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PRINTED: 06/20/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: ROWLEY

ALTERNATE NAMES:

RAWLEY
RELIANCE COPPER
SAN CARLOS PAT. CLAIM #4524

MARICOPA COUNTY MILS NUMBER: 105

LOCATION: TOWNSHIP 4 S RANGE 8 W SECTION 25 QUARTER E2
LATITUDE: N 33DEG 02MIN 59SEC LONGITUDE: W 113DEG 01MIN 55SEC
TOPO MAP NAME: DENDORA VALLEY - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

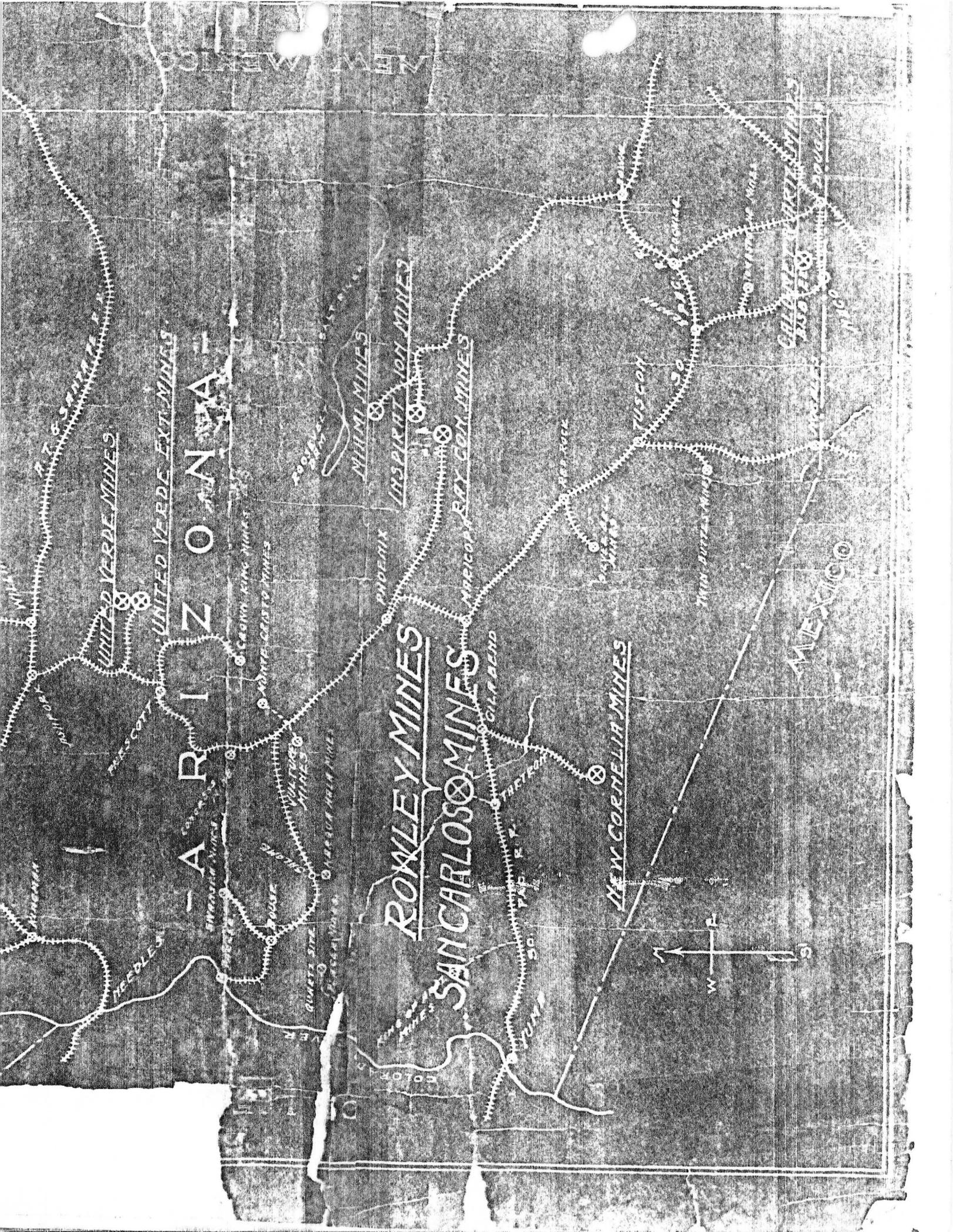
COPPER SULFIDE
COPPER OXIDE
SILVER
LEAD WULFENITE
MOLYBDENUM WULFENITE
VANADIUM VANADATES
GOLD PLACER
BARIUM BARITE
CALCIUM CALCITE
IRON SULFIDE
SPECIMENS WULFENITE

BIBLIOGRAPHY:

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HICKS C ADMMR MOLYBDENUM REPORT 1979 P 17
ELEVATORSKI E A ADMMR FLUORSPAR RPT P 29
ADMMR IND. MIN. RPT P 36
ADMMR "U" FILE
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KIRKEMO C, ET AL USGS GULL 1182-E P E6-E7
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MINERALOGY OF AZ, P 22

NEW MEXICO

ARIZONA



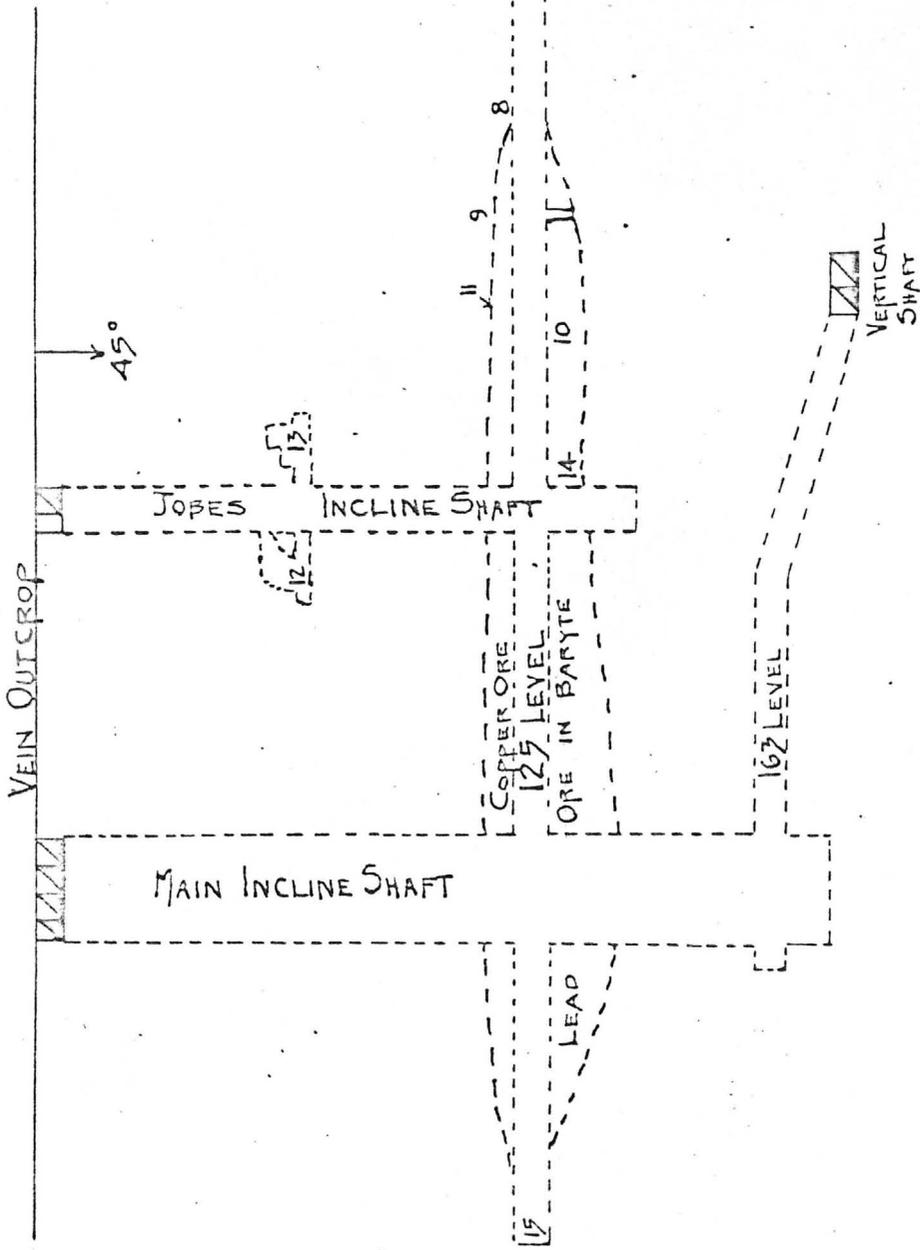
MEXICO



Supposed Vein under wash

Arroyo

SKETCH D



ASSAY PLAN
 SHOWING
 SHAFTS AND MINE WORKINGS
 ORE SHOOT INDICATED
 SCALE 1" = 50'

Do Not Copy

ROWLEY MINE

MARICOPA COUNTY

Visited the Rowley mine near Painted Rock dam. No evidence of work since visit last year. FPK WR 6-4-69

See: ABM Bull. 180, p. 314

Visitor, Mr. C.A. Rowley, owner of Rowley Mine. His address is 7803 Harper Avenue, Downey, California. He had no plans regarding the mine but said "open to a deal." FTJ WR 8/30/73

NJN WR 4/9/82: Visited the Rowley Mine, Maricopa County. Though it appears many mineral collectors have been collecting from the dumps, small crystals of wulfenite may still be found on barite. The shafts are well fenced and open but lack of timbers and ladders prevent access to underground workings.

KAP WR 4/8/83: In the company of Jim Weatherby a number of mines were visited. They were: the Rowley Mine, Rowley East, Sundad, and an unnamed prospect and the Dixie, all in the Webb District. Separate reports have been written.

NJN WR 5/27/83: Dave Shannon, Mineral Dealer, 1727 W. Drake Circle, Mesa, AZ 85202 visited. He reported that foot thick slabs of Galena containing up to 45 oz Ag/ton have been barred down from the hanging wall of the Rowley Mine, Maricopa County. He would like to option the mine and sell the material. He reported never having seen that much galena in the Rowley before. He was told how to get in contact with the owners of the patented mining claims. He was also told where the nearest lead smelters are located as such material would be direct shipping ore.

The following article was written in two parts for the Jan. and Feb., 1971 issues of ROCKHOUND RECORD by Bud Standly with the help of Leo Langland. We are again publishing it verbatim

ROWLEY MINE

...History and Description

Dear to the heart of every Arizona mineral collector are the brilliant orange wulfenites from the old Rowley Mine near Theba, Arizona. Located a short distance west of Gila Bend in Maricopa County, this famous wulfenite locality has also been called the Theba Mine, Old Rowley Mine, and Rainbow Mine. A publication of the University of Arizona Press in Tucson called "MINERALS OF ARIZONA" has employed all three names to describe more than a half dozen minerals all from this one mine. Many a collector has incorrectly spelled the mines' name as "Rawley" (even the U.S.G.S. topographic maps have it wrong) when in reality it is named after Charles A. Rowley who owns the property and currently resides in Calif.

Mr. Rowley has given a watchman in Gila Bend strict orders to keep people away from the mine which has recently been sealed off with a six-foot barbed wire fence cemented sturdily into the ground. The area is well posted as being private property with no trespassing allowed, and the road into the mine is treacherous as the watchman has poured a foot of loose sand down its length to trap unscrupulous people who are foolhardy enough to attempt at collecting trip to Rowley.

In addition to the illegality of collecting in the Rowley Mine, the workings are extremely dangerous to collect in as the result of a needless fire started by vandals who destroyed all the timbering in the inclined shaft where most collecting has been done. All being considered, a collector's best bet today is to buy Rowley specimens whenever possible.

The Rowley property consists of six patented claims which were bought by the Rowley Copper Mines Co. when it was incorporated in 1909. Wulfenite had been discovered by about

K 8/17

1917 and a seventy-five ton concentrator was built to treat it. The Rowley Company was succeeded in 1922 by the Reliance Copper Company whose operations were later suspended. The bond-holders secured title to the property at a foreclosure sale in 1926, and in 1927 Charles A. Rowley became the majority owner and president of the Rowley Mines, Inc. Mr. Rowley has owned the property since that time. The mine was exploited intermittently from 1909 to 1923 for ore that contained values in copper, lead, molybdenum, and gold.

Walter K. Osborn, former manager of the Rowley Copper Mines Company, wrote a report in November, 1933, which described the workings as follows: one inclined shaft extended to the 160 foot level (225 feet on the incline) and another to the 100 foot level (150 feet on the incline). A vertical shaft was 280 feet deep with more than 300 feet of workings on the 160 foot level. There was 1,462 feet of total development work, and ore was shipped to a value of \$10,000; all except the wulfenite ore came from development work. There was a heavy flow of water on the 160 foot level, and more water was encountered at 280 feet in the vertical shaft.

The main shaft consists of two hoisting and two manway compartments and is well timbered down the incline to 107 feet since the recent fire was confined to the other inclined shaft. From 107 feet to the level at 150 feet, (inclined distance) only a few posts are present.

Below the 100 foot level the shaft narrows to two compartments. A fairly good ladder extends most of the way down the main shaft except where collectors removed a portion near the bottom to use in collecting high areas.

Reference: Steward and Pfister, 1950

Mineralogy:

The most well known mineral species from the Rowley Mine is unquestionably wulfenite (lead molybdate). Many years ago, before the water table rose and the lower levels of the mine were flooded, enormous orange crystals were collected which were transparent and had a brilliant luster. Perched on these crystals were blood-red balls of crystallized mimetite. These specimens are rarely seen today and are highly prized by serious collectors. Although they have not been collected in the mine for years, a few of them show up once in a while

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in BR1 collections and always bring a top price. Most material that has been collected since flooding of the lower levels has been somewhat less spectacular, but this is not to say that fine material has not been collected.

The forms which the wulfenite assumes are almost unlimited, some crystals being paper thin and yellow, while others are thick and dark red, locking for all the world like Red Cloud material. Beautifully symmetric octagonal crystals have occurred, and in one portion of the mine, square reddish crystals have grown which have diamond-shaped patterns inscribed on their faces.

Second only to wulfenite in fame is the crystallized mimetite from Rowley (lead chlorarsenate). In addition to the spherical form already mentioned, it occurs as fuzzy mats of deep red color, and a truly spectacular effect is achieved when the brilliant yellow form occurs along with this red variety. Radiant shades of orange are common, and specimens often display large orange wulfenites sitting amidst the fuzzy mimetites.

A chemical series extends between mimetite and the mineral pyromorphite (lead chlorophosphate) which also occurs in the Rowley but in limited amounts. Depending on the amount of phosphorous present in the solutioning waters within the ground, pyromorphite may be deposited instead of mimetite. When no phosphorous is present, mimetite crystallizes exclusively. If more phosphorous is present than arsenic, the crystallized mineral is pyromorphite. Specimens of the latter mineral from the Rowley, with good color and quality are virtually never seen in collections. Although mimetite and pyromorphite have the same crystal form and are often mistaken for each other, the phosphorous tends to make the pyromorphite green or yellow-green in contrast to the yellow or orange color of the mimetite.

In the Rowley Mine, the wulfenites, mimetites, and pyromorphites are very often perched on blades of gray to white barite which is the major constituent of the gangue material. Entire walls within the mine are composed of attractive undulating bands of semi-crystalline barite which is heavily stained with iron oxide. The barite occasionally crystallizes to a superlative degree, assuming an almost purple color and forming magnificent aggregates of large attractive

blades which are sprinkled with mimetite and wulfenite and are highly pleasing specimens suitable for the finest collections.

The Rowley Mine also offers a host of rare Lead-copper minerals which occur with the wulfenite and mimetite. These include minium (lead oxide), diaboelite (lead copper chloride), phosgenite (lead chlorine carbonate), linarite (lead copper sulphate), caledonite (copper lead sulphate carbonate), and leadhillite (lead carbonate sulphate).

Only two collectors I know of have been lucky enough to find any minium in Rowley, and the diaboelite was collected exclusively by only one man that I know of. Both of these mineral occurrences are especially significant to the collector since they are found very rarely even on a statewide basis. Minium is found near Wickenburg but does not crystallize whether there or in Rowley. Diaboelite is famous from Tiger where it does crystallize in beautiful blue crystals, whereas the diaboelite in Rowley simply occurs as light blue veins within barite.

Phosgenite, another rare mineral (which happens to resemble barite) also occurs in the Rowley Mine although I can't describe it as I've never personally seen any.

Linarite and caledonite are more commonly known from Rowley than either minium, diaboelite, or phosgenite, and usually occur together. The color combination that results from this is most pleasing. Although I have not seen any well defined crystals of linarite from Rowley, the caledonite has occurred in remarkably perfect and distinct crystals, fully terminated and exceedingly rare.

Leadhillite, being rarer than anything mentioned so far, usually occurs as nothing more than flat cleavage surfaces, within masses of the caledonite and linarite, but on at least one specimen I've seen recently, it did occur as singular complete crystals of a light green color with minute mimetite hairs accompanying it. This is undoubtedly the rarest of the rare from Rowley.

Other more common lead and copper minerals also occur in the Rowley Mine, including anglesite, malachite, cuprite, galena, cerussite, vanadinite (endlicheite), chrysocolla, and mottra-

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mite. As in just about all mines, quartz and calcite crystallize to some degree periodically.

Anglesite (lead sulphate) occurs in masses, in modules, and in concentric layers which surround galena nodules from which it may be derived through oxidation. (Lead sulphide--galena--is oxidized to lead sulphate--anglesite). Anglesite may also surround nodules of linarite.

Malachite occurs as dispersed material in the anglesite--linarite nodules and as massive material associated with diableite and the other secondary lead-copper minerals. I have seen only two specimens of crystallized malachite from Rowley, both of which were the velvet type and were obviously from the same vug. These two specimens contained some massive cuprite also. Besides the malachite, some brochantite may occur in Rowley but it is difficult to distinguish.

Galena, is fairly common in Rowley, occurring mostly in nodules, some of which have dimensions exceeding eighteen inches. It is often found surrounded by the wulfenite, anglesite, and other secondary minerals which are derived from its oxidation. An interesting observation is that the galena found in Rowley never has the normal cubic cleavage exhibited by most galena, due to the high silver content. Unfortunately, there is not enough silver-bearing galena in the Rowley Mine to make mining it a worthwhile proposition.

Cerussite is somewhat rarer than galena, malachite, or anglesite, and very seldom crystallizes in Rowley. It often associates with caledonite and linarite, and it also occurred in minium mentioned earlier.

Vanadinite is found in Rowley, mostly in the form of yellow or brown endlicheite where the red color is lost due to arsenic substituting for vanadium. Some cherry red vanadinite has also been collected. Very often, it is difficult to distinguish between the vanadinite, endlicheite, pyromorphite from Rowley because all three form hexagonal prismatic crystals (shaped like six-sided barrels). Color is usually the only distinguishing factor.

Among local lapidarists, chrysocolla is nearly famous from Rowley due to its abundance and very high quality--it is extremely hard and has excellent color. In fact, one stone in

Rowley has been nicknamed "the blue room" due to chrysocolla predominating in its walls.

Mottramite also occurs in one portion of the mine and provides a pleasing background for the yellow wulfenite which accompanies it, in similar fashion to the wulfenite on mottramite from "179".

Fluorite is also reported from the Fowley Mine.

The Rowley Mine has its share of unusual unidentified minerals, one of which has a fuzzy character and has a light blue color. An interesting pseudomorph is also found here--barite after wulfenite, but are pure white in color.

* * * * *

UP-DATE

...by Leo Langland

Since Bud and I wrote the first article, my two sons have made some new discoveries.

Jeff found some textbook cerussite V twins and some green pyromorphite with yellow capped terminations similar to pyromorphites from Les Farges, France.

Tom found a pseudomorph watercourse with both vanadinite and mimetite pseudomorphs after wulfenite, similar in some way to those from Mapami a few years back.

* * * * *

In some of the bulletins the print on one line of this article on page 14 did not come through clear due to machine failure again. This is the 3rd line down in the last paragraph:

"ite which is the major constituent of the gangue material."

* * * * *

From the Tucson Gem & Mineral Society bulletin

IN MEMORIUM

BY Bill Panczner

George Bideaux (1899-1978): In the course of our lifetime we are privileged to make friends with a few remarkable people. It seems that as quickly as these individuals come into our lives, so they go. And so it was with George Bideaux. His warm, gentle and friendly personality quickly became apparent. Next to the great love for his family, painting, writing and minerals was his love of people. George's friendship was unique and endearing. ...we are all richer for having known him.

EDWIN A. STONE
1622 EAST HAWTHORNE
TUCSON, ARIZONA
TELEPHONE MAIN 2-2613

January 17, 1957.

Mr. C. A. Rowley
701 East 59th Street
Los Angeles 1, California.

Dear Mr. Rowley:

Herewith is my report on your
Rowley Copper Mine.

As you know, the limited time
that was spent on the property did not permit me
to map the surface geology in detail. The attached
aerial photographs show the general regional struc-
ture and the relationship of the orebody to it. I
believe that this will serve your purpose for the
present.

Enclosed separately is a typical
drilling schedule which applies to work that I am
now doing. Of course, this will vary with location
and conditions but it will give you a close approx-
imation of costs.

If you have any questions, please
call upon me an explanation and I will try to answer
them.

Very truly yours,

Edwin A. Stone

ROWLEY COPPER MINE
Painted Rock Mining District.
Maricopa County, Arizona.

I N D E X

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MAPS:

Geological Plan 150 ft level
Scale 1" : 50 ft Fig. 1

Section through Drill Holes
Scale 1" : 100 ft Fig. 2

SURFACE STRUCTURAL GEOLOGY
Shown on aerial photographs Separate

GENERAL

The Rowley Copper Mine was visited in the period November 16-19, 1956, in company with the owner, Mr. C. A. Rowley. During this period, the accessible underground workings were mapped and the district geology observed, on and adjacent to the property. Adequate maps of the area were not available; therefore aerial maps covering the Painted Rock Mountain Range were secured. The principal structural of the region is shown on these pictures which accompany this report.

Location

The Rowley property is situated in the Painted Rock Mining District, Maricopa County, Arizona. It lies on the west slope of the Painted Rock Mts at an elevation of about 800 ft. From the mine, the ground slopes gently toward the Gila River which lies about two miles to the west at an elevation of about 500 ft. The Dendora Ranch headquarters is about two miles southwest from the mine.

Accessibility

The paved Dendora Valley road passes about one mile west of the mine and it connects with Highway 80 in a distance of 12 miles south of the property. Its junction with Highway 80 is west of the town of Gila Bend a distance of 15 miles. The closest rail point is on the Southern Pacific R. R. 13 miles south of the mine.

