



## **CONTACT INFORMATION**

Mining Records Curator  
Arizona Geological Survey  
1520 West Adams St.  
Phoenix, AZ 85007  
602-771-1601  
<http://www.azgs.az.gov>  
[inquiries@azgs.az.gov](mailto:inquiries@azgs.az.gov)

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Arizona Department of Mines and Mineral Resources Mining Collection

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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: RICO MERCURY MINE

ALTERNATE NAMES:

HANNAH PAT. CLAIM  
EUREKA NO. 1 PAT. CLAIM  
DOLORES PAT. CLAIM  
CINNABAR PAT. CLAIM  
CINNABAR QUEEN PAT. CLAIM  
SAM HUGHES  
SAM PESCHE COPPER GROUP  
LARSEN SHAFT

MARICOPA COUNTY MILS NUMBER: 448B

LOCATION: TOWNSHIP 3 N RANGE 3 E SECTION 34 QUARTER NE  
LATITUDE: N 33DEG 33MIN 34SEC LONGITUDE: W 112DEG 02MIN 22SEC  
TOPO MAP NAME: SUNNYSLOPE - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:

MERCURY

BIBLIOGRAPHY:

BLM MINING DISTRICT SHEET  
BLM MINERAL SURVEY MS 4111  
SCHRADER F USGS BULL 690-D P 99, 102-104  
USBM IC 8252 P 69 MERCURY POTENTIAL IN US  
LAUSEN C & GRADNER E AZBM BULL 122 P 51  
ADMMR "U" FILE  
ADDITIONAL CLAIMS IN SEC 3 NW 1/4-T3N-R3E  
ADMMR RICO MERCURY MINE FILE  
COVERED BY SQUAW PEAK FREEWAY & NORTHERN INT-  
CHANGE CONSTRCTION 1990.  
GEO FILE - STONE, LYLE, 1990 SITE HISTORY ETC  
BLM MINERAL SURVEY MS 4047

8635 3/13/2005 24006-4M T02N R03E 03 N 33ø33'11.96858"N  
112ø02'22.08500"W 1225.139 928874.855 662588.980 1322.280  
1.000156905 -0ø04'04" 8/24/2004 AMECFD 1/2" RB W/ 1" PLAS  
CAP 0.35' DN STAMPED "HERSEY LS 11750", AFFIXED 2" MARICOPA COUNTY  
AL CAP 0.3' DN STAMPED "T3N R3E 1/4 S34 S3 T2N 2004 RLS 2782"

8636 3/13/2005 24006-T1 33ø33'11.95881"N  
112ø02'20.80323"W 1226.385 928873.740 662697.447 1323.525  
1.000156965 -0ø04'04" 6/10/2004 AMECFD 1/2" RB W/O ID 0.5' DN

NOTE- BENT; SHOT POINT OF ENTRY

8637 3/13/2005 24007-1 T02N R03E 03 NE 33ø33'10.44559"N  
112ø01'48.87534"W 1463.914 928717.721 665399.148 1561.010  
1.000168528 -0ø03'46" 5/5/2004 AMECFD 1" IP 0.5' UP W/ 3" BC  
STAMPED "USMS 4603 E27 1 34 35 3 2"

## ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY

1. Mine file: RICO MERCURY
2. Mine name if different from above:
3. County: Maricopa
4. Information from: Lyle Stone  
Company: Archaeological Research Services  
Address: 2124 S. Mill Ave.  
Tempe, AZ 85282  
Phone: 966-3508

5. Summary of information received, comments, etc.:

Mr. Stone visited to document historical information on the Rico Mercury mine. The mine, mine dumps, and mill foundations lie in the construction path of the Squaw Peak Parkway where it intersects with Northern Avenue. If the structures of the retort and hoist are over 50 years old (they are) they can perhaps be saved. If not the freeway construction will obliterate all traces of the operation similar to the removal of all signs of mining at Mercury Mine School.

Date: 2/10/89Nyal J. Niemuth, Mining Engineer

The Sam Hughes Mine (also known as the Rico) is about 10 miles north of Phoenix. The property consists of 14 patented claims and fractions. Mercury was discovered in Phoenix Mountains about 1900 and the Sam Hughes mine was located in 1916. Production has been small.