Property

The property is comprised of 6 patented mining claims and 16 unpatented mining claims. These claims cover the mineralized outcrops along the west slope of the Painted Rock range. Existing claim

maps were not reproduced for this report.

DEVELOPMENT

Underground workings

The chief development on the property is located near the center of the ^{Jack} Rowley patented claim and consists of two incline shafts and one vertical shaft from which several levels have been driven. The shafts are connected by workings on the 125 and 163 levels as shown on existing maps. Records do not agree upon the extent of the workings or the depth of the shaft and various levels. The distance to the first level (125) measured by the writer on the incline of the main shaft was 150 ft which calculates to a vertical depth of 110 ft. Benedict reports the vertical shaft to be 260 ft deep. Botsford states that the vein was crosscut at 186 ft in the vertical shaft and showed 18 ft of barite and 30 ft of copper mineralization, the vein still being completely oxidized. Houle states that the original shaft was sunk 265 on the incline, presumably referring to what is now known as the main incline shaft. A map of unknown origin shows the main incline shaft to be 365 ft deep with levels at 110, 220 and 330 ft but designated the 100, 200 and 300 levels. If this is a vertical section, the distance to the first level checks with the measurement made by the writer, but this would make the shaft 520 ft deep on the incline. It is apparent that none of the previous examining engineers had access to the mine below the first level, excepting Botsford who indicates that he observed the 186 ft level from the vertical shaft. Accurate information on the workings now under water would be very helpful but the lack of this information does not affect the overall picture since there is no indication that the vein structure has

changed to the depth of the lowest development work. Figure 1 shows the accessible workings above water level.

Drilling

According to Houle, two holes were drilled in 1923 to prove the continuity of the vein in depth. Hole No 1 located 350 ft east of the outcrop was drilled to 525 ft and Hole No 2, 260 ft east of the outcrop drilled to 325 ft. Hole No 1 was located at the surface at a point N 52° W, 380 ft from the collar of the main incline shaft. The accompanying cross-section shows the two drill holes in relation to the mine workings (Fig. 2). Projection of the vein on its normal dip ties into the mineralized zones described by Houle and undoubtedly both holes cut the vein. Average dip of the ore zone from the collar of the shaft through Hole No 1 is 46°. This conforms with the 50° dip to the 150 level the flattening of the vein to 40-45° at the level and just below it. Also, all the available reports indicate that the average dip of the structure is 45°. The mineralization cut in Hole No 2 conforms with what is seen above. The copper mineralization cut by No 1 hole is indicative of the vein and the barite may have been present, but the records which/Houle states were poorly kept may not have recorded this fact.

Other development

The San Carlos shaft which lies about 1500 ft SE of the main workings is reported to have been sunk 230 ft on the incline. It is now inaccessible. Gold values are reported to have been encountered but otherwise the dumps show no indication of mineralization. A few shallow workings elsewhere on the property has exposed some of the outcrops.

GEOLOGY

Rocks

The rocks in the mine vicinity are comprised of a series of Tertiary volcanic flows which are bedded in almost a horizontal direction. The beds vary in composition and texture and no attempt was made to segregate the formations, however the principal rock type in the mine area is andesite. The overlying beds which form the high parts of the range are more vesicular and locally they contain obsidian and are cut by basaltic dikes. The thickness of the volcanic section is not known, however granite outcrops at the surface south of the road where it passes through the low part of the range.

Alteration and Structure

In general the rocks have not been intensely altered. Silicification occurs along NW-SE zones, parallel to the mineralized structure, forming bands of more resistant rock which stand out in the surface outcrops. Hydrothermal action was not extensive as the rock constituents have not been completely broken down or replaced by subordinate minerals. Pyrite mineralization was almost nil and little or no hematite or limonite is present in the oxidized vein material and adjacent rocks. Minor amounts of calcite occur in the vein and in the walls as filling in fissures.

Present development follows a N 30° W fault which dips on an average of about 45° to the east. This fault is rather strong as evidenced by 8 to 12 inches of gouge and fault breccia, and it forms the hangingwall of the ore zone. Elements of it branch into the footwall at the north end of the mine forming a shear zone 10 to 25 ft wide which continues southerly beyond the limits of present development. Mineralization terminates at the north end of

the mine where the footwall elements merge with the main hanging-wall element.

Regional Structure

The major regional structural feature is a northwesterly striking fault which passes along the western slope of the range. In the central part of the range, elements branch from it forming several parallel faults which again merge both to the north and to the south. The presently known mineralized structure occurs along one of these branching elements. The dip on the mine element is 45° to the east and in the south part of the range dips observed at the surface were at somewhat lower angle to the east. Intense shearing between fault elements was not observed in the surface outcrops and there is no indication of areas of strong deformation.

ORE OCCURANCES

The earliest mineralization was the silica which was introduced into the rocks adjacent to the fractures. Locally the fractures were reopened by renewed movement and there was at least two periods of mineralization. Barite, which is by far the most abundant mineral, was introduced at an early stage. It was later fractured and the lead and zinc was introduced into it as well as in other parts of the structure. Molybdenum was introduced at a much later period, probably after oxidation was in progress, as it had to combine with the lead in order to form the wulfenite molecule. The origin of the copper is not clear. The almost total absence of iron residue precludes the possibility that it was derived from pyritic sulfides. The only explanation is that it may have come from primary chalcocite which is very low in iron. Silver

and gold values are negligible in the ore.

The copper, lead and zinc occur as oxidized minerals and are contained in amounts usually less than 1% of each metal. No determination was made for the molybdenum content. Assays shown on Figure 1 give the approximate tenor of the ore.

The oxidized section of the vein is too low grade to have any economic value unless enough barite can be recovered in marketable form to pay for mining and treatment costs. The value of the mine is predicated upon the occurrence of sulfide ore at depth, in sufficient volume and grade to return a profit. There is no evidence that the copper values will improve in depth, however there may be some cumulation of secondary chalcocite locally and at water level. The small tonnage of copper ore shipped from the mine was probably from a local area which had been enriched.

The oxidized zone may be impoverished in lead and zinc. Lead, as a rule is very stationary being reduced to carbonate or sulfate minerals in the process of oxidation but are not removed. The zinc may be readily dissipated by oxidation and leaching. The writer has noted that a deficiency of lead and zinc sometimes occur in oxidized ores where molybdenum and vanadium are present. An outstanding example is the Mammoth Mine in Pinal County, Arizona, which carried about 1% of each lead and zinc in the oxidized zone but sulfide ores averaged 13% combined lead-zinc. However it is impossible to predict what the original sulfide content may have been or how much it may have been depleted in the process of oxidation. Any analogy between ore deposits of this type will depend upon many other factors.

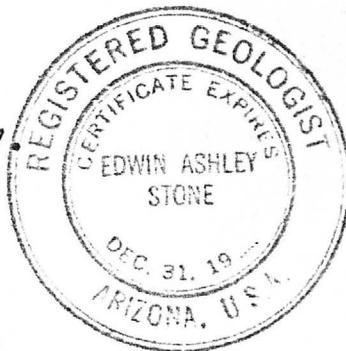
CONCLUSIONS

1. Exploration of the property, to date, has opened one mineralized structure, the limits of which are not yet fully defined. Undoubtedly, other similiar ore shoots exist with the regional fault system but these are not reflected in the surface outcrops.
2. The presently developed oxide ore is too low grade to be of economic value; therefore the value of the property must be predicated upon the occurrence of sulfide ore of grade and volume that can be profitably mined.
3. The depth of oxidation is not known and cannot be accurately predicted. Also, continuity of the mineralized structure in its present dimentions, in depth, is a factor to be considered. In this type of structure, ore shoots, as a rule tend to make in lenticular lenses. This is illustrated in the north end of the mine which is typical of what may be expected to occur to the south and also down the dip of the vein. Drill Hole No 1 may have already encountered a pinch in the structure which could account for the absence of the barite section even though minor amounts of copper were encountered. However the attitude of the structure at this point cannot be accepted with cretainity due to the incomplete records available on the drill hole.
4. Evidence points to the fact that primary ore will be lead and zinc sulfide. As pointed out above, there is a possibility that the oxide ore has been impoverished in lead and zinc, but the extent of impoverishment cannot be predicted. The small amount of iron residue is not indicative of extensive leaching of the copper minerals which were changed by oxidation but suffered little or no loss through leaching. Sulphate solutions

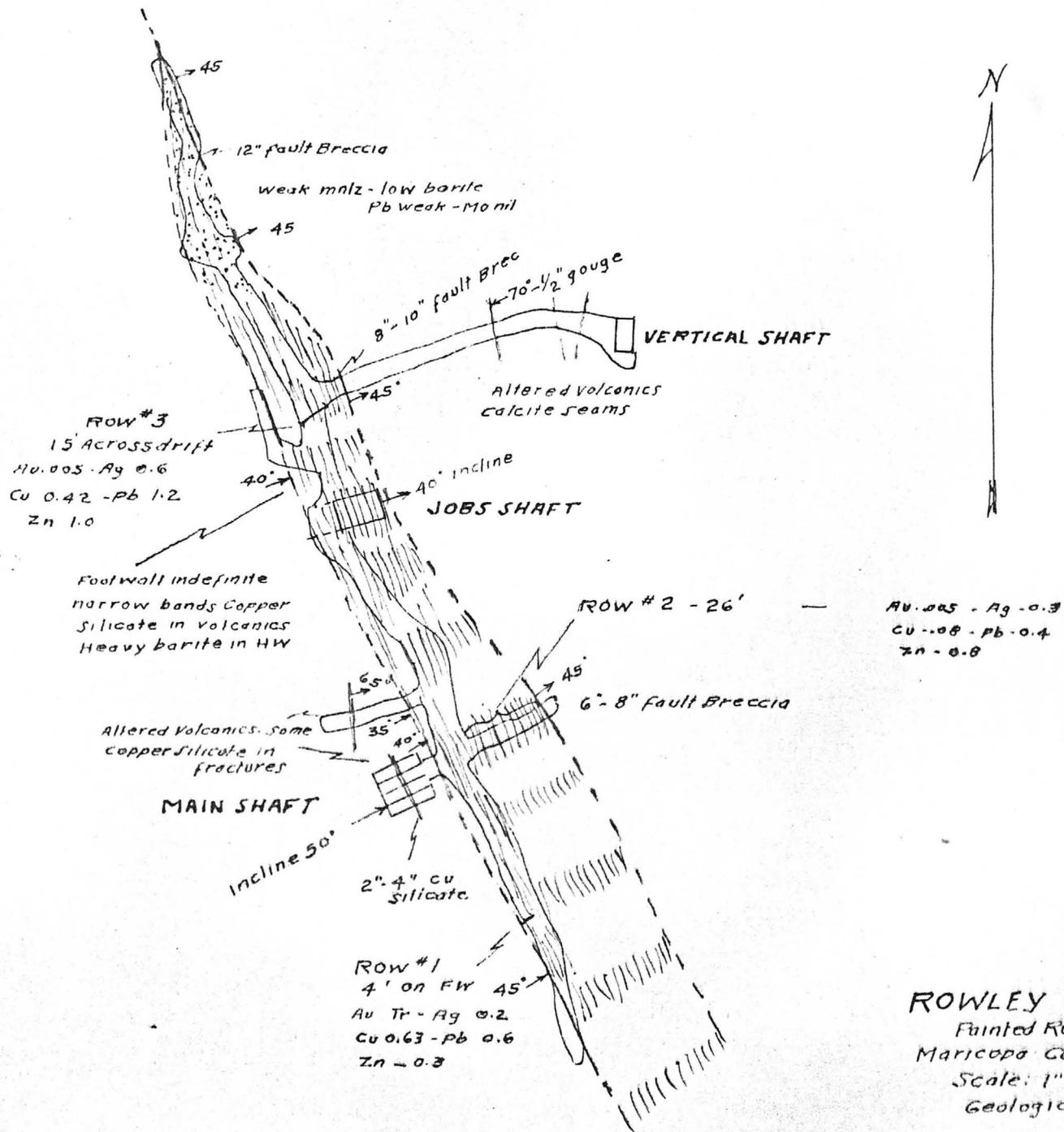
from which the barite was deposited must have been very low in iron and subsequent deposition of copper must have been in form of chalcocite to account for the small amount of iron residue left in the oxide zone.

5. The first step in any future development of the property should be to determine the depth to the sulfide zone within the presently known mineralized structure. If this structure contains sulfide orebodies that can be profitably mined, the knowledge gained in developing it may give some clue to other possibilities for ore on the property.

January 17, 1957.



Edwin A. Stone
Edwin A. Stone



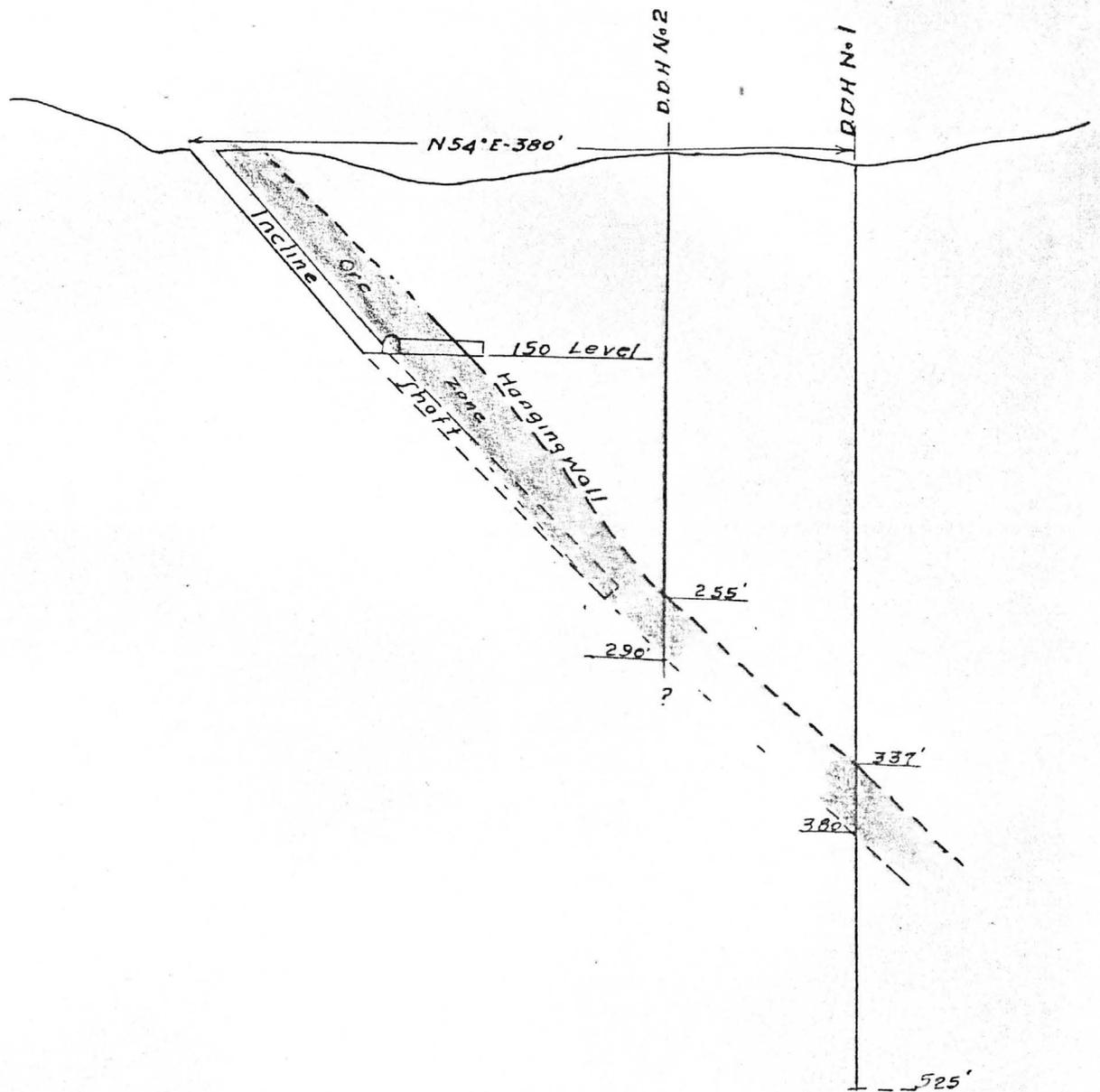
ROWLEY COPPER MINE

Fainted Rock Min. Dist
Maricopa County - Arizona

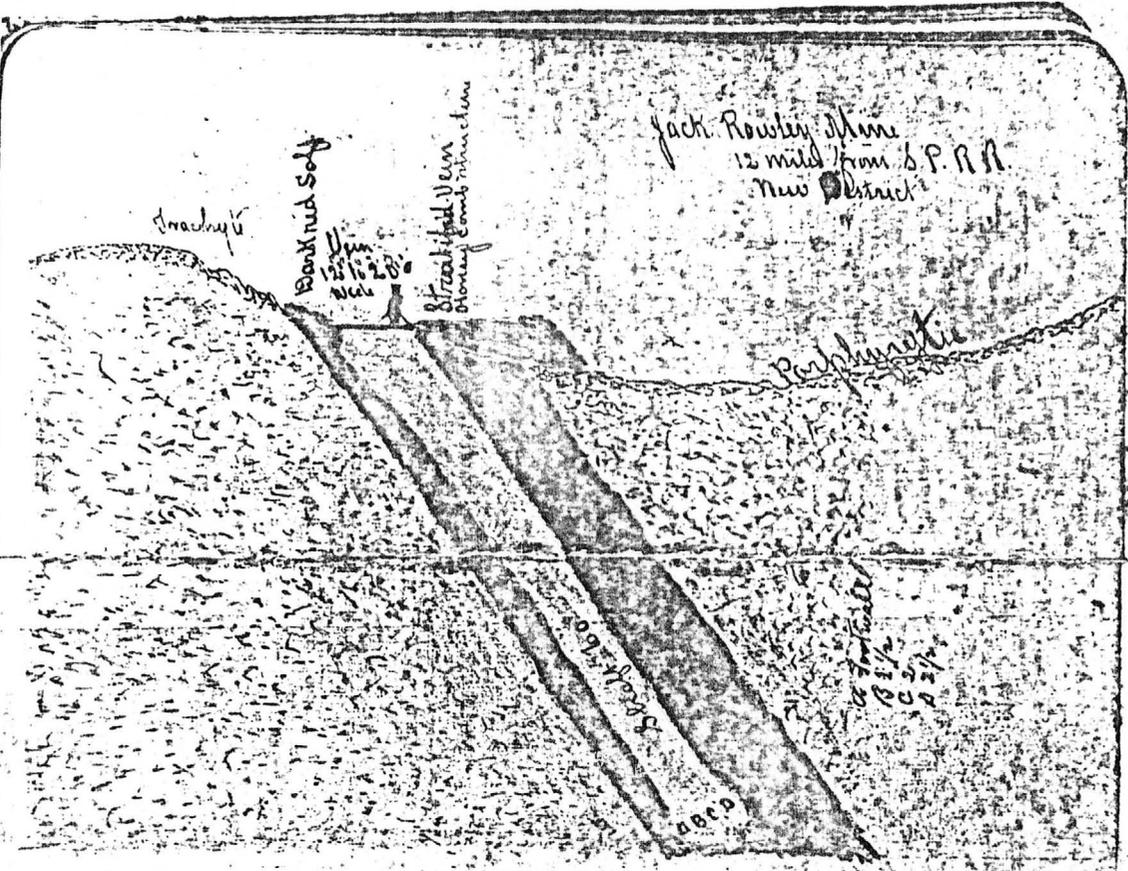
Scale: 1" = 50'

Geologic plan 150' Level

Nov 17, 1956. Edwin A. Stone



ROWLEY MINE
 Section Thru Drill Holes
 Scale: 1"=100' - 12/15/56 E.L.P.



Vein 12 to 20. Well defined Dip 50° from horizontal North easterly
Stratified structure. Well certainly go to great depths, and for a long distance on
strike of vein. Will surely develop into a large property.

Gold, copper, silver, lead. Principal values.

Most promising vein I have seen for years.
Development

values very satisfactory

Samples sent to John Herman for assay Feb 22 1908

Tartron R.R. Station 1 1/2 miles distant



Photographic page of my Note Book Geo. W. Kingbury M.E.

COPY

ARTHUR HOULE
Mining Engineer
#1303 East Fifth Street,
Tucson, Arizona.

November 17, 1927

Mr. M. Curley, General Manager
New Cornelia Copper Company,
Ajo, Arizona.

Dear Mr. Curley:-

I am enclosing herewith my report on the Reliance Mining Company property, better known as the Rowley property near Gila, Arizona.

I visited the property accompanied by Mr. Charles A. Rowley, and we were able to visit and examine thoroughly all workings above water level.

The property is still a prospect notwithstanding the fact that a great sum of money has been spent in development work, I hope I have succeeded in this report in setting out the facts so that you will readily understand the conditions existing at this property.

The molybdenum ores are worthy of thorough investigation, and I feel certain that there is an important tonnage of molybdenum ore here, which will in the future prove to be a valuable asset for this property.

Thanking you for the opportunity of making this examination, and trusting I may again be of service to you, I am,

Yours very truly,

AH D

(Signed) Arthur Houle

REPORT

on the

RELIANCE MINING COMPANY

near

Gila, Maricopa County, Arizona

THE PROPERTY:

The group of mining claims now known as the property of the Reliance Mining Company comprised six patented mining claims each measuring 600 feet wide and 1500 feet long. In addition to the patented claims, the company owns title to twelve unpatented claims known as the Obsidian group and two mill site claims. See Map A.

The six patented claims were named as follows:

1. Jack Rowley
2. Jack Rowley #1
3. Jack Rowley #2
4. Jack Rowley #3
5. Jack Rowley #4
6. Daisy Cornelia

Adjoining and almost surrounding the patented claims is situated the ground of the San Carlos Copper Mines Company, a group of 27 unpatented mining claims lying north, east, and south of the Rowley patents.

To the eastward of the Hill-top, Charles A, and Grandy claims of the San Carlos Copper Mines Company are located the Obsidian claims #1 to #10 inclusive, a part of the holdings of the Reliance Mining Company.

On the west side of the Jack Rowley #1 is found the Claim Obsidian #11, and the mill site.

The total area of the Reliance Mining Company property is approximately 370 acres.

LOCATION OF THE DISTRICT:

The lands of the Reliance Mining Company are located in the Painted Rock Mining District, Maricopa County, Arizona, about twenty-seven miles northwest of the town of Gila, Arizona.

The nearest accessible railroad point is Tartron, a siding of the Southern Pacific Railway, which is thirteen miles south of the mining claims. A fairly good ungraded desert wagon road extends northward from the railroad to the mining property. The journey by automobile from Tartron is about one hour's ride.

The country is typical Arizona semi-arid desert with scant vegetation, except for the narrow strip of irrigated and cultivated lands along the Gila River, situated two miles west of the mining property.

Climate is hot during four summer months, but mild throughout the remainder of the year.

Water is abundant in this section and obtained from shallow wells near the property. The water from these wells, although slightly brackish, is not unpleasant to drink.

HISTORY:

The original locations in the district were the Jack Rowley group of claims whose development was undertaken by the Rowley Copper Mines Company, Arizona corporation organized in 1909 with a capitalization of ten million shares. The company's main office was first located in Baxter Springs, Kansas, and moved later to Kansas City, Missouri.

In 1922, the Rowley Copper Mines Company was succeeded by the Reliance Mining Company thru a reorganization. A bond issue to provide development funds for the Reliance Mining Company has not been redeemed and the property is now held in trust to protect the bond holders.

Development work started in 1910 on an iron stained silicious outcrop marking a fissure vein discovered on the Jack Rowley claim. Between the years 1910 and 1923, development work was prosecuted with vigor only at irregular intervals, the campaigns depending upon more or less successful efforts to sell the stock of the company. However, during this period three shafts were sunk developing the mineral showing on the Jack Rowley claim to a vertical depth of 200 feet, besides lateral development for a length of 550 feet on the 125 foot level. Cries of copper, lead gold and silver were exposed and from this development one carload of 15% copper ore and two small carloads, totaling 30 tons of lead molybdate, wulfenite concentrates, containing 18.26 MoO₃.

The copper ore was shipped to a local smelter. The wulfenite concentrates were sold to a Los Angeles buyer in April 1919, when molybdenum tri-oxide was valued at fifty cents per pound.

In the opening up of these mineral showings the companies were hampered mainly by lack of funds, and inability to cope with a problem of pumping water encountered below the 125 foot level; The water is said to have amounted to about 400 gallons per minute.

GEOLOGY:

The section known as the Painted Mining Rock Mining District is made up from a series of bedded andesite lava flows.

Much of the andesite is dense and porphyritic, but occasional beds were observed to be porous and vesicular. Faulting of these andesite beds and erosion has assisted in shaping these lava flows into irregular pinnacles, ridges, and flat-topped hills, forming a low range of mountains, striking northwest-southeast for a length of twelve miles.

On the west side of this range the ground slopes gently westward to the Gila River. The river bed is approximately three and one-half miles west of the main mountain ridge. The elevation of the mountains is about 1500

feet. The elevation of the river bed is 425 feet.

The land sloping gently toward the Gila river is marked by elongated domes of sunburnt andesite rocks, rising island-like to slight elevations above the valley floor. On one of these small hills, elevation 510 feet, the Jack Rowley mining claim was located to cover the outcrop of a mineralized fault fissure cutting through the andesite beds. See Map B.

The Rowley fault strikes N 30 degrees W and dips at 45 degrees to the east at its location point. The fault outcrop is marked by a slight ridge on the hill and minor stains of copper in a silicious or jasper-like alteration of the andesite along the fault zone. A few feet below the surface where excavations have been made for plant construction more abundant copper stains were exposed in silicious gangue on the footwall of the fault, also a wide zone of baryte, - - heavy spar - stained with lead minerals towards the hanging wall.

The fault fissure is easily traced 4,000 feet, but mineralization along the fault is visible for only about 800 feet on the Rowley claim, and is marked particularly by the elongated knoll of andesite which stands out above the surrounding valley.

To the north on the Jack Rowley #3 the fault fissure is traceable, but is not marked by mineral indications. The vein is only 18 inches wide at this end.

To the south, the fissure can be traced through a portion of the San Carlos claim up to a point where it is cut off by an intrusion of rhyolite. The rhyolite shows copper staining in several assessment pits, but copper staining is not characteristic of the mass of the intrusive.

The San Carlos Copper Mines Company sank a small shaft at a 37 degree incline, following the fissure to an incline depth of 225 feet. The vein is well marked, not over three feet wide, good foot and hanging wall, but does not show any indication of copper or lead mineralization. The owners report having obtained good gold assays near the bottom. No samples were taken at the time this visit was made.

The main fault, or Rowley fault, forms a true fissure vein in which both walls are andesite. The vein filling is of two types within the mineralized part of the fissure, namely, a silicious copper stained gangue on the footwall in which occasionally is found stringers, veinlets and kidneys of oxidized copper ores. The footwall part with its copper indications attains a maximum width of 15 feet and is always well marked. This is pictured in sketch C, a cross section of the vein.

The remainder of the vein filling toward the hanging wall is heavy spar, barytes, the mass brecciated in appearance and cemented by stringers, bunches and cavities lined with beautiful yellow and orange crystals of wulfenite and mimetite. Wulfenite section of the vein attains a maximum width of 40 feet, and is so exposed in the crosscut from the incline shaft at the 125 foot level.

The baryte zone tapers out to the north and south along the strike of the vein. The length of this zone exposed on the 125 foot level is 260 feet. Sketch D accompanying this report illustrates this hanging wall zone.

DEVELOPMENT:

Practically all of the underground work was confined to the development of the Jack Rowley claim. The work consisted of two incline shafts and one vertical shaft and some drifting and crosscutting from these shafts. The mineralized zone has been opened up to a vertical depth of 200 feet.

In addition to the shaft work, two diamond drill holes were bored proving the existence of copper mineralization in one of the holes to a vertical depth of 350 feet below the outcrop.

MAIN INCLINE SHAFT:

The original shaft measured 6' x 8'. It was sunk following the footwall to an inclined depth of 265 feet.

At the 100 feet inclined depth, a drift was driven north 260 feet and south 100 feet from the shaft. Both drifts are in vein matter, but not sufficiently mineralized to be called ore.

The face of the north drift across a width of 4 feet 6 inches now assays Gold, trace; Silver 0.85 oz.; Copper 0.85.

The material in the north face checks out with another sample out 15 feet south of the face. Sample #2 assayed Gold, trace; Silver 0.86 oz.; Copper 0.75%.

A general sample across 15 feet of ore on footwall at the powder magazine assayed Gold, trace; Silver 0.98 oz.; Copper 0.95%.

All of the copper stained silicious vein matter on this level will average slightly less than 1% Copper and less than 1 oz. silver per ton.

Within the vein material are occasional small kidneys of richer carbonate and silicate ores of copper, but never abundant enough to raise the average grade of the mass above 1% Copper. oxidized

A selected sample of the richer carbonate and silicate ores found as kidneys assayed Copper 15.90%.

The permanent water ~~xxx~~ level is found just a few feet below the 160 foot level inclined depth (125' vertical depth).

Above the water level the main incline has been enlarged to three and one-half compartments. The job was completed from surface to 130 feet on the incline.

Below the water level the 6x8 foot shaft is reported to follow the footwall to a depth of 265 feet on a 45 degree incline.

The vein matter is said to be similar to that exposed above water. The surface dumps would seem to corroborate the claims of these interested.

From the bottom of this incline shaft a connecting drift was driven northeastward and holed through to the vertical ~~ax~~ shaft. The connection was

made at 163 feet vertical depth below the collar of the vertical shaft.

In this connecting drift the vein was crosscut and reported to be 40 feet wide at this point. The material cut was very low grade in copper, but reported to carry higher values in lead and molybdenum, however, this is not apparent from material observed on the mine dumps.

JOBES INCLINE SHAFT:

This shaft was started at a point 110 feet N 30 degrees W from the main incline and follows the footwall at 45 degree incline to a depth of 200 feet.

The shaft was sunk as a working shaft for the extraction of lead molybdate ore during the war period. At that time molybdenum was in great demand and commanded a high price.

A mill was erected and a tonnage of ore was concentrated. Two shipments of wulfenite concentrates were made, - a total of about 30 tons. The concentrator operations ceased with the fall in price of molybdenum at the close of the war. The lead ore was mined from two stopes started from this incline at a point 100 feet below the surface outcrop.

The north stope shows a spotted lead ore occurrence. An average sample of ore from this stope assayed as follows: Gold, trace; Silver 0.78 oz.; Lead 0.88%; Copper 0.11%; MoO₃ 0.57%.

The south stope across the shaft at the same level as the north stope shows better values. A general sample from the south stope assayed; Gold, trace; Silver 0.82 oz.; Lead 4.50%; Copper 0.10; MoO₃ 1.01.

In order to check the lead molybdate values within the baryte zone, a careful sample was cut across this material 45 feet north of Jobes shaft on the 125 foot level.

The sample assayed; Gold, trace; Silver 1.76 oz.; Lead 7.80%; MoO₃ 1.28

Just above water level in the hanging wall at Jobes shaft, a cut sample across 8 feet of lead ore in baryte assayed as follows; Gold, trace; Silver 0.62 oz.; Lead 2.69%; Copper 0.07%; MoO₃ 0.35%.

The average of the lead molybdate ores in baryte gangue will contain less than 1% in MoO₃ for the entire mass.

Occasionally within the lead ore zone residual midneys of galena are found unaltered. Two of these pockets were sampled and assayed as follows;

100' N. of Jobes shaft, Gold, trace; Silver 19.63 oz.;
Copper 0.98%; Lead 65%

125' N. of Jobes shaft, Gold, 0.04 oz.; Silver 207.76 oz.; Copper 2.75%;
lead 60.6%

VERTICAL SHAFT:

This shaft is located 200 feet east of the outcrop and is reported to have cut through the vein on the 200 foot level. Good ore is said to have been encountered, but the mine run dumps show much the same character of material as can be seen in the workings above water level.

At the 163 foot level connection was made with the main incline. At the vertical shaft, two 10-inch Cornish pumps were installed to handle all of the underground water.

Water in this shaft is said to stand now at the 125 foot level.

DIAMOND DRILL HOLES:

In 1923, an effort was made to prove the continuity of this fissure vein in depth, also to prove ore values would materially improve in depth and probably encounter high grade ores in sufficient quantity to warrant a resumption of mine development.

Number One diamond drill hole was started July 27th, 1923 at a point 350 feet east of the vein outcrop and drilled to a depth of 525 feet. Actual drilling started August 12th; the hole was completed October 9, 1923. The hole was not very carefully logged, but drill reports show that the vein was encountered between 337 and 360 feet. Pieces of core showing copper stains and marked 345-350' prove the vein was cut but the metal values have not improved greatly with the additional 200 feet depth.

Hole Number Two, for some reason, was spotted to start from a point nearer the outcrop than the first hole. It is located 260 feet east of outcrop. The record of this hole shows that the type and character of mineralization encountered in the vein between depths 255 and 290 are exactly the same as can be seen at the 125 foot level above water, definitely proving that in 50 to 60 feet additional depth below the previously known ore conditions, no change has taken place. It seems at this time that Number Two Hole was a waste of effort and proved nothing beyond what was already known.

DRILL CORE AND SLUDGE EXAMINATION:.

The drill cores and sludges from Hole Number One were found stored in the assay office. The building is in a dilapidated condition and easily entered. Cores and sludges were stored in old tin cans, but all cans were marked with wooden paddles on which the footage was given.

The following is a list of assays made from cores found in storage:

	Au.	Ag.	Cu.
Core marked 306-308 Silicified Andesite	Nil	Trace	None
" " 345-350 Cu. stained Vein mat.	tr.	0.08	2.55
" " 358-365 Red stained Andesite	Nil	Trace	0.09

Assays of Sludge Samples in storage resulted as follows:

			Au.	Ag.	Cu.
Marked	337-340	Hole #1	trace	1.08	0.10
"	340-345	"	trace	0.58	0.55
"	345-350	"	trace	0.44	0.48
"	350-355	"	trace	0.20	0.37
"	355-360	"	nil	trace	0.23
"	360-365	"	nil	trace	0.08
"	375-380	"	nil	trace	0.04

It is reasonable to suppose that the vein was encountered in Hole #1 between depths of 337 and 360 feet as shown by assays of sludge sample checked by one core sample marked 345-350. The cores recovered between 345-350 were small pieces of red stained silicious material showing veinlets of copper silicates and carbonates.

No cores or sludge samples were found from Hole #2.

Sketch E shows drill holes plotted from data furnished by the company, together with notations as a result of this examination and assays made to check the data furnished by the company.

MINE WATER:

Permanent water level at least for surface seepage stands at 125 foot vertical depth.

The pump installation on this property consists of two ten inch Cornish pumps belt driven from an E. P. Allis Corliss engine.

A report by C. J. Price, written in 1925, states that the Cornish Pumps operating 16 hours daily and raising 200 gallons of water per minute were keeping the workings free from water.

EQUIPMENT:

The mine buildings and equipment are typical of an abandoned mining camp. Equipment of all kinds is gradually being scattered about the country and within a short time only the heaviest machinery will be found on the property.

The main equipment comprises:

- 3 100 Horse power return tubular boilers
- 1 150 h.p. E. P. Allis Corliss engine
- 1 150 h.p. Nordberg internal combustion engine
- 1 700 cu. ft. Ingersoll Rand Imperial type belt driven compressor
- Feedwater pumps
- 1 Oil Tank
- 1 Tractor
- 3 Tank Wagons
- 2 Oil storage tanks at railroad
- 1 5 ton truck
- 2 10' Cornish pumps
- 1 6 x 8 Geared hoist, steam driven

8.

Power house, bunk house, boarding house, cottages and tent houses.
All buildings need extensive repairs.

SUMMARY:

The outstanding features of the Reliance Mining Company property are as follows:

1. A fissure vein cutting andesite traceable 4,000 feet.
2. The outcrop of the mineralized portion of the fissure vein is exposed for nearly 800 feet on the Jack Rowley claim.
3. The vein filling shows two kinds of ore and indicates two periods of mineral deposition:
First: Copper ores in a silicious gangue
Second: Lead ores in baryte
4. Iron gozsan and iron ores are conspicuous by their absence. The outcrops and oxidized zones show jasper and silicified andesite. The original sulphide mineralization was probably copper in the form of finely disseminated chalcopyrite. Pyrite or iron sulphide was not abundant and that accounts for the absence of iron outcrops and heavy iron oxides within the vein matter.
5. The footwall copper vein will average 10 feet wide for a length of 650 feet. The copper contents of the vein to a vertical depth of 200 feet will not exceed 1% copper with 1 oz. silver per ton.
6. The hanging wall vein, lead ores in baryte are not important for their lead contents at this time, however, these ores will have a future value for their molybdic acid contents in which the lead can be recovered as a valuable by-product.
7. Oxidation has been very thorough to present known depth of 350 feet, shown by one diamond drill hole and secondary enrichment will occur at greater depth, probably not less than 1,000 feet below surface.

CONCLUSION:

1. The ore deposit on this property will be one pipe or lense as indicated by the outcrop on the Jack Rowley claim. There are no indications that more than one orebody occurs along this fissure vein.
2. The size of the ore shoot will be roughly 10' x 650' in cross section.
3. The ores of secondary enrichment can be expected at greater depth.
4. Gold and Silver values within the ore zone do not appear to be important.
5. The leaching and oxidation indicates ore values will be concentrated into a small but rich body of copper ore at greater depth. Residual spots of chalcocite and galena, showing high silver values, point to probable occurrence of rich ore in depth which now warrants further prospecting by diamond drilling. This work should be undertaken before planning any campaign to gain depth by shaft sinking.

9.

It is my opinion that the pipe of ore indicated has sufficiently attractive possibilities to warrant spending at this time sufficient money to bore three vertical diamond drill holes from points indicated on Map B, near the east side line of the Daisy Cornelia claim on the south half of the claim. These holes should encounter the vein at a depth of slightly more than 1,000 feet and prove the existence of a workable orebody.

The property is purely speculative, but leached ore conditions justify the proposed diamond drill campaign, which, I believe, will give proof that a more extensive development program will be found advisable.

It is my understanding that both properties can be optioned without capital outlay, and under these conditions further development is recommended.

Respectfully submitted.

(Signed) ARTHUR HOULE

Tucson, Arizona
November 17, 1927.

(3)

Report by Botz

292 (2)

Inspiration, Arizona. May 1, 1923.

Mr. Wm. G. Rice,
Phoenix, Arizona.

Dear Sir:

In accordance with your instructions, I have examined the Rowley mine and wish to submit the following remarks.

Various reports have already covered the working and equipment of the mine in full detail, and this report will deal only with the general geological conditions and the new work, with recommendations as to future development.

GENERAL

The Rowley vein is a large and well defined fissure vein striking about N - 30 W and dipping 45° to the East. It varies from 20' to 40' or more in thickness, with some mineralization extending into the foot-wall. It is a well defined compound fault and the vein occurs in two portions; next to the hanging-wall is from 10' to 30' of barite, with lead, silver and a little copper, and on the footwall side is from 20' to 30' of siliceous copper bearing vein material. Both walls are andesite.

MINE WORKINGS

1st. Level. This is about 100' below the surface. The vein has been opened by drifts and crosscuts for 300' in length with no change in either face. This shows oxidized and

~~and~~ leached material containing some residual copper in lenses and veinlets as chrysocolla, malachite and, at a few points, a little residual chalcocite. The barite portion of the vein contains small bodies of lead ore. A little ore has been shipped from this level, but, as a whole, it is not workable. It is of value in showing the size, nature and longitudinal extension of the vein. (For Molybdenite, see Osborne's report.)

186' Level. The vertical shaft was recently unwatered and the vein crosscut at this level. It shows 18' of barite with some lead and silver, and 30' of the copper-bearing vein. The vein is still completely oxidized, and the copper ores are found in veinlets and stringers. No chalcocite was seen. The copper is more uniformly distributed throughout the vein than in the level above. The general average of the whole is about 1%.

CONCLUSIONS.

The vein on both levels opened is very completely oxidized and leached, only a few specimens of chalcocite stringers of oxidized ores having been found. The sulphide ores will be at greater depth than has yet been attained. The chances are excellent for large payable ore-bodies at lower horizons.

The hanging-wall of the barite vein and both the hanging and foot-walls of the copper veins are well defined, strong and regular faults. These may be expected to have longi-

tudinal extensions far beyond the ground at present opened by drifting. Other ore bodies may very reasonably be expected along these extensions.

RECOMMENDATIONS.

It seems most expedient to drill the vein by vertical holes to determine the location and extent of the sulphide zone. Probably five or six holes from 400' to 800' in depth will be required. If these are favorable, a vertical working shaft should be sunk in the hanging-wall for further development and production purposes.

Respectfully submitted,

C. W. Botsford.

Inspiration, Arizona, October 8th, 1923.

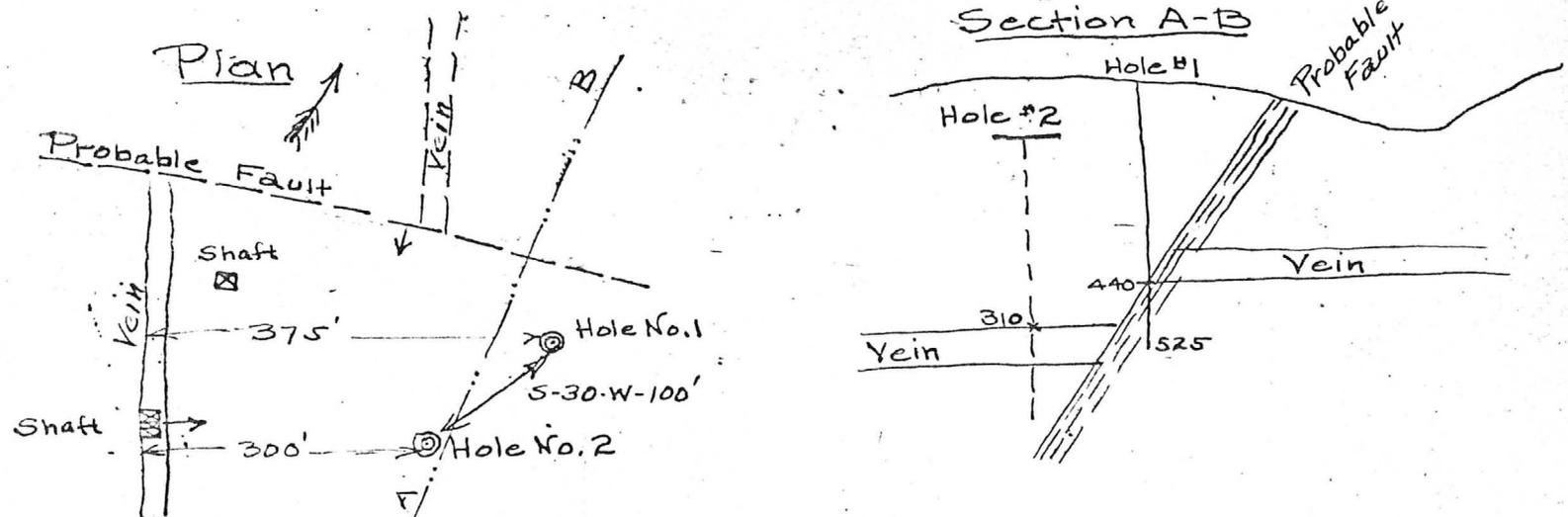
Mr. W. G. Rice,
Houghton, Mich.

Dear Sir:

I have just returned from the Rowley and found the following conditions.

Drill hole No. 1 has most probably cut a cross-fault at 440' and continued in this to 525'; the bottom. The hole is deep enough to have cut the vein without faulting and would not get anything by going deeper. It really proves nothing.

The following sketch shows the most probable occurrence.

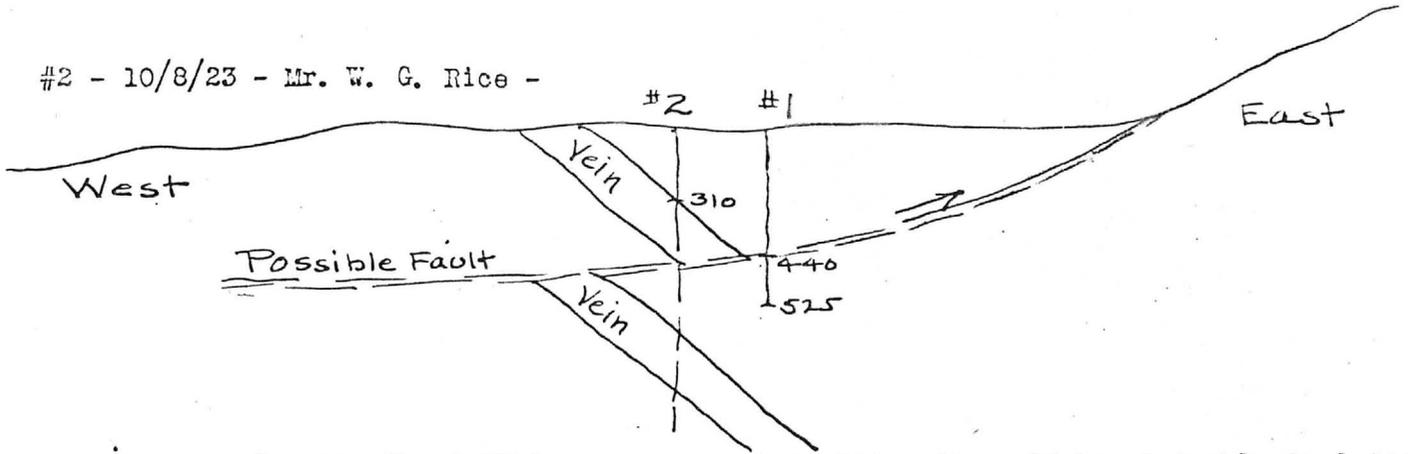


I changed the location 100' at S-30-W from the present hole. This will clear the fault and is located a little nearer the outcrop. It should cut the vein at about 310' or 320'.

Hole No. 1 shows 115' of overburden, so we can get no help from surface indications. Incidentally, this explains why we could never trace the outcrop of the vein beyond the little hill which seems to be like an island.

The possible other assumption is that a flat overthrust fault was cut by the drill. If this is the case the lower portion of the vein will lie farther west as shown in this sketch. No. 2 Hole will prove this and guide further drilling following.

#2 - 10/8/23 - Mr. W. G. Rice -



In case the drilling proves much faulting it would be advisable to drift underground and to do more drilling before locating any permanent shaft.

Yours very truly,

CW Botsford

Let
this
C.A.H.
8/21/36

PERSONAL LETTER ABOUT THE
MINES IN 1911 AND 1912
THE WRITER DESIGNING HIS NAME
J. C. ROWLEY, KNOWN WELL, MR. RICE
AND SON JOHN, WHO WAS AT THE YOUNG
MAN, THE ABOUT 16 TO 19 YEARS OLD
HIS FATHER, MR. RICE, WAS EMPLOYED BY
THE FINESTRE THE MINE. C. A. Rowley

Nov. 12, 21.

Rowley Copper Mines Company
Kansas City, Mo.
Gentlemen:

I have just received some first hand information of great interest regarding conditions at the bottom of the shaft.

Pastrana, one of the shaft men I have here now, was the man who worked with Jesus in the shaft at the time the gold ore was struck. He tells me that when the last round was drilled, there were four holes in the south west corner of the shaft that were never loaded. These holes struck softer material in the bottom and the water shot up from each hole about ten feet in the shaft. Each of these holes was plugged by him as they were drilled, and the balance of the holes were shot.

They found the gold ore when they mucked out. However the shaft was never completely mucked out, as owing to the big flow of water, they were never able to get more than three feet from the bottom. They had #7 & #8 pump, and pumped steady for 12 hours, without being able to lower the water below a point about three feet from the bottom, so that no one has ever seen the ledge where the gold ore came from, or knows anything about its size.

I had understood that the bottom was all cleaned out after the gold ore was struck, but this is not so. At the time that this last round was drilled, each of these holes that have such a flow of water, were plugged as they were struck. If all of these plugs have now come out, under the big pressure behind them, it will easily account for the big flow of water we now have. One hole 1 1/2 inches, with a 50 foot head, would discharge nearly 300 gallons per minute alone. Of course this is for an unobstructed hole like a nozzle, but if all four of these holes are open, they must have a pretty clear opening to be able to throw a stream ten feet high, and they would supply a lot of water every minute. If we completely drain the mine to the 160 level, we would greatly reduce this pressure and this big flow. From this information I am now satisfied that Wheeler never saw the bottom, and that this big increased flow of water is entirely due to these plugs being blown out by the water pressure. They were put in very hastily Pastrana tells me, and since that time when part of the muck was mucked out, no one has ever seen the bottom, in fact the bottom itself has never been reached since the last round was fired. From the amount of muck containing gold, and the fact that the greater part of the muck shot out by the last round, IS STILL IN THE BOTTOM, this would indicate that the gold strike is of much greater size than we suppose it to be. It will certainly be interesting to get down to it, for if there is any quantity of ore such as there seems to be, it would only take a very short time to put the Company completely on its feet financially.

very truly yours,

As we may have comparatively limited resources when we resume operations, I want them to count to the best advantage, and to be sure that I do two things, first fully install both sides of the jackhead so that I fully have the water under control and can truly say that our water troubles are over, and second that we can break shipping lead ore, and if possible also get down to the gold ore at the bottom of the shaft. In any event we will accomplish the first two things.

However to insure getting the best results, we should have the plunger here when we start, also have the boilers fixed up and should have a car of oil on hand.

In connection with the jackhead I also have to order the timber for the pump rods and some additional 10" column, but this order could be placed a week or so before I assemble the crew again to re-open the mine.

I am very glad to be able to say that when we do make the next attempt to get the water under control, that I will be able to get Mr Graham here to help me. I was unable to do this the last time, as I could not offer him any assurance of any extended operations, and did not feel justified in asking him to leave his present position at Catman. He wishes to make a change during the coming month and is willing to take a chance in coming here.

He is one of the best practical miners in the State, without exception, and has had a lot of experience in handling water and sinking wet shafts. He was assistant foreman a long time in the Old Dominion under Geo. Kingdon, later general foreman of the Arizona Commercial and was the man that brought in the ore in that mine and made a success of it when it was on its last feet. Later was Supt. of the S & B. and two different times while holding that position was offered the position of Superintendent of the U.V.X. by Mr Kingdon. He would not leave the S & B. owing to his personal loyalty to Mr Rice the President of the Company, but when Mr Rice lost the control of the Company and a new faction got control, they brought in their own men and of course he was forced out. He then went to Jerome and was immediately appointed general foreman of the United Verde Extension, (in the meantime another Supt. had been appointed so he could not get that position). Later he left there to take charge of operations for Mr Rice on another property, which later plans did not mature owing to the slump in the Copper market. He is not an engineer and is not an educated man, but when it comes to the practical end of handling men and handling a mine, he is one of the best men that I know of, and I personally have known a lot of mine superintendents. He and I are able to work together in perfect harmony and we make a better team together than either one of us would working single.

He will be worth a good many times to the Rowley Co. what I would have to pay him in the way of wages, and I will consider myself exceptionally fortunate in being able to secure the services of such a man at all. He is one of the type of men that is exceptionally loyal to those he likes, in fact his loyalty to Mr Rice in the past has more than once cost him opportunities of positions paying several times what Mr Rice was able to pay. I hope that we will soon be able to resume operations, as this time I am sure we will get down and open up the ore.

very truly yours,

February 1, 22

Rowley Copper Mines Company,
Kansas City, Mo.

Gentlemen:

In reply to your letter of the 28th inst. would say that you have a wrong impression of the location of the Driest well. The fence along side of the road is about the center of his land, that is to say on the center running east and west, however it is only about 300 feet from his north end line. There is about TWO THOUSAND FEET between the well and the Company side line.

However on receipt of you letter, I took the transit and ran a line to the well, with the object of working out the water levels and to find out if it would be possible to sink a well nearer the mine, and in running these surveys found out some very interesting facts that have been overlooked by everyone.

First: Between the west side line of the Jack Rowley #1 claim and the east side line of the Driest ranch, I found a fraction of vacant ground about 400 feet in width and the length of a claim. I immediately located this for the Company, calling it OBSIDIAN # 11. This is fine level ground and gives us nearly twenty acres that some day will be very useful for a tailings pile. I dont see how Mrs Rowley overlooked getting it. She would certainly liked to have grabbed it and hemmed us in on that side.

My important find however was that there is a vacant forty acres of government land, being the south east quarter of the north west quarter of section 25. The reason for this is that the Anderson ranch takes an eighty on each side of the next section line, leaving 80 acres clear, of which 40 acres is in the hills and probably covered with mineral claims. However the important 40 acres is this forty close to Al Driest's house. Miss Sparks and Mr McFernal will remember the cross roads at the end of the Driest place. This is fine level land, not rocky and there is some of it that would be fine to build on, as the land would be fine to put in a garden or shade trees. The corner is only about three hundred feet from the Driest well. I have secured ten acres of this land for the Company in the form of two five acre mill sites, one taken in connection with the Rowley claims and the other in connection with the Obsidian claims. I enclose a sketch map showing the location of these two mill sites. As these mill sites are on the direct line of the road to the mine, there are much superior to the mill site that the Company originally owned and afterwards lost, as they are close enough to the mine to build on at some future date, and would not be so far away for men to have to walk to the mine. Then a well on the corner, as close as possible to the present Driest well, will without any question get the same kind of water, and the water in this well is particularly soft.

I would suggest to the Board that they authorize me to spent two hundred and fifty dollars immediately on sinking a well on this mill site. This will not complete it, but will make a good start, and would enable a couple of the boys that have been waiting here, paying board, in the hopes we will start up, to make at least their board while we are getting things lined up. I would have to move the pipe line over to the new well, but in sinking this well, I would make it large enough to work in so that we can get it dee enough to furnish all the water we need. We need enough fresh water to supply the boilers, then we will get away from this constant expense that is costing the Company thousands of dollars. The well itself will cost us around five or six hundred dollars, perhaps a little less, but close to that, as I want to make it of ample size and timber it well, for I want it to be finished for good, and not have to think any more about water. We have the domestic water now, but we must develop enough water for the boilers, for this is our big expense. However you dont need to authorize five hundred dollars expense right now, but if you can spare two fifty for this work, I can get it well started, and then when we get the money to resume operations, I will be able to complete the well while the plunger parts are coming, and when I have the boilers repaired, I will not have any further trouble with them.

When I found out about the vacant forty acres, I went down to see Trushiem to make sure that I was not mistaken about it, as he knows all the agricultural land near here, and he said "Yestx it is open ground" It seems he has known of this piece of ground all the time, and wondered at the time the Company was trying to get the mill site they had trouble over, that they did not take up a mill site on this piece, which was so much better in every way for the Company.

I think it would be a good plan to sink this well as soon as possible, as it would be developing a bona fide use of it for the mine, and prevent anyone else taking it up. I am very glad that you brought this to my attention in this manner, as it would not have occured to me to have run any surveys on this side of the Company property, as I presumed that my predecessors had looked up anything of value to the Company that might lie here, long before this.

I shall survey these two mill sites tomorrow, and have them recorded right away, and will await your instructions in regard to starting a well there. However I would strongly urge this, and now is the best time when we have nothing else to do, for when we get started up we will be so busy that we wont want anything to distract our attention from the mine work.

very sincerely yours,

April 12, 1922.

Fowley Copper Mines Company
210 Scarritt Arcade, Kansas City, Mo.

Gentlemen:

Your letter of the 6th inst. at hand. I am indeed glad to learn of the late success in placing the bonds and sincerely trust that it will continue. I am glad that we passed the \$1000.00 quota, as that will insure Mr McGregors subscription and justifies our little campaign that we put on just before I left.

You have doubtless seen Mr Rice by this time, but I expect that he will have nothing definite to offer until he has talked with Mr McGregor. However it is very encouraging to have Mr Bottsford endorse my report so fully, also to have him so well pleased with the showing.

One point came up while we were in Phoenix that was a little unfortunate as it might cause some question later. Mr Rice was talking with Mr Elliot, who is his personal attorney there and one of the big corporation lawyers of the State. He represents the Old Dominion and other big mining companies. Maxx Mr Rice brought up the subject of the bond issue and Mr Elliot asked me if a special meeting of the stockholders had been called to authorize this issue. When I told him no, that it was authorized by the Directors only, it said it put a very serious doubt on the legality of the issue. In other words any stockholder might bring action in the Courts and have the issue put aside. I told him of our action in ratifying the issue at the annual meeting and he said that it was very doubtful if we had any power to do this, unless we notified the stockholders in the notice of the annual meeting of our intention to present this action for ratification.

I then went to see Mr Marks about it, as I understood that he had passed on the matter. I was very much surprised to find that the papers, deed of trust etc. had never been submitted to him. The only thing he knew of it, was a letter he received from Mr Day, asking him if it was necessary to call a special meeting of stockholders in the State of Arizona to place a mortgage on the property. He replied that if the Articles of Incorporation specifically gave the Directors this power, it was not absolutely necessary, but he very strongly advised Mr Day to have this done, in order to make a positive assurance that no question could be raised later. He said that he had felt rather hurt that the Company had ignored him so completely in such an important matter as this was, where the entire assets of the Company was involved. I had supposed that Mr Marks had passed on and approved the entire matter of the bond issue from a legal standpoint, but it seems that he has never seen any of the papers, and John handled this matter in a very loose way and has left serious chances for trouble at some future time.

There was some correspondence between him and John in relation to a permit from the Corporation Commission to put out a bond issue. The Commission granted this permit, but this permit does not in any way guarantee the legality of the issue itself, that is to say, guarantee that the proper steps have been taken by the Directors of the Company. Mr Elliot seems to think that they have not done so. It is to be hoped that the question will never arise, but the danger is there that someone like Barber may do so.

The Company, or rather the Directors, for their own protection, should have the written opinion of the Company attorney that the issue is properly authorized and binding on the Company in every respect.

We are making excellent progress on the well. The labor costs to date are \$171.00 and lumber (voucher enclosed) \$89.64. We have enough lumber for another 24 feet. We have the well down 26 feet, which makes total costs about ten dollars per foot. This is at least two dollars per foot under my estimate. We are putting down a regular nine shaft, properly timbered and when we get it done we will have a permanent well.

I have not ordered a thing except the plunger, that will take a month to make and we have to have it in any event. The balance we can get quickly. I am hoping that we will get word from Mr Rice that some arrangement has been made to finance us to the extent of at least ten thousand dollars before we start the unwatering. He advised me very strongly not to spend any money except finishing the well until he had had a conference with you and Mr McGregor and he seemed to think that in about three weeks or so, that there might be something definite accomplished in the way of financing to carry out the programme of development I have outlined to you and to him and Mr McGregor. I shall finish up the well and have the fresh water for the boilers before I steam up, so that when the boilers are repaired, that continual repair expense is over. I do hope that Mr Rice will finance us so that we can put in the flame also, for I don't want to do any great amount of pumping and run chances of spoiling the well after we get it done. You can rest assured that I will freeze on to every cent we have and watch expenses, for if Mr Rice does not do anything for us, I absolutely have to make the money on hand get us down to the lead ore and have the water under permanent control.

With kindest regards and wishing you continued success in the bond sale, I am,

very sincerely yours,

IN THE UNITED STATES LAND OFFICE, PHOENIX, ARIZONA.

MINERAL SURVEY NO. 4524, MINERAL APPLICATION NO. PHOENIX

NOTICE OF INTENTION TO APPLY FOR PATENT.

NOTICE IS HEREBY GIVEN that Charles L. Rowley, a citizen of the United States, whose mailing address is 701 East 53th Street, Los Angeles 1, California, intends to make application for a mineral patent to the hereinafter named and described lode Mining Claims, pursuant to the Revised Statutes of the United States.

Said mining claims are located in the Painted Rock Mining District, Maricopa County, Arizona, and notices of Location thereof are of record in the Office of the County Recorder of Maricopa County, Arizona, in the Books of Mining Records and at the pages following, to-wit:

	<u>NO.</u>	<u>BOOK NO.</u>	<u>PAGES</u>
San Carlos	20-21		425-1, 2
San Carlos No. 1	20-21		214-640, 641
San Carlos No. 2	20-21		214, 215-641
San Carlos No. 3	20-21		215-641, 642
San Carlos No. 4	20		215, 216
San Carlos No. 5	20-21		216-542
San Carlos No. 6	20-21		216, 217-643
San Carlos No. 12	21		380
Casis	21-Booklet 3173		389; 639, 640-419
John Junior	22		544
Leadora	21		409
Cold Hill	21		603
Hilltop	22		196
Charles A.	21		457
Grandy	27		162, 185

All of said mining claims lie wholly within Sections 19, 24, 25, 30, 31, 36, Township 4 South, Range 7 and 8 West, Gila and Salt River Base and Meridian, and are further described by the following notes and bounds, which are the exterior bounds of said mining claims as surveyed in United States Mineral Survey No. 4524, to-wit:

Beginning with Corner No. 1 of the San Carlos lode, which is identical with corner No. 4 of the San Carlos No. 2 lode, being a stone set in the ground, thence S C - 1 - S 82° 2' - 4 - 4524, thence the quarter corner common to Sections 25 and 30, bears N. 82° 23' E. 890.44 Ft. (Variation 14° 15' E);

Thence N. 69° 45' E. 600 Ft.,	Thence N. 11° 22' W. 1502.30 Ft.,
Thence N. 20° 20' W. 1407.60 Ft.,	Thence N. 61° 43' E. 1100.50 Ft.,
Thence S. 20° 20' E. 1500 Ft.,	Thence S. 14° 32' E. 1500 Ft.,
Thence S. 21° 38' E. 1500 Ft.,	Thence S. 53° 43' W. 600 Ft.,
Thence S. 21° 38' E. 1496 Ft.,	Thence S. 69° 43' W. 600 Ft.,
Thence S. 53° 37' E. 1500 Ft.,	Thence S. 67° 43' W. 1200 Ft.,
Thence N. 53° 37' W. 1500 Ft.,	Thence S. 53° 43' W. 600 Ft.,
Thence N. 21° 36' W. 2006 Ft.,	Thence N. 69° 43' E. 1200 Ft.,

to the place of beginning.

Each of the above described claims contains an area as listed below

	<u>Total Acres</u>
Hilltop	20.661
Gold Hill	20.660
Isadora; Charles A; each 20.659 Acres	41.318
San Carlos; No. 1; No. 2; John Junior; Grandy; each 20.655 acres	103.275
San Carlos No. 3; No. 4; No. 12; Oasis; each 20.600 acres	62.400
San Carlos No. 5; No. 6; each 17.252 acres	34.504
	302.838
Less areas in conflict with above claims, as follows:	
San Carlos .043 acres; No. 1 .014 acres; No. 2 .014 acres	.071
Total remaining acreage	302.767

Any and all persons claiming adversely the mining ground, vein, ledge, premises, or any part of the same so designated, surveyed, platted and applied for, are hereby notified that according to the law and regulations thereunder, unless their adverse claims are duly filed with the Bureau of Land Management, Department of the Interior of the United States, at Phoenix, Arizona, such adverse claims will be barred under and by virtue of said law and regulations. A certified copy of the official plat of Survey No. 4524 is posted herewith.

DREW AND POLICE on the ground, this
_____ day of March 1931.

Claimant, Applicant

Witnesses

AFFIDAVIT OF FEES PAID BY APPLICANT

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STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

Charles A. Rowley, being duly sworn, upon his oath deposes and says:

That he is the applicant for patent for the San Carlos, San Carlos No.1, San Carlos No. 2, San Carlos No. 3, San Carlos No.4, San Carlos No.5, San Carlos No.6, San Carlos No.12, Oasis, John Junior, Isadora, Gold Hill, Hilltop, Charles A., and Grandy Lode Mining Claims in Painted Rock Mining District, County of Maricopa, State of Arizona, under the Mining Laws of the United States and that in the prosecution of said Application he has paid out the following amounts Viz:

Surveyor General's Office \$420.00 Less \$132.50 refund	\$287.50
In the Local Land Office	10.00
For Surveying (Mining Engineer's Survey No. 4524)	2,440.25
For the Publication of Patent Notice	277.05
For Abstract or Certificate	375.00
For the Land embodied in these claims	1,515.00
For Stenographic work, Telephones & Clerical Misc.	44.97
For Photostats of the 15 Mining Claim Records	56.25
For Attorney Services	320.00
Total	\$ 5,326.02

Charles A. Rowley
Applicant-Claimant

Subscribed and Sworn to before me this 12th day of July, 1961, a Notary Public in and for the County of Maricopa County, Arizona.

[Signature]
Notary Public

My Commission Expires:
My Commission Expires Nov. 3, 1963

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AFFIDAVIT THAT PLAT AND NOTICE REMAINED
POSTED ON CLAIM DURING TIME OF PUBLICATION.

STATE OF ARIZONA)
) ss
COUNTY OF MARICOPA)

Charles A. Rowley, being first duly sworn, according to law,
on his oath, deposes and says;

That he is the Claimant and Applicant for Patent of the
San Carlos, San Carlos No.1, San Carlos No.2, San Carlos No.3,
San Carlos No.4, San Carlos No.5, San Carlos No.6, San Carlos No.
12, Oasis, John Junior, Isadora, Gold Hill, Hilltop, Charles A,
and Grandy, Lode Mining Claims, situate in the ^{Painted} ~~Lead~~ Rock Mining
District, Maricopa County, State of Arizona, the official plat
of which premises, together with the Notice of Intention to apply
for a patent therefor, was posted thereon on the 8th day of March,
1961, as fully set forth and described in the Affidavit of Harry
E. Jordan and M. E. Strickland, dated the 9th day of March, 1961,
which affidavit was duly filed in the office of the Manager,
Land Office at Phoenix, Arizona; and that the Plat and Notice so
mentioned and described remained continuously posted upon said
mining claim from the 8th day of March, 1961, until and including
the 10th day of July, 1961, including the sixty day period during
which notice of said Publication for patent was published in the
Newspaper.

Charles A. Rowley
Applicant-Claimant

Subscribed and sworn to before me this 10th day of July, 1961.

Notary Public
Notary Public

My Commission Expires:
My Commission Expires Nov. 3, 1962

REPORT ON
SAN CARLOS COPPER MINES COMPANY
OF ARIZONA.

PROPERTY

The San Carlos property consists of eleven full mining claims known as San Carlos, San Carlos #1, San Carlos #2, San Carlos #3, San Carlos #4, San Carlos #5, San Carlos #6, San Carlos #11, San Carlos #12, John Junior and Oasis.

LOCATION

The San Carlos property is located in the Painted Rock Mining District, Maricopa County, Arizona, about twenty-five miles northwest of Gila Bend and twelve miles north of Tartron, stations on the Southern Pacific Railroad.

ACCESSIBILITY

The group is unusually accessible, being reached by an auto-truck and wagon roads over railroad grades.

TOPOGRAPHY

The group is along the western slope of the Painted Rock Mountains. The topography is comparatively uniform for a mining property. The lowest point is about 460 feet and the highest about 600 feet above sea level.

GEOLOGY

The original formations on the surface of the property were probably upper carboniferous limestones. Then came the first disturbance, during which a number of trap dykes were formed. These dykes trend easterly and

westerly, and vary from 2,000 to 8,000 feet apart.

The second uplift formed the main mountain range and the primary contact paralleling it. This contact is about midway from the main vein to the crest of the mountains.

The third uplift destroyed all limestones not previously destroyed. Closely paralleling the contact on the east side is a formation of obsidian, or volcanic glass. It varies from 35 to 70 feet in thickness, and is on the horizon of the Niagara limestone. The horizon of this limestone in Arizona is about 2,600 feet below the horizon of the original upper carboniferous limestones. But the Niagara horizon on the east side of the contact now stands in some places 400 feet above the upper carboniferous limestone horizon to the west of the contact. This means that any given rock on the east side of this contact is now about 3,000 feet higher than the same rock on the west side of the contact. This also means a fissure in the earth to a depth of many thousand feet.

At the time of the third uplift, a primary or main vein was formed that parallels the contact, and is from 1,200 to 1,500 feet from it. I call this the main vein, but it consists of at least four veins. However, they so closely parallel one another that I represent them as one.

On the west side of the ore zone, and closely associated with the veins, are the reefs of rhyolite, diorite, impure Jasper porphyry, and other igneous rocks. The Jasper porphyry is several hundred feet wide, but on the east side of the ore zone, near the contact, the formations are similar to those found along the veins.

but trachyte must be added to the list.

This contact and ore zone crosses Oatman Canyon about one mile south of the property. Just west of the zone, in Oatman Canyon, is a white, or gray, formation about 1,100 feet wide. It seems to be either chlorite quartz or phonolite.

So far as can be determined by a surface survey, the walls of this contact are vertical. The main veins are about 1,200 feet westerly from the contact. These veins dip towards the contact at an angle of about 45 degrees from a vertical plane. So the veins probably reach the contact at depths of from 1,500 to 1,700 feet, measured on the incline of the veins.

ORES AND VEINS

From a point of the Rowley property, near the main shaft, the formations dip downward in the direction of south, southeast, to the dyke on the San Carlos group. This dip causes the main ores in the San Carlos group to lie at lower levels than they do in the Rowley mine.

All geological conditions obtaining at the two properties point to the fact that the main mine lies within the San Carlos property, but geological conditions there would not allow the main body of ore to penetrate to the surface. The Rowley mine cap being lower and softer and a vent in it being made, the gases and waters flowed through it making the enormous deposit of ore at the Rowley. However, geological conditions clearly indicate that the Rowley mine has only the extreme end of the San Carlos ores.

The main shaft of the San Carlos is about 230 feet deep. At this level there are about 150 feet of

drifts and cross-cuts. Besides the main well-defined vein, several other veins were encountered in sinking and cross-cutting. Some of these gave assays that ran as high as \$710.00 per ton, mostly in copper and gold. There is, of course, no large body of this ore at present.

The main shaft of the San Carlos is about 1,500 feet from the main shaft of the Rowley mine. The south workings, underground, of the Rowley mine are about 550 feet from the north line of the San Carlos.

No lengthy description of the Rowley property is necessary here, as reports by different engineers are accessible to anyone. But I will say that I am credibly informed that two United States engineers, or geologists, have stated that there are from seven to nine million dollars' worth of ore in sight. The Rowley mine is a wonderful property, and this fact is obvious to anyone, whether experienced in mining or not, who examines it. As I stated above, geological conditions indicate that with depth the San Carlos will develop an ore body far in excess of that at the Rowley mine.

Attention has been called to the dip towards the dyke. I believe an area of from 75 to 125 acres at the foot of this incline, immediately north of the dyke, has received the solutions of copper to such an extent as to render the entire area of workable richness.

The three main veins in the Rowley mine were cut in 58 feet. The lead and molybdenum zone is about 28 to 30 feet wide, and is about 15 feet in the clear, east of the three copper-gold veins.

The copper and gold ores in the Rowley mine are peculiar in a mineralogical sense. The crystallization of

these ores prove that most of them were deposited from below - probably from the contact.

The usual formations in a copper zone are as follows:

1- From the surface to water level, a zone of leached and highly oxidized ores;

2- Beginning near the water level, a zone of second enrichment - a zone of rich oxidized ores that gradually merge into the sulphides; and

3- Permanent sulphide ores. Above the sulphides nearly all the values indicate that they were infiltrated from above. Their source being sulphides that have been decomposed on higher levels and been leached out of rocks long eroded away.

There have been some enrichments from higher levels in the Rowley mine, but most of the values came from below - almost certainly from the contact.

This fact explains why no sulphides have been encountered in the Rowley mine. While sulphides may be reached at any depth below the water level, it is possible for the oxide ores to continue down to the junction with the contact - to a depth of about 1,600 to 1,700 feet.

The conditions existing in the Rowley mine have been set forth in this report, for the reason that the development work done at this mine has made available geological data which have a direct bearing on the ore deposit in the San Carlos and tend to prove the correctness of the deductions made after careful study of the San Carlos property.

WATER

There is an abundance of water at shallow depths

within one mile. One well about 2,000 feet from the San Carlos is about 50 feet deep, and the water in it is pure and soft, and is abundant in quantity.

FUEL

There is an abundance of mesquite and other wood for domestic fuel, but crude oil is the most available for mining purposes.

GENERAL REMARKS

I believe that the San Carlos property has every chance of becoming a wonderful mine, duplicating if not excelling the Rowley mine.

Aside from its high grade possibilities and probabilities, it has the indications of a great deposit of millions of tons of low grade copper ores.

I do not hesitate to recommend the San Carlos, and believe that it has every chance of becoming a wonderful producer.

Respectfully submitted,

(Signed) Edwin Walters,

Sawtelle, California.

Former Geologist, State of Missouri.

Former Geologist, Kansas City,

Pittsburgh and Gulf Railroad.

I hereby certify that the above is a true and correct copy of the original report that is on file in the office of the San Carlos Copper Mines Company.

Ed. Peck Pres.

No. 14-A Dec. 13th, 1911: Gold-oz. Silver oz. % copper total val.
 trace .7 52.01 \$124.82
 " .92 51.44 123.45

Copper @ 12¢ Worthington & Pickard, Douglas, Ariz.

No. 14-B Jan. 9th, 1912: gold, .04-oz. val. \$1.80; silver, 6.96-oz. val. \$3.48
 copper, 54.24%, total val. \$157.15. W. Geo. Varing, Analytical Chemist &
 Assayer, Webb City, Mo.

No. 15 April 15th, 1912:

	oz-gold:	oz-silver:	% copper	total val.
Smelter lot No. 1033	.52	2.5	25.6	\$ 92.00
Av. sample box sent K. O.	.48	2.4	39.5	142.00
Red & Green ore from shaft	trace	2.9	28.1	85.98
Best copper ore " "	.05	1.5	56.1	170.17
Lead ore on surface " "	trace	82.5		102.45

J.H. Moreland, Mining Engineer
& Assayer.

Late Assayer by appointment to U. S. Surveyor of customs, at Kansas City, Mo.
 at date above stated in employ of Rowley Copper Mines Co. at the mine.

No. 16 May 5th, 1912: oz-gold: oz-Silver: % copper Total val.

Fine red dirt from shaft	trace	1.00	0.6	\$ 2.52
Rotten red rock " "	"	.08	.2	1.12
Silicate ore " "	"	.2	8.3	26.28
Dons best copper ore "	1.28	2.5	25.2	107.74
Aver. 8-in. bottom of "	.96	1.4	13.7	63.88

J.H. Moreland, at mine

Copper @ 16¢.

No. 17 May 22nd, 1912:

	oz-gold.	oz-silver	%-copper	total val.
54-ft. below water level, 6-in.	0.03	1.2	8.5	\$ 27.84
56 " " " " 12 "	.05	1.4	23.6	75.47
58 " " " " 14 "	1.04	1.3	22.	90.22
60 " " " " 8 "	.02	2.1	7.1	24.18
62 " " " " 12 "	.40	2.2	14.6	54.87
64 " " " " 10 "	.56	1.	20.3	75.13
64 " " " " 30 "	.06	1.1	9.9	32.74
66 " " " " 24 "	8.70	2.9	12.8	215.67
68 bottom of shaft 8 "	.44	1.2	15.4	57.56
68 " " " " 14 "	.36	1.4	8.8	35.50

J.H. Moreland, at mine.

Copper @ 15.6 per lb.

No. 18, May 28th, 1912: Certificate of assays of dump samples from Rowley
 Copper Mines.

Sample No,	Gold:	Silver:	Copper:	Value per ton:
1	0.12	0.4	8.8	\$ 27.27
2	0.08	0.6	7.7	23.50
3	0.02	0.9	2.1	6.80
4	trace	0.2	3.1	8.80
5	0.16	0.5	8.5	27.40
6	trace	0.4	0.6	1.90
7	0.02	0.8	24.3	68.90
8	trace	1.0	3.4	10.10
9	0.20	0.8	4.8	17.92
10	trace	1.1	3.6	10.72
11	0.04	0.8	5.1	15.54
12	trace	1.2	34.1	96.17
13	0.28	1.8	18.5	52.84
14	0.20	1.2	34.2	100.45
15	1.04	12.6	38.2	135.06
16	0.08	1.1	32.5	93.24
17	trace	1.8	29.2	82.80
18	0.05	1.0	44.5	128.16
19	0.40	2.2	20.3	67.50
20	.88	2.7	20.3	76.00
21	0.04	1.2	21.5	61.70
22	trace	0.8	15.5	43.86
23	0.44	1.8	34.2	95.60
24	0.48	1.2	20.7	68.26
25	trace	0.0	0.6	1.68

Gold at \$20.00 per oz.
 Silver " .58 " "
 Copper " .14 " Lb.

J.H. Moreland, at mine.

Offices: 6 Gumbel Bldg., Kansas City, Mo and Gila Bend, Ariz.

The following assays are set out by number in relation to date, and show; first, ounces gold and value thereof: second, ounces silver and value: third, per cent copper and value at price when assayed, followed by total value of gold, silver & copper, and name of assayer. When assays show from what section of property sample is taken, it is so stated.

No.1 Sept.1st,1909: From brown sample over the malachite green at 125 ft. Gold, 1.24 oz. val. \$25.63; silver, 3.96 oz. val. \$1.98; copper 5%, total val.\$38.11 Jas.Irving & Co. Assayers, Los Angeles, Cal.

No.2 Sept.1st,1909: Malachite green at 125 ft. Gold, .32-oz. val. \$6.61; Silver, 5.68-oz. val. \$2.84; copper,27.90%, total val. \$68.04. Irving & Co.

No.3 Sept.1st,1909: Silver & lead sample at 125 ft. Gold, .06-oz. val. \$1.24; silver, trace; copper, 2% total val. \$5.44. Irving & Co.,

No.4 Sept.1st,1909: Iron in bottom of shaft on footwall at 125 ft. Gold, .40-oz. val. \$8.26; silver, 1.60-oz. val. 80 cents; copper 9.06%, total value \$9.06. Irving & Co.

No.5 Sept.1st,1909: Dump samples taken from entire dump. Gold, .16-oz. val. \$3.30; silver, trace; copper, 1.10%, total val.\$5.61. Irving & Co.

No.6 Sept.1st,1909: General sample, 125 ft. down in incline shaft. gold, .32-oz. val.\$6.61; silver, .08-oz, val. 4 cents; copper, 8.10%, total value \$23.66. Irving & Co.

No.7 Sept.1st,1909: Lead ore taken from crosscut toward hanging wall at 125 ft. No assay for silver. Lead, 47.50% Irving & Co.

No.8 Oct. 7th,1910: From 23ft.below water level. Gold, 27.00-oz. val. \$558.13; silver 1-oz, 50 cents; copper 14.02%, total val. \$585.15.

From soft streak of brown ore between copper ore, 23 ft.below water level. Gold,.24-oz, val. \$4.96; silver, .26-oz, val. 13 cents; copper 3.81%, total val.\$14.99. Irving & Co.

No.9 Oct.8th,1910: Bottom of shaft, east side, 24 ft below water level on 42 deg. incline shaft. Gold.60-oz. val. \$12.00; silver, .40-oz val. 20 cents; copper 6.80%, total val. \$17.68. Irving & Co.

No.10 Oct.8th,1910: From same location as No. 9. Red ore. Gold, .20-oz val. \$4.13; silver, .30-oz, val. 15 cents; copper 22.82%, total val. \$68.33. Irving & Co.

No.11 Oct.21st,1910: oz.gold: oz.silver: copper-% total val.
 .70 .30 13.60 \$ 15.75
 .15 2.00 7.00 21 48

Copper @ 12 1/2¢ Arthur W. Houck, El Paso, Texas.

No.12 Nov.3rd,1910: total val.
 oz.gold oz,silver gold-silver %-copper total val.
 .30 3.70 \$ 7.85 20.90 \$ 58.00
 .48 3.12 11.16 32.90 90.12
 .50 3.60 11.80 8.90 33 15
 .35 2.70 8.35 7.90 27.30
 .31 2.30 7.35 24.30 65.67
 .60 4.50 14.25 2.05 19.17
 .40 3.20 9.60 46.50 121.20

Copper @ 12¢: Kansas City Testing Laboratory.A.C.Cross

No.13 Nov.10th, 1910: .60 1.20 10.50 37.80
 Kansas City Testing Laboratory,
 A.C.Cross.

No.14 Oct.20th,1911: gold val. silver val. copper total val.
 .13-oz \$2.60; 12.44-oz. \$6.22; 40.22% \$109.37
 Copper @ 12 1/2¢ Worthington & Pickard, Douglas, Ariz.

MARICOPA COUNTY TAX STATEMENT				1977 239933		401781001	
VALUATION (Dollars Only)				TAX DISTRIBUTION			
TYPE	FULL CASH	ASSESSED	TYPE	RATE PER \$100 VALUE	AMOUNT		
LAND	2060	370	STATE	160	592	CLAIMS DAISY CORNELIA-JACK ROWLEY-JACK ROWLEY NO	
IMPROVEMENT			COUNTY	170	629	1-JACK ROWLEY NO 2-JACK ROWLEY NO 3-JACK ROWLEY	
PERSONAL			CITY			NO 4-JACK ROWLEY HILLSITE SECS 24&25-4S-8W	
EXEMPTION			SCHOOL DIST.	385	1426	PAINTED ROCK DISTRICT 122 1/3 AC	
			TEACHERS RETIREMENT	97	358		
			IN COLLEGE	76	281		
TOTAL	2060	370	LAND & IMPROVEMENT	1000	888	3286	
			ASSESSED VALUE FOR CALCULATING FLOOD TAX				
			VALUE ON ACRES				
			FLOOD	20	74		
			CAWCD	03	12		
SPECIAL DISTRICTS							
TOTAL TAXES					3372		
MAY BE PAID IN FULL				INTER-EST			
DO NOT MAIL CASH MAKE PAYMENT IN U.S. FUNDS ONLY TO MARICOPA COUNTY TREASURER AND SEND TO 111 S. 3rd AVE. ROOM 101 PHOENIX, ARIZONA 85003				SEE REVERSE SIDE FOR EXPLANATORY NOTES		DO NOT RETURN THIS UPPER PART OF YOUR TAX STATEMENT UNLESS YOU MUST HAVE A RECEIPTED BILL.	
				SECOND HALF TAXES		FIRST HALF TAXES	
				1686		1686	
				DUE MAR. 1, 1978 DELINQUENT AFTER MAY 1, 1978		DUE OCT. 3, 1977 DELINQUENT AFTER NOV. 1, 1977	
				90241		90241	
				CONTO		CONTO	
				SECOND		FIRST	

MARICOPA COUNTY TAX STATEMENT				1977 239769		401781009	
VALUATION (Dollars Only)				TAX DISTRIBUTION			
TYPE	FULL CASH	ASSESSED	TYPE	RATE PER \$100 VALUE	AMOUNT		
LAND	8000	1440	STATE	160	2304	ROWLEY CHARLES A	
IMPROVEMENT			COUNTY	170	2448	% CHIEF PRODUCTS CO	
PERSONAL			CITY			7803 E HARPER AVE	
EXEMPTION			SCHOOL DIST.	385	5546	DOWNEY CA	
			TEACHERS RETIREMENT	97	1396	90241	
			IN COLLEGE	76	1094	CONTO	
TOTAL	8000	1440	LAND & IMPROVEMENT	1000	888	12788	
			ASSESSED VALUE FOR CALCULATING FLOOD TAX				
			VALUE ON ACRES				
			FLOOD	20	288		
			CAWCD	03	44		
SPECIAL DISTRICTS							
TOTAL TAXES					13120		
MAY BE PAID IN FULL				INTER-EST			
DO NOT MAIL CASH MAKE PAYMENT IN U.S. FUNDS ONLY TO MARICOPA COUNTY TREASURER AND SEND TO 111 S. 3rd AVE. ROOM 101 PHOENIX, ARIZONA 85003				SEE REVERSE SIDE FOR EXPLANATORY NOTES		DO NOT RETURN THIS UPPER PART OF YOUR TAX STATEMENT UNLESS YOU MUST HAVE A RECEIPTED BILL.	
				SECOND HALF TAXES		FIRST HALF TAXES	
				6560		6560	
				DUE MAR. 1, 1978 DELINQUENT AFTER MAY 1, 1978		DUE OCT. 3, 1977 DELINQUENT AFTER NOV. 1, 1977	
				90241		90241	
				CONTO		CONTO	
				SECOND		FIRST	

MARICOPA COUNTY TAX STATEMENT 1977 240703 SEC. LOT 6 TWP. 18 S. 6 E. 18 TR. 18 PARCEL NUMBER 4021161075 1
 MARICOPA COUNTY TREASURER ROOM 101 111 S. 3RD AVE. PHOENIX, ARIZONA GILA BEND

VALUATION (Dollars Only)		TAX DISTRIBUTION	
TYPE	FULL CASH	ASSESSED	AMOUNT
CASH	940	170	272
IMPROVEMENT			289
PERSONAL			340
SPECIALTIES			1510
TOTAL	940	170	2704

LAND AND IMPROVEMENT ASSESSED VALUE FOR CALCULATING FLOOD TAX	VALUE ON ACRES	RATE	AMOUNT
	170	20	34
	170	03	6
SPECIAL DISTRICTS			

TYPE	RATE PER \$100 VALUE	AMOUNT
STATE	150	272
COUNTY	170	289
CITY	200	340
SCHOOL DIST.	887	1510
TEACHERS RETIREMENT	97	164
UN. COLLEGE	76	123
TOTAL	2456	1590

ROWLEY CHARLES A 7803 HARPER AVE DOWNEY CA 90241	
SECOND HALF TAXES	FIRST HALF TAXES
1372	1372
INTEREST	INTEREST
DUE MAR. 1, 1978 DELINQUENT AFTER MAY 1, 1978	DUE OCT. 3, 1977 DELINQUENT AFTER NOV. 1, 1977
SECOND	FIRST

DO NOT MAIL CASH
 MAKE PAYMENT IN U.S. FUNDS ONLY TO
 MARICOPA COUNTY TREASURER
 AND SEND TO 111 S. 3RD AVE. ROOM 101
 PHOENIX, ARIZONA 85003

TOTAL TAXES 2744
 MAY BE PAID IN FULL
 SEE REVERSE SIDE FOR EXPLANATORY NOTES

DO NOT RETURN THIS UPPER PART
 OF YOUR TAX STATEMENT UNLESS
 YOU MUST HAVE A RECEIPTED BILL.

MARICOPA COUNTY TAX STATEMENT 1977 240702 SEC. LOT 6 TWP. 18 S. 6 E. 18 TR. 18 PARCEL NUMBER 4021161075 1
 MARICOPA COUNTY TREASURER ROOM 101 111 S. 3RD AVE. PHOENIX, ARIZONA GILA BEND

VALUATION (Dollars Only)		TAX DISTRIBUTION	
TYPE	FULL CASH	ASSESSED	AMOUNT
CASH	940	170	272
IMPROVEMENT			289
PERSONAL			340
SPECIALTIES			1510
TOTAL	940	170	2704

LAND AND IMPROVEMENT ASSESSED VALUE FOR CALCULATING FLOOD TAX	VALUE ON ACRES	RATE	AMOUNT
	170	20	34
	170	03	6
SPECIAL DISTRICTS			

TYPE	RATE PER \$100 VALUE	AMOUNT
STATE	150	272
COUNTY	170	289
CITY	200	340
SCHOOL DIST.	887	1510
TEACHERS RETIREMENT	97	164
UN. COLLEGE	76	123
TOTAL	2456	1590

ROWLEY CHARLES A 7803 HARPER AVE DOWNEY CA 90241	
SECOND HALF TAXES	FIRST HALF TAXES
1372	1372
INTEREST	INTEREST
DUE MAR. 1, 1978 DELINQUENT AFTER MAY 1, 1978	DUE OCT. 3, 1977 DELINQUENT AFTER NOV. 1, 1977
SECOND	FIRST

DO NOT MAIL CASH
 MAKE PAYMENT IN U.S. FUNDS ONLY TO
 MARICOPA COUNTY TREASURER
 AND SEND TO 111 S. 3RD AVE. ROOM 101
 PHOENIX, ARIZONA 85003

TOTAL TAXES 2744
 MAY BE PAID IN FULL
 SEE REVERSE SIDE FOR EXPLANATORY NOTES

DO NOT RETURN THIS UPPER PART
 OF YOUR TAX STATEMENT UNLESS
 YOU MUST HAVE A RECEIPTED BILL.

2 7.4 4
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 2 7.4 4
 2 7.4 4
 0 7.1 0
 3 3.7 2
 3 3.7 2
 1 3 1.2 0
 4 5 0.3 9 *

MARICOPA COUNTY TAX STATEMENT 1977 240704
 Maricopa County Treasurer, Room 101 111 S. 3rd Ave. Phoenix, Arizona

DESCRIPTOR: GILA BEND
 TWP: 3 N. R. 18 E. PANEL NUMBER: 40216076 B

VALUATION (Dollars Only)			TAX DISTRIBUTION		
TYPE	FULL CASH	ASSESSED	TYPE	RATE PER \$100 VALUE	AMOUNT
LAND	940	170	STATE	160	272
IMPROVEMENT			COUNTY	170	289
PERSONAL			CITY	200	340
EXEMPTION			SCHOOL DIST.	887	1510
			TEACHERS RETIREMENT	97	164
			UNIVERSITY COLLEGE	76	129
TOTAL	940	170	TOTAL	2458	2704

LAND AND IMPROVEMENT ASSESSED VALUE FOR CALCULATING FLOOD TAX		VALUE ON ACRES	RATE	AMOUNT
		170	FLOOD 20	34
		170	CAWCD 03	6

SPECIAL DISTRICTS {

TOTAL TAXES	2744	INTEREST	
--------------------	-------------	-----------------	--

DO NOT MAIL CASH
 MAKE PAYMENT IN U.S. FUNDS ONLY TO
 MARICOPA COUNTY TREASURER
 AND SEND TO 111 S. 3rd AVE. ROOM 101
 PHOENIX, ARIZONA 85003

SEE REVERSE SIDE FOR EXPLANATORY NOTES

SECOND HALF TAXES	1372	FIRST HALF TAXES	1372
INTEREST		INTEREST	

DO NOT RETURN THIS UPPER PART OF YOUR TAX STATEMENT UNLESS YOU MUST HAVE A RECEIPTED BILL.

SECOND FIRST

DUE MAR. 1, 1978 DELINQUENT AFTER MAY 1, 1978
 DUE OCT. 3, 1977 DELINQUENT AFTER NOV. 1, 1977

ROWLEY CHARLES A
 7803 HARPER AVE
 DOWNEY CA 90241

MARICOPA COUNTY TAX STATEMENT 1977 240702
 Maricopa County Treasurer, Room 101 111 S. 3rd Ave. Phoenix, Arizona

DESCRIPTOR: GILA BEND
 TWP: 3 N. R. 18 E. PANEL NUMBER: 40216076 B

VALUATION (Dollars Only)			TAX DISTRIBUTION		
TYPE	FULL CASH	ASSESSED	TYPE	RATE PER \$100 VALUE	AMOUNT
LAND	940	170	STATE	160	272
IMPROVEMENT			COUNTY	170	289
PERSONAL			CITY	200	340
EXEMPTION			SCHOOL DIST.	887	1510
			TEACHERS RETIREMENT	97	164
			UNIVERSITY COLLEGE	76	129
TOTAL	940	170	TOTAL	2458	2704

LAND AND IMPROVEMENT ASSESSED VALUE FOR CALCULATING FLOOD TAX		VALUE ON ACRES	RATE	AMOUNT
		170	FLOOD 20	34
		170	CAWCD 03	6

SPECIAL DISTRICTS {

TOTAL TAXES	2744	INTEREST	
--------------------	-------------	-----------------	--

DO NOT MAIL CASH
 MAKE PAYMENT IN U.S. FUNDS ONLY TO
 MARICOPA COUNTY TREASURER
 AND SEND TO 111 S. 3rd AVE. ROOM 101
 PHOENIX, ARIZONA 85003

SEE REVERSE SIDE FOR EXPLANATORY NOTES

SECOND HALF TAXES	1372	FIRST HALF TAXES	1372
INTEREST		INTEREST	

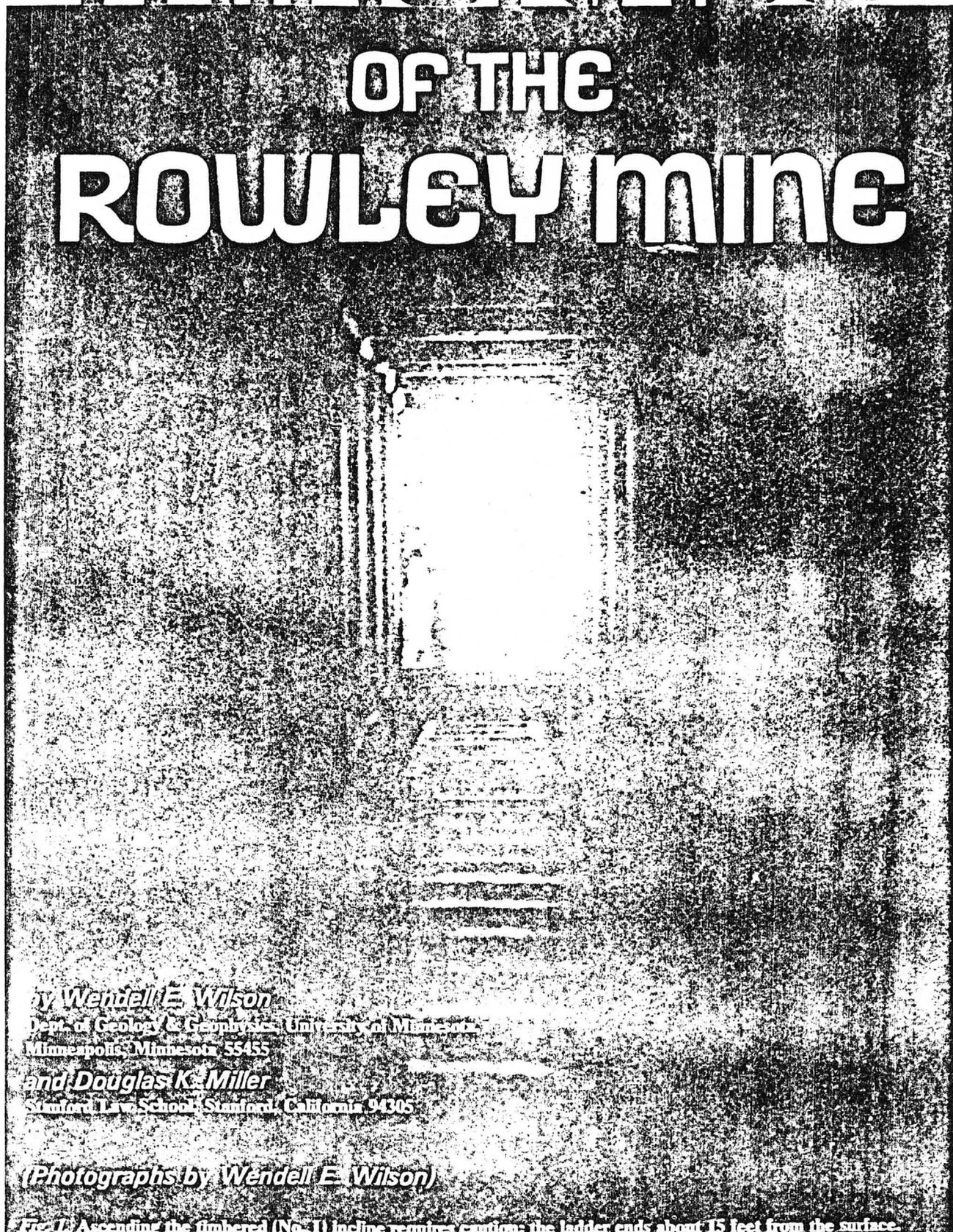
DO NOT RETURN THIS UPPER PART OF YOUR TAX STATEMENT UNLESS YOU MUST HAVE A RECEIPTED BILL.

SECOND FIRST

DUE MAR. 1, 1978 DELINQUENT AFTER MAY 1, 1978
 DUE OCT. 3, 1977 DELINQUENT AFTER NOV. 1, 1977

ROWLEY CHARLES A
 7803 HARPER AVE
 DOWNEY CA 90241

MINERALS OF THE ROWLEY MINE



MINERAL RESOURCES

P. O. Box 15917
Phoenix, AZ 85060
(602) 957-8897

by Wendell E. Wilson

Dept. of Geology & Geophysics, University of Minnesota,
Minneapolis, Minnesota 55455

and Douglas K. Miller

Stanford Law School, Stanford, California 94305

(Photographs by Wendell E. Wilson)

Fig. 1. Ascending the timbered (No. 1) incline requires caution; the ladder ends about 15 feet from the surface.

HARLEY A. SILL
CONSULTING ENGINEER
1011 SOUTH FIGUEROA STREET
LOS ANGELES 15

Dec.12, 1961.

ASSAY CERTIFICATE.

C.A.Rowley Chief Products Co.

701 East 59th St

Los Angeles 1, Calif.

Sample Mark	oz.Gold	oz Silver	Value Gold	Silver per ton	%Copper
1	.01	.1	35¢	10¢	.37
2	trace	.2	-----	20¢	.36
3	.01	.1	35¢	10¢	.18
4	trace	.1	-----	10¢	.09
5	.01	trace	35¢	---	.09
6	.01	trace	35¢	---	.09

Harley A.Sill

per

H Morgan

Received Payment \$36.00

H Morgan

SMITH-EMERY COMPANY

ASSAY REPORT
 ESTABLISHED 1910
 ASSAYERS AND CHEMISTS
 781 EAST WASHINGTON BOULEVARD
 LOS ANGELES 21, CALIFORNIA

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS. AUTHORIZATION FOR PUBLICATION OF OUR REPORTS, CONCLUSIONS, OR EXTRACTS FROM OR REGARDING THEM IS RESERVED PENDING OUR WRITTEN APPROVAL AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES.

Sample Mineral

Received 12/13/61

Submitted by C. A. Rowley,
 701 East 59th Street,
 Los Angeles 1, California.

Gold, @ \$35.00 per oz.
 Silver, @ \$ 0.905 per oz.

Date December 19, 1961

NUMBER	MARK	PER TON OF 2000 LBS.				COPPER	LEAD	ZINC
		GOLD		SILVER		PER CENT	PER CENT	PER CE
		OUNCES	VALUE	OUNCES	VALUE			
3112	"Sample No. 1"	0.09	\$3.15	0.64	\$0.58	0.44%		
3113	"Sample No. 2"	0.02	\$0.70	0.36	\$0.33	0.19%		

3 copies CAR

Respectfully submitted,
Smith-Emery Co.
 ASSAYERS AND CHEMISTS
 9.1.6

SMITH-EMERY COMPANY

CHEMISTS • TESTING • INSPECTION • ENGINEERS

781 EAST WASHINGTON BOULEVARD

LOS ANGELES 21, CALIFORNIA

No 21855

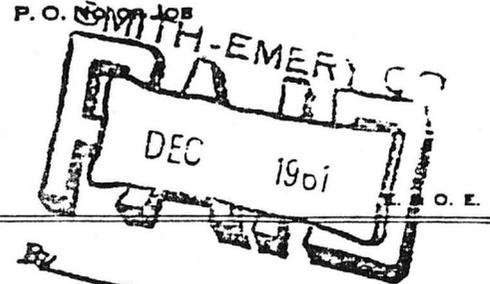
PLEASE REFER TO THIS NUMBER
ON PAYMENT OR INQUIRY

INVOICE

FILE NO.

DATE: December 19, 1961

In Account with C. A. Rowley,
701 East 59th Street,
Los Angeles 1, California.



TERMS: NET. THIS IS A PROFESSIONAL LABOR BILL AND IS DUE UPON PRESENTATION.

TO PROFESSIONAL SERVICES

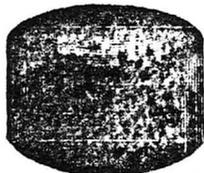
Lab. Nos. 493112-13 - Assaying two samples of mineral for
gold, silver and copper, at \$9.00 per sample ---- \$18.00

OUR LIABILITY FOR ERROR OR NEGLIGENCE IN CONNECTION WITH THE WORK AND REPORT COVERED BY THIS BILL IS LIMITED TO THE ABOVE AMOUNT.

R. S. BAVERSTOCK

H. L. PAYNE, B. Sc. M. S.

ASSAYING
CONCENTRATION
AMALGAMATION
AND
CYANIDE TESTS



ASSAY CERTIFICATE

Baverstock & Payne

223 West First Street
LOS ANGELES, CALIFORNIA

Telephone
Home A 2054

CHEMICAL ANALYSES

*Duplicate
Feb 19-19*

Mr J.C. Rowley.

Our No. 6785

Our Laboratory is Complete and All Work Guaranteed

OWNER'S MARK OR DESCRIPTION	GOLD PER TON		SILVER PER TON		COMBINED VALUES	BASE METALS	VALUE PER TON
	OZ. TROY	VALUE	OZ. TROY	VALUE			
	33.46	\$ 691.60	3.2	\$ 1.60	\$ 710.20	Copper 4.6.8	\$ 17.00



All values based on current New York quotations.

Gold \$20.67 per oz. Troy.

Copper 12.5 cts. per lb.

Charges \$

Silver 50 cts. per oz. Troy.

Lead _____ cts. per lb.

Signed

Baverstock Payne

Chemists

Average value of all dump assays:

Gold:	Silver:	Copper:	Combined value.
.118-oz	1.534-oz	17.392%	\$ 53.2058

Eleven of above assays from dump all below 10% copper, average.

.056-oz	.609-oz	4.39%	\$ 13.76
---------	---------	-------	----------

Fourteen of above assays from dump all above 10% copper, average.

.1279-oz	2.24-oz	27.607%	\$ 84.178
----------	---------	---------	-----------

No. 19, Jan. 1st, 1914: From bottom of present working in mine.

oz-gold	value:	oz-silver	value	copper-%	total value
11.	6.60	8.92	178.40	36.10	\$ 293.30
28.70	17.22	36.28	725.60	49.45	891.17

J. S. Neal, Assayer
Phoenix, Ariz.

MARICOPA COUNTY

ROWLEY MINE

USGS Bull. 1182-E p. E6

ABM Bull. 180, p. 236, 314

RI 5651 p. 41 - Barite

Mr. Marvin Johnson, Attorney (Phone: 252-7461) Luhrs Tower, called and said that Mr. Rowley had died in California and that he had been appointed as executor for his holdings in Arizona. He was interested in any information we had concerning the mine. (11/2/78) He stated that they will have to try to sell the mine.

Minerology of Arizona p. 22

Lapidary Journ

MILS Sheet sequen

AMERICAN METAL MARKET/METALWORKING NEWS

ROWLEY MINE
IS CLOSED
BY WERRY EULEN 7/24/70
The old Rowley Mine

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine	ROWLEY MINE	Date	May 8, 1957
District	PAINTED ROCK MOUNTAINS	Engineer	Lewis A. Smith Frank Knight, Director B. J. Squire
Subject:	Visited as check		

The Rowley Mine is located in T4S, R8W, Section 25, on west slope of Painted Rocks Mountains along the Painted Rock Damsite road, 14 miles north of the Gila Bend-Yuma Highway.

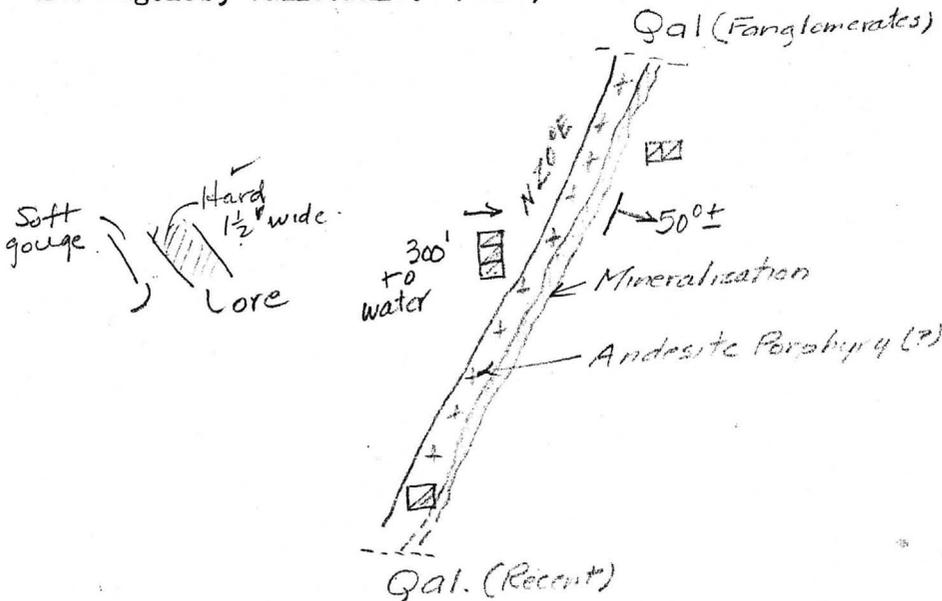
The area consists of andesite and rhyolite flows of early to middle Cenozoic (Tertiary) overlain by late basalts. The flows partly cover/domed area over a biotite granite. All of these were invaded by an andesite porphyry dike, the apparent source of the mineralization.

The mineralization is in veins bordering and locally cutting the dike area.. Float on the dumps indicates that the minerals are cerargyrite, wulfenite, vanadinite, ecdemite and colloidal chrysocolla. Probable minerals are descloizite, mimetite and anglesite. Old assays show mostly copper and gold. A few include lead which is fairly prevalent in the ore in places.

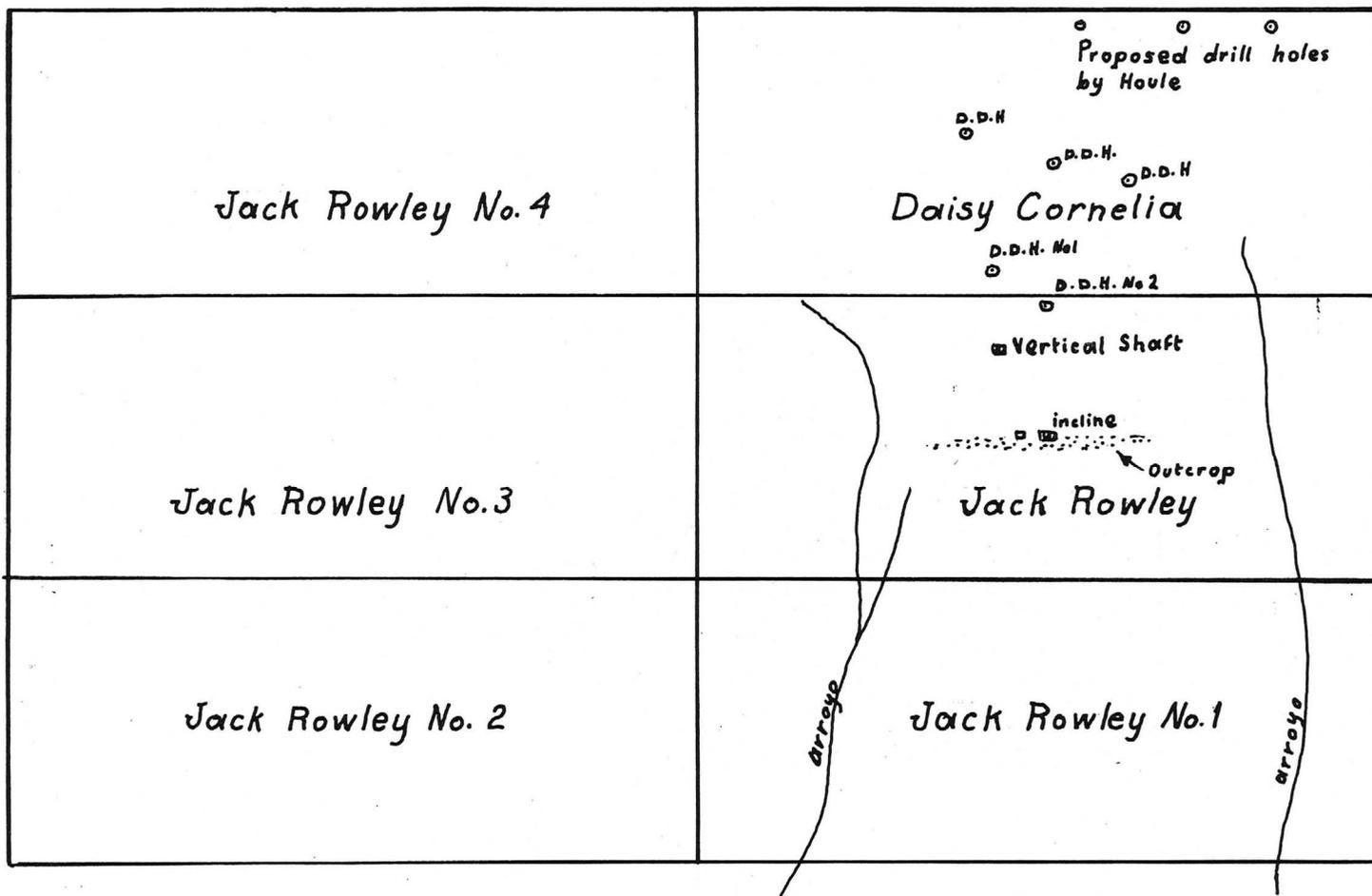
The property has no remaining surface structures but there are 3 shafts in the main portion of the property, 2 of which are vertical.

The strike of the orebody is about N20°E and the dip appears to average 50° to SE.

Present owner - C. A. Rowley, Chief Products Company, 701 East 59th Street, Los Angeles, California. - 90001



San Carlos
claims

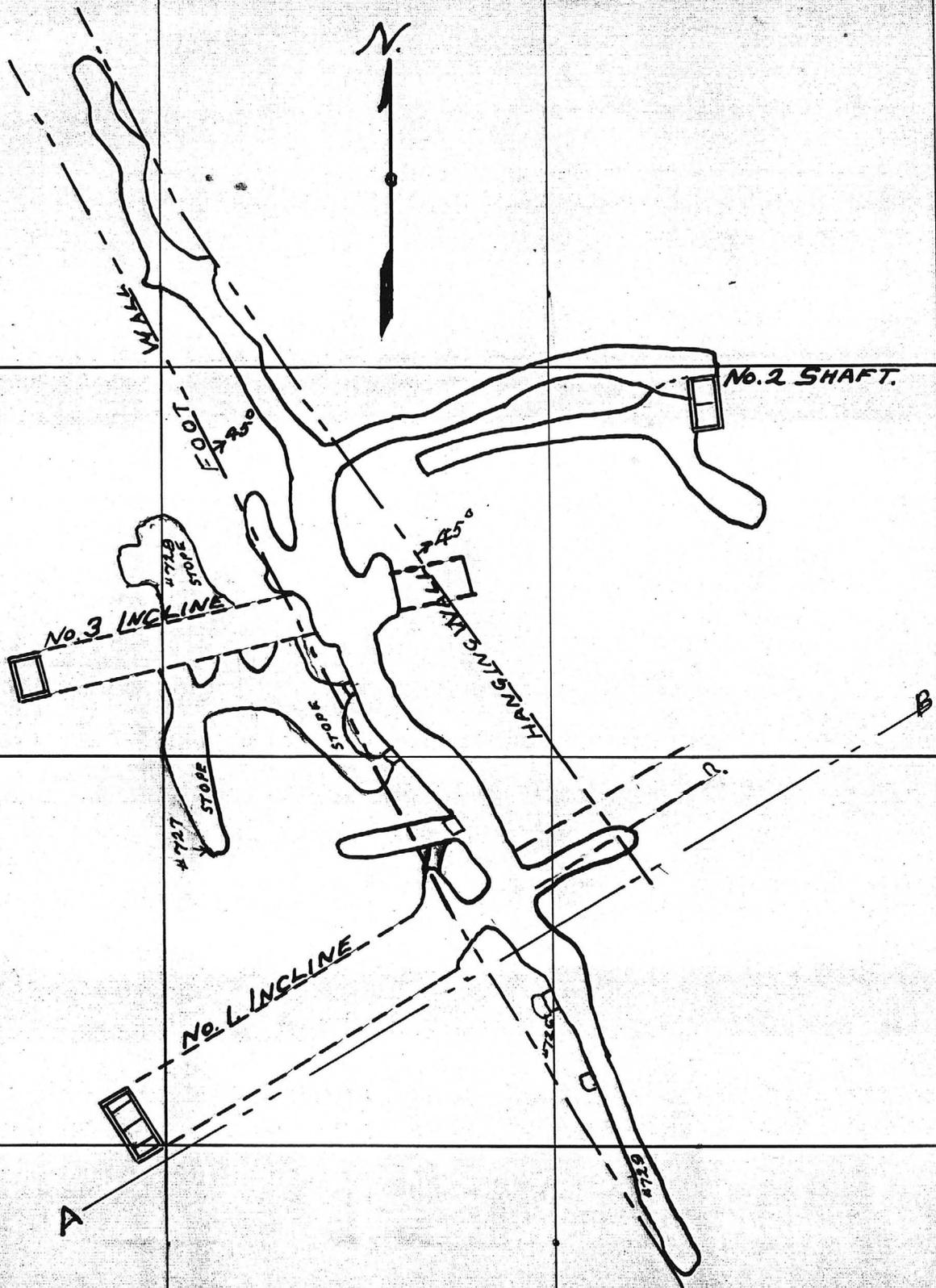


San Carlos
claims

San Carlos
claims

Fig. 2 JACK ROWLEY GROUP

scale 1" = 400'



14014

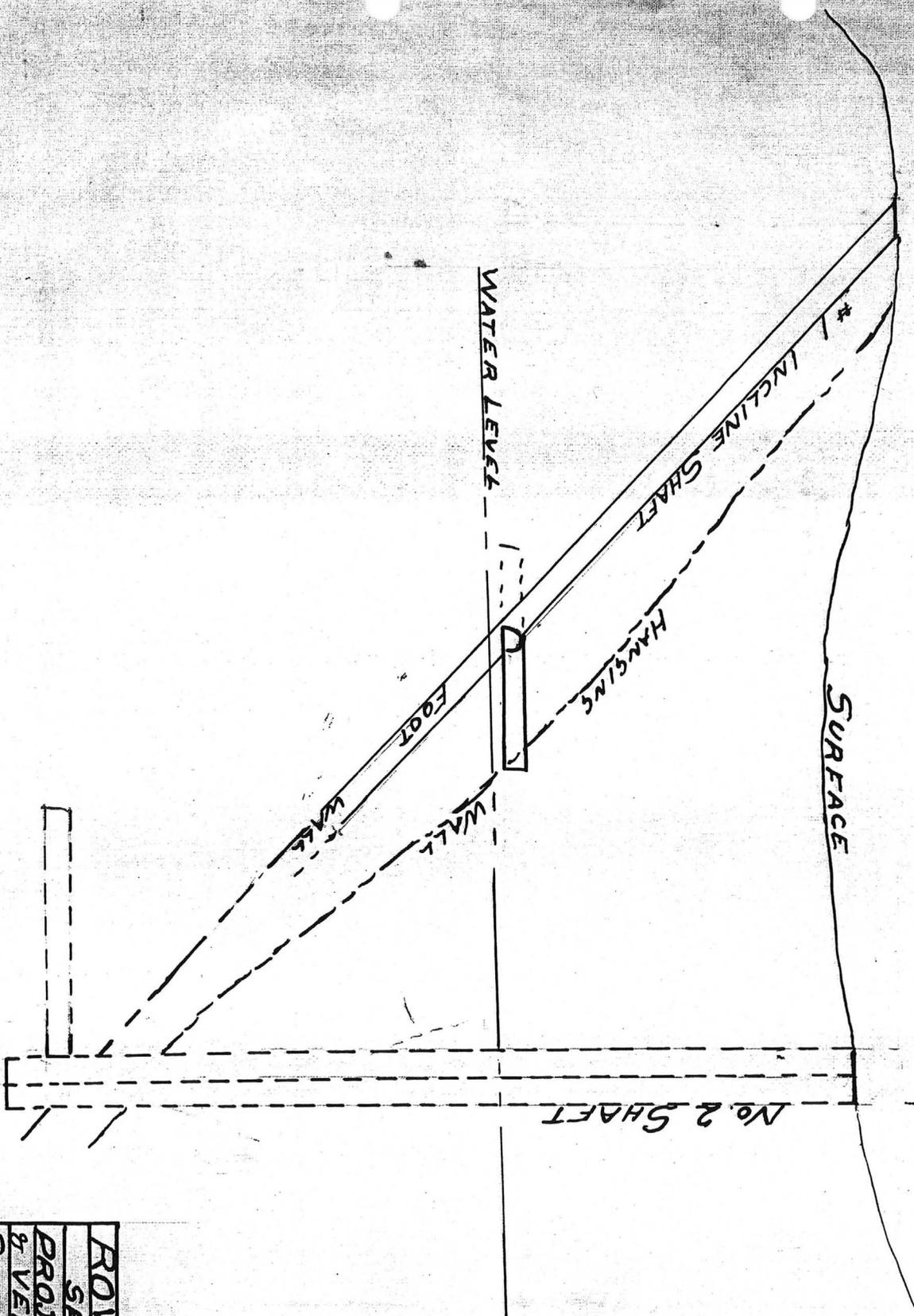
ROWLEY MINE

100' LEVEL

1"=40'

NOV. 19 42

TRACED & DRAWN BY RC



ROWLEY MINE
 SECTION A-B.
 PROJECTION OF VEIN
 & VERTICAL SHAFT
 SCALE 1"=40' NOV 19 1922
 DRAWN BY G.P.S.

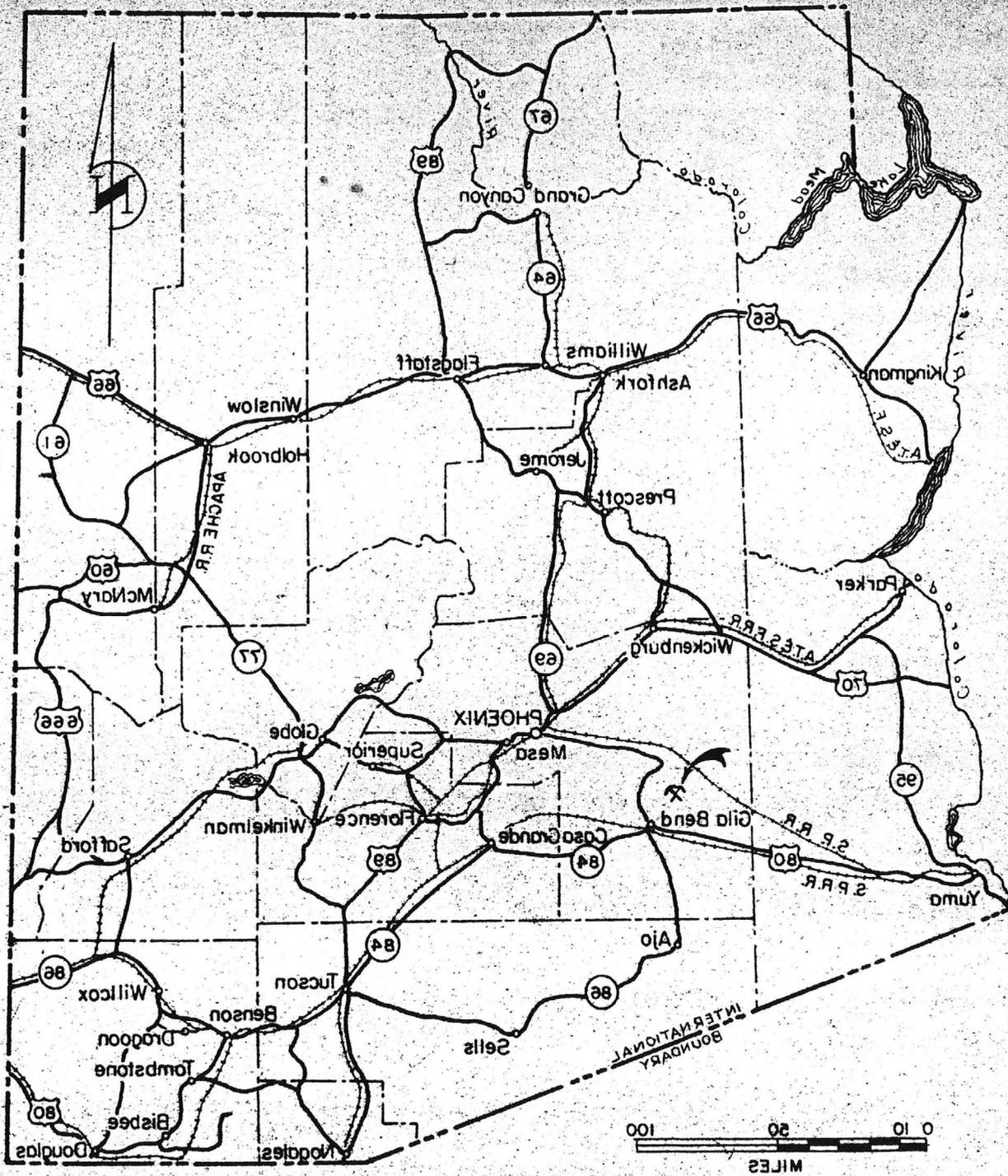


Fig. 1
 LOCATION MAP, ROWLEY MINE
 Maricopa County, Ariz.
 DWA 1965

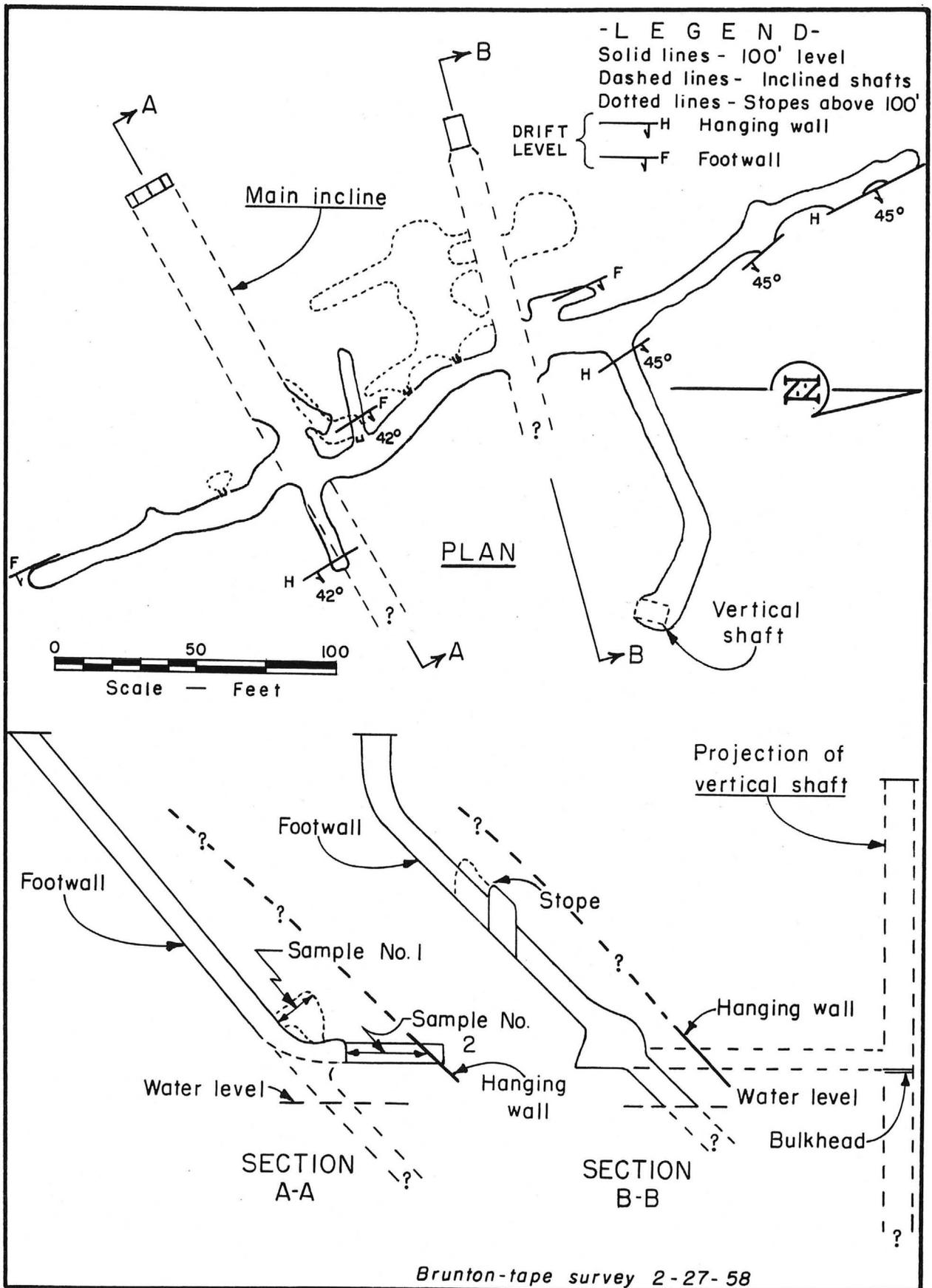
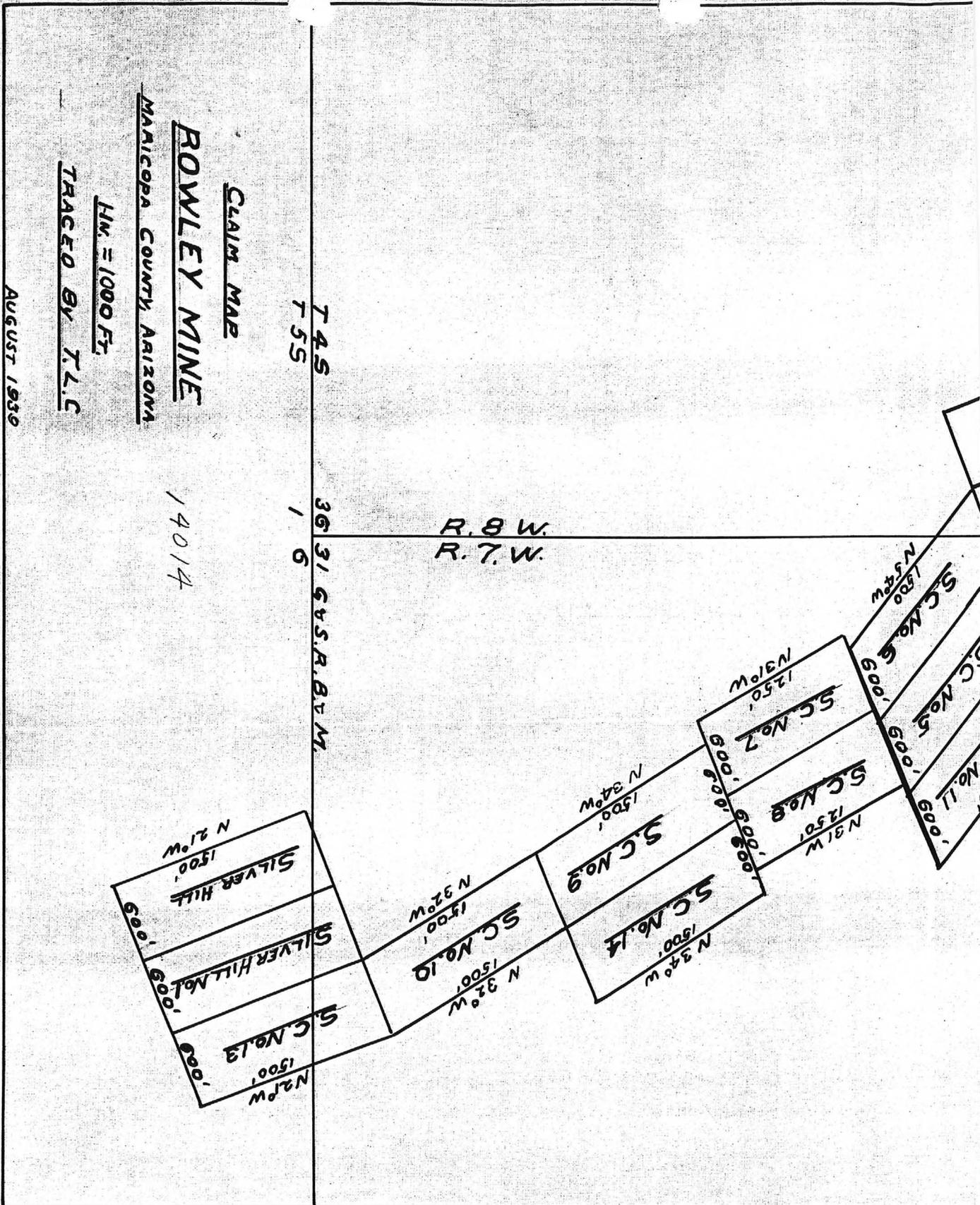


Fig. 12 - Plan & Sections - Rowley mine, Maricopa County, Arizona

OK



CLAIM MAP

ROWLEY MINE

MARICOPA COUNTY ARIZONA

H.M. = 1000 FT.

TRACED BY T.L.C.

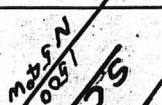
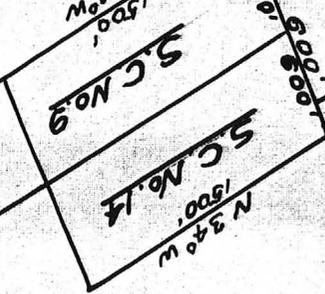
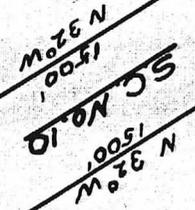
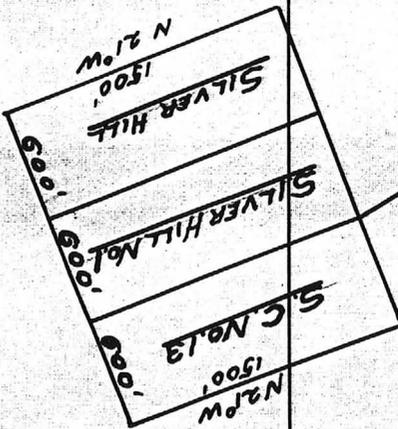
AUGUST 1939

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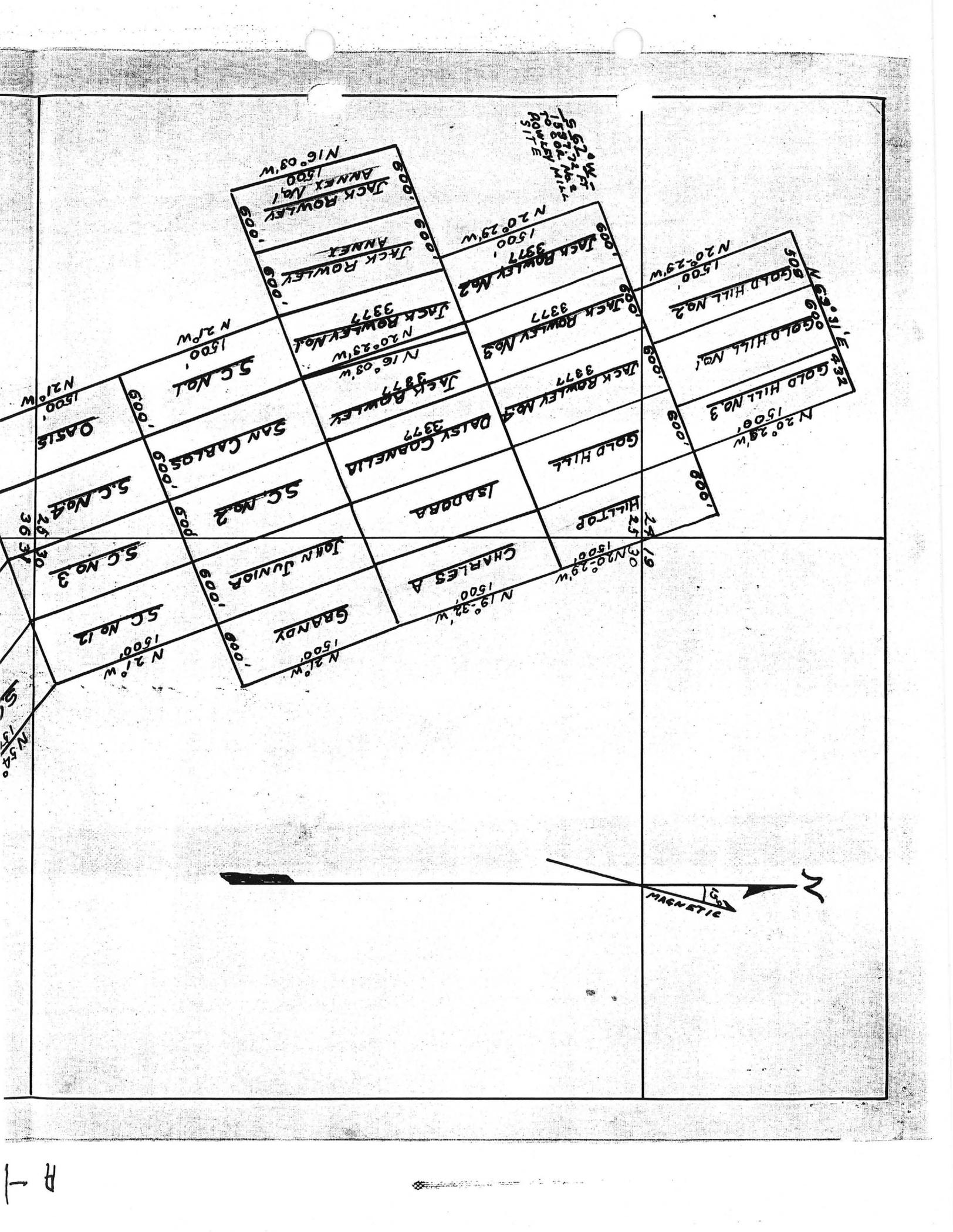
36 31 6 S. R. B. & M.
1 6

R. B. W.
R. T. W.

14014



14



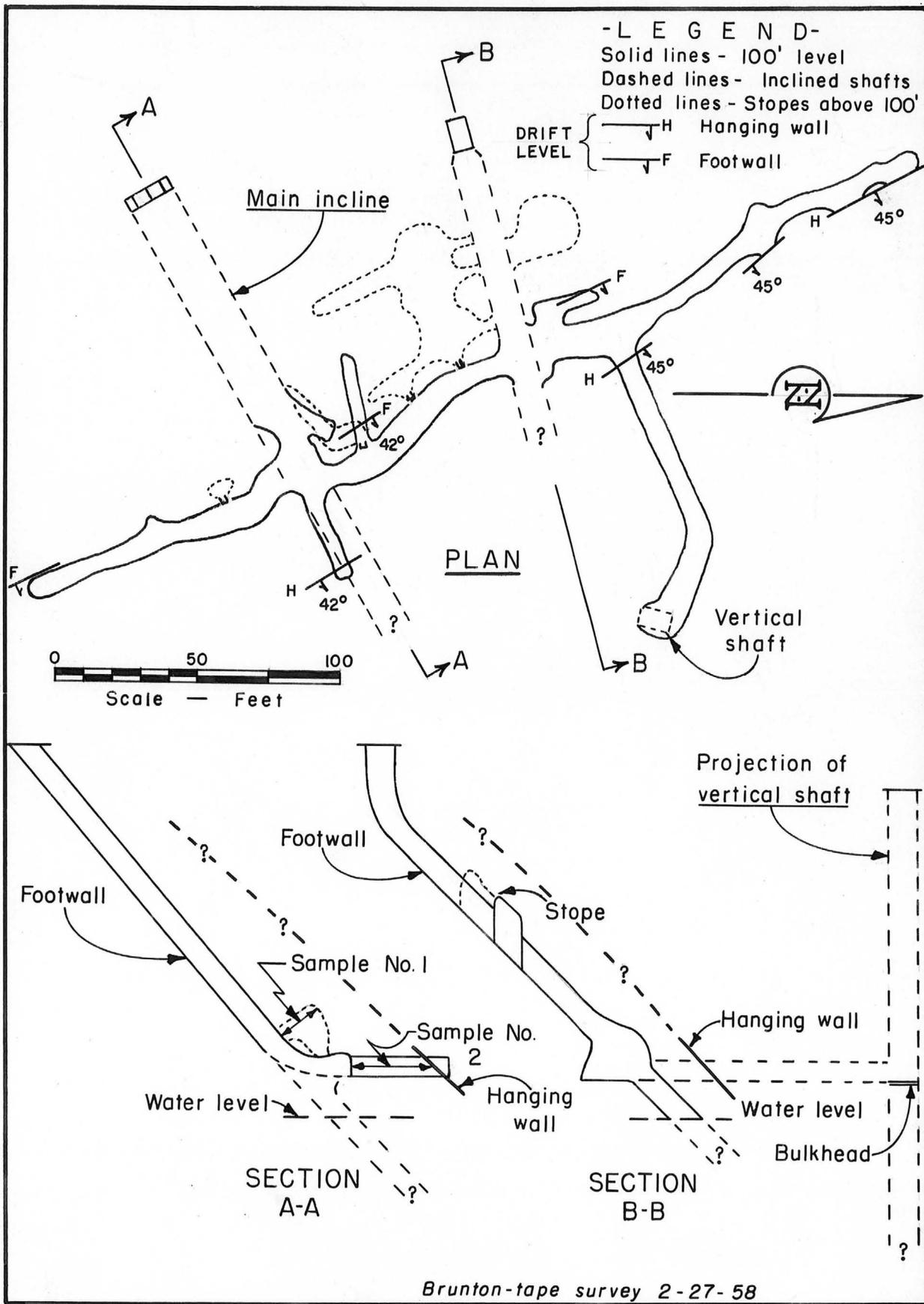
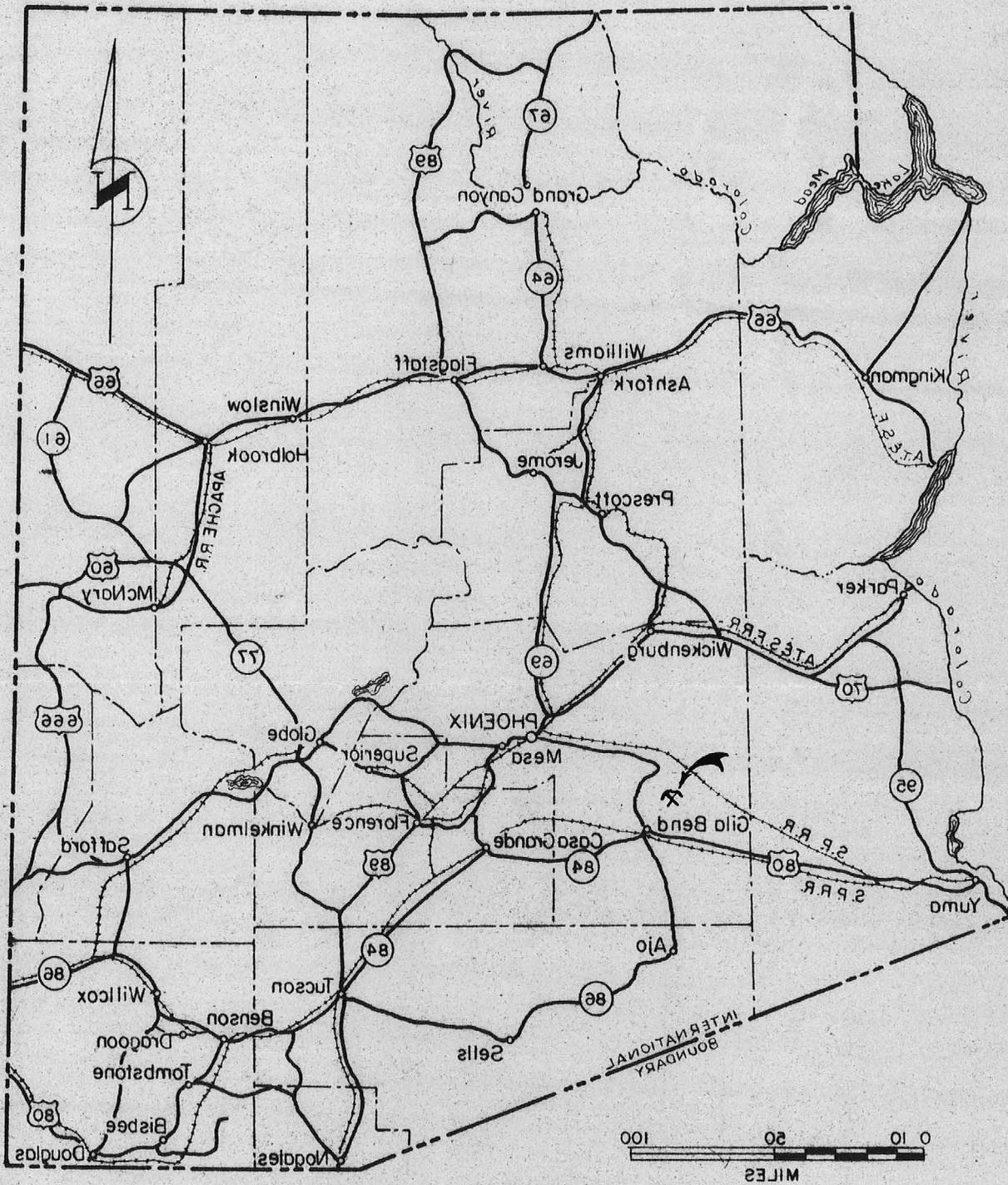


Fig. 12 - Plan & Sections - Rowley mine, Maricopa County, Arizona

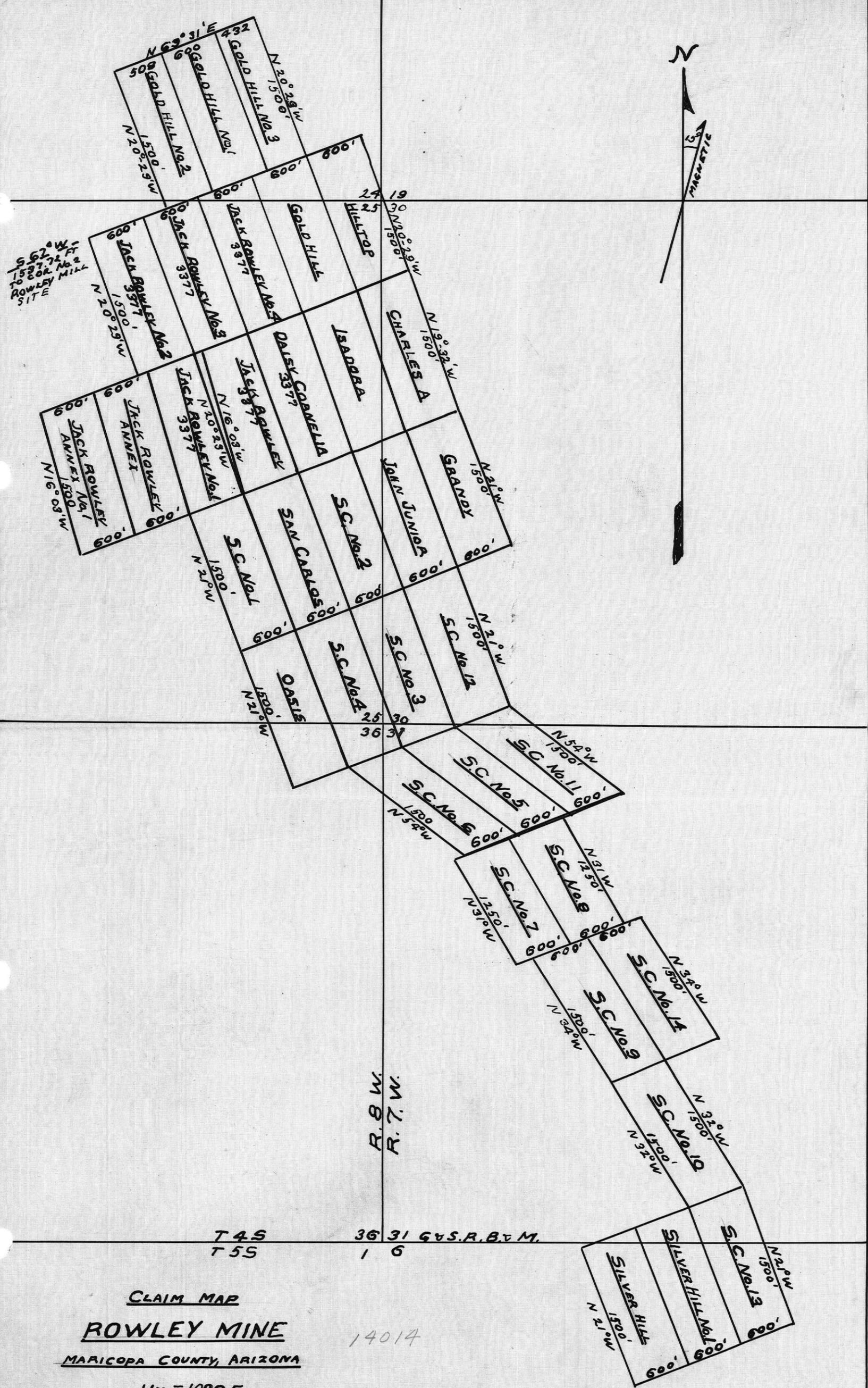
Fig 12

OK



DMA 1962

Fig. 1
 LOCATION MAP, ROWLEY MINE
 Maricopa County, Ariz.

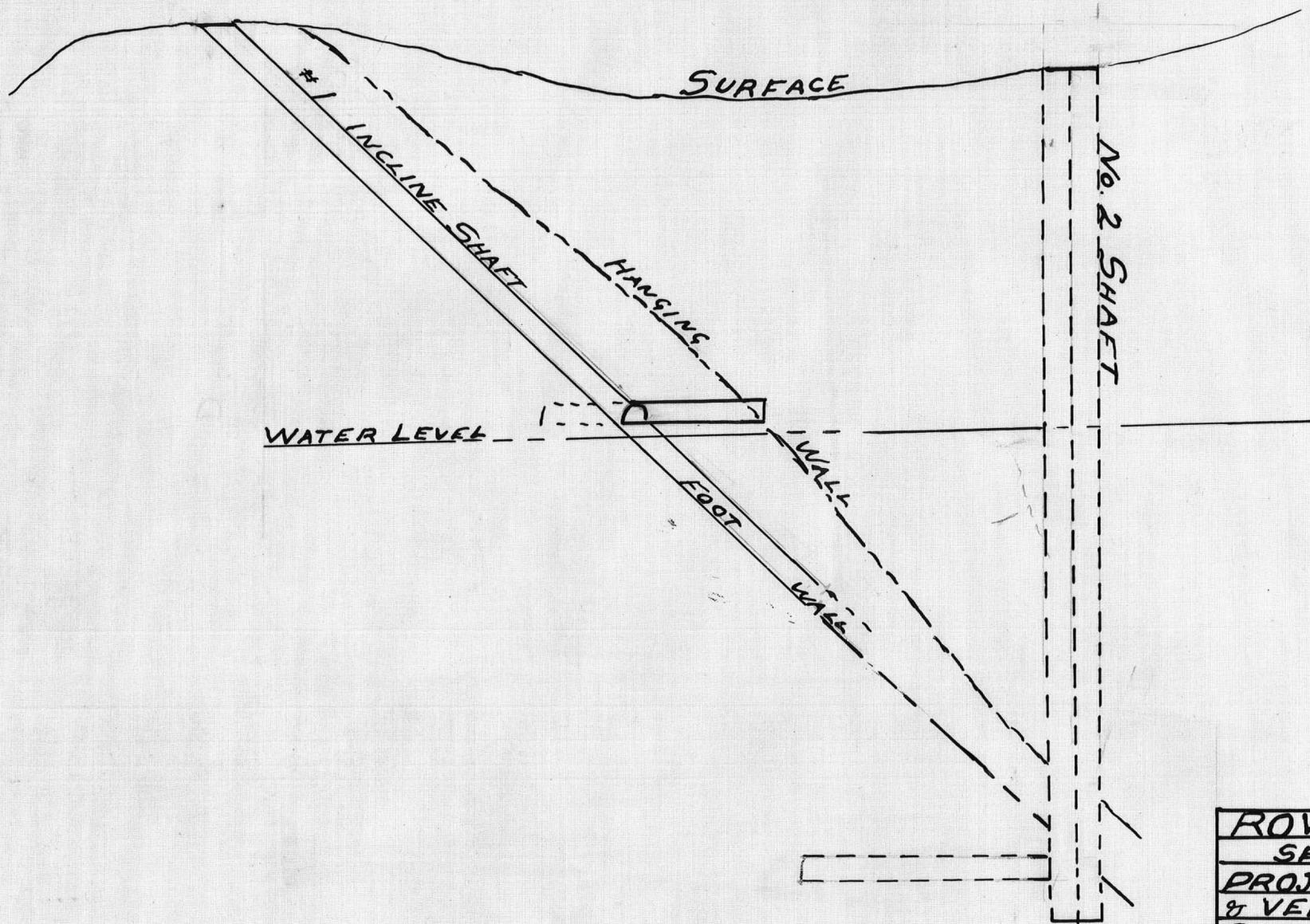


562' W.
1537.72 FT.
TO COR. No. 2
ROWLEY MINE
SITE

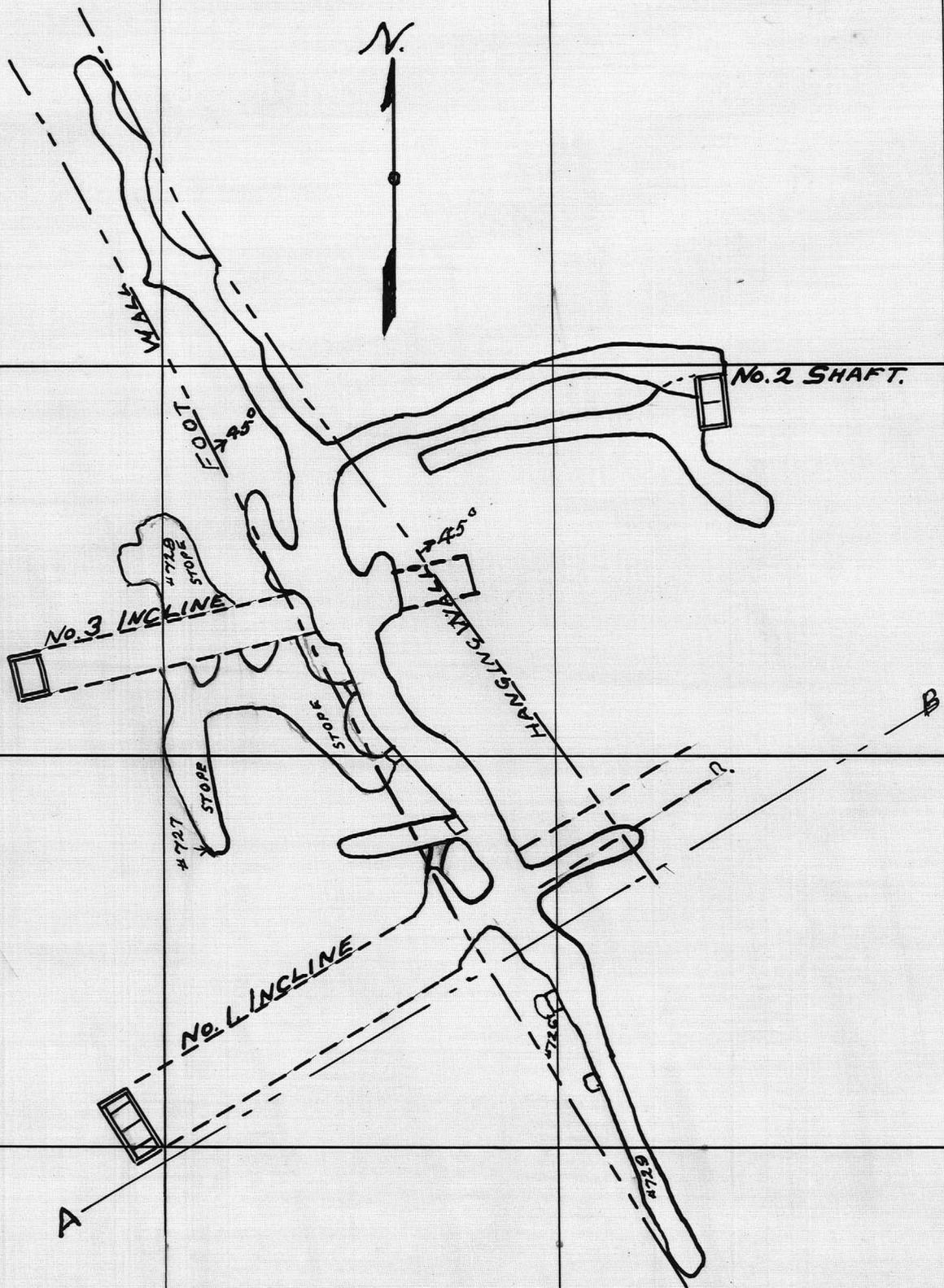
14014

CLAIM MAP
ROWLEY MINE
MARICOPA COUNTY, ARIZONA
HM. = 1000 FT.
TRACED BY T.L.C.
AUGUST 1939

T 4 S
T 5 S
R. 8 W.
R. 7 W.
36 31 6 & S. R. B. & M.
1 6



ROWLEY MINE
 SECTION A-B.
 PROJECTION OF VEIN
 & VERTICAL SHAFT
 SCALE 1"=40' NOV. 19, '42
 DRAWN BY *XC.*



14014

ROWLEY MINE

100' LEVEL

1"=40'

NOV. 19 42

TRACED & DRAWN BY JAC

San Carlos
claims

San Carlos
claims

San Carlos
claims

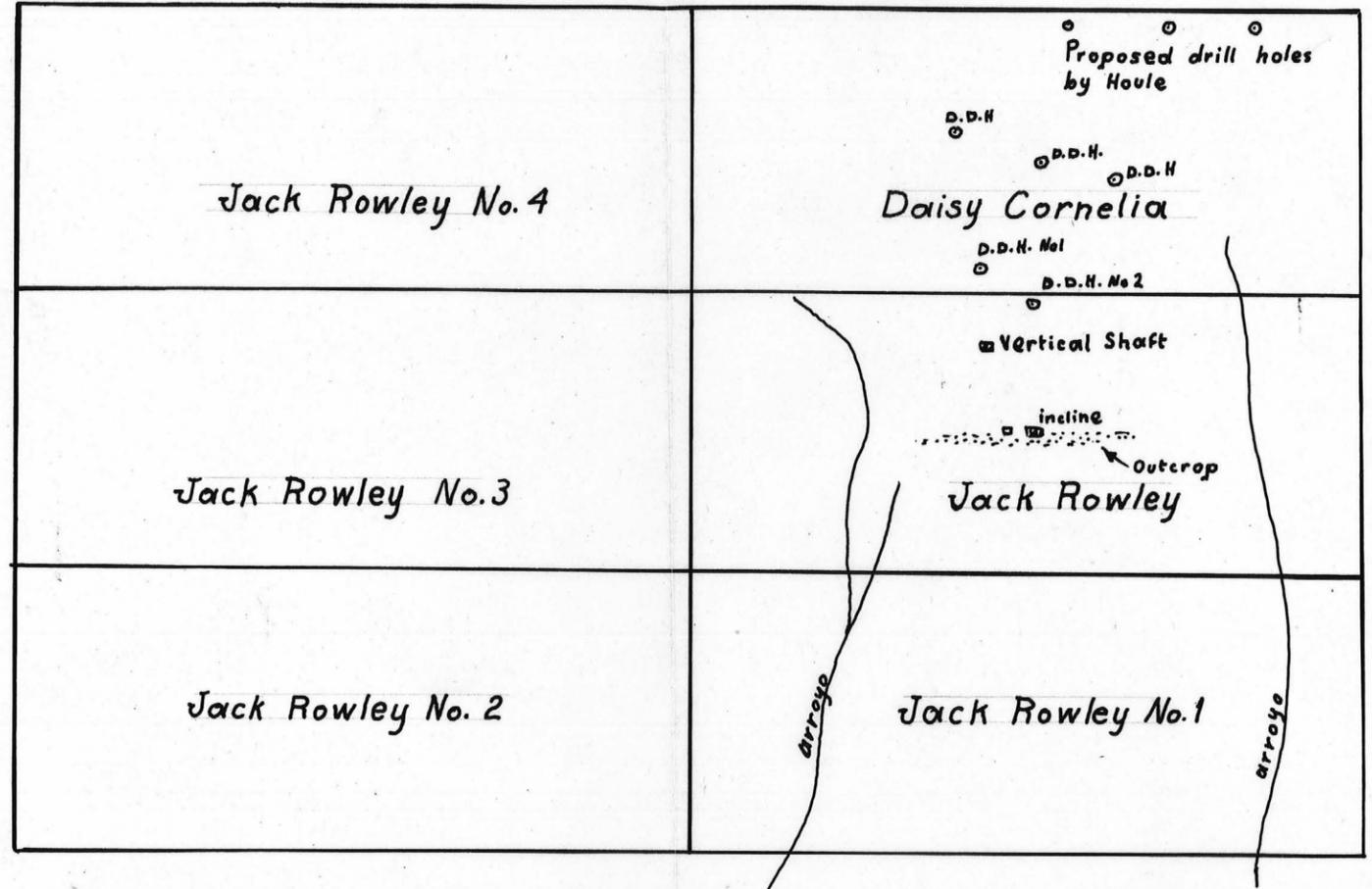


Fig. 2 JACK ROWLEY GROUP

scale 1" = 400'

DMA 1965