The principal rock formation in the vicinity is quartz-sericite schist. The ore bodies are found in a fault or shear zone which roughly follows the schist foliations, and which strikes N 25 deg. E and dips 45 deg to 70 deg E. Mercury occurs in a quartz gangue as cinnabar, metacinnabarite, and native mercury.

The property has been opened by two shafts, known as the Rico and the Larsen, to a depth of 245 feet and developed by more than 500 feet of drifting. At the Rico shaft, a persistent streak of high-grade cinnabar has been followed from the surface for 100 feet on the dip and 60 feet south on the 100 level. The streak varied in width from 1/8 to 2 inches. Low grade ore varying in width from a few inches to 5 feet accompanied the high-grade streak. The ore shoot appeared to rake to the southwest. A sample from a 100-ton pile of ore from the Rico shaft assayed 3.9 pounds of mercury per ton; one from a 50-ton pile of material on the dump assayed 0.9 pounds of mercury per ton.

Taken from I C 8252 (1965) p. 69

## RICO QUICKSILVER MINES.

Since the "Report on the Sam Hughes Mercury Property" by the writer was prepared eleven years ago (December 6th, 1924) the original Hughes claims have been patented. To this group has been added the Larsen-Jetter Group, adjoining on the north and the Pesche Group on the east. These also are all patented. There are now fourteen claims and one fraction in the holdings. Due to conflict with homestead entries on the west three of the claims are not full size. The fraction is rectangular, 220 x 350 feet.

A moderate amount of development work has been done but there are no systematic records of any description covering this work. There has been some production but no record of that is available. Within the past two years there has been a considerable amount of shallow prospecting going on outside the area which, heretofore, has been considered of greatest importance. This shallow work has added much to the knowledge of the property and serves a very definite purpose.

The greatest amount of concentrated development was an extension of the work done on the Rico and Dolores claims. The Rico shaft (A on the accompanying map) was enlarged and carried to a total depth of 245 feet. About 345 feet of drifting and 80 feet of crosscutting was done on the 100-ft level. On the 200-ft and the 245-ft levels a small amount of drifting with some crosscutting was done but no maps or other records of this work are available. In late 1933 the Rico shaft was seriously damaged by caving at the station on the 100-ft level. For that reason the workings below that level cannot be examined. The drifts on the 100-ft level are also badly caved. Above that level the shaft is in good repair. Under the circumstances nothing can be reported concerning the findings in deeper development.

The Larsen or Dolores shaft (B on the map) some 250 feet north of the Rico shaft has been sunk an additional 25 feet, giving a total depth of 105 feet. A short drift was driven north from the bottom. Panning indicates the presence of cinnabar across the face of the drift but the mercury content has not been determined quantitatively. Excepting for the first five sets the shaft is in good condition. Reconditioning of the shaft will not be expensive if undertaken in time.

From the latter part of 1928 until into 1933 the property was under lease and option. During this period the property was equipped with mining machinery and a reduction works. An 80 HP Primm engine and a belt-driven 50KW Westinghouse DC motor furnished power at the start. Later the Arizona Light and Power line was brought to the property. All the equipment on the ground is in very good condition, well housed and properly protected.

Previous operators who installed the equipment had a contract with the Central Arizona Light & Power Co., under their standard schedule E6 (Revised 1935) which provided a regular service demand of \$1.80 per HP for a power requirement up to 30 KWH. Their power bill was between \$50 and \$60 per month. Lighting was on a separate meter, delivered under Schedule E 32, which is the usual small commercial power service schedule.

In addition to the buildings which house the equipment, power plant, assay office, tool room, change house etc there is a small house near the works now occupied by a watchman. Some distance away there is a larger house with several rooms occupied by the manager in charge of the operations mentioned above.

Shortly after the cave at the 100-ft level in the Rico shaft was discovered some work was done in an effort to catch up the ground and reopen the shaft. With the resources and materials at hand this could not be carried out so the undertaking was abandoned. Whether the shaft must be abandoned permanently cannot

be determined without further inspection. The location of the shaft is not altogether desirable as it is almost in the wash, which at times may get beyond control and do serious damage to all the workings tributary to the shaft, as well as wreck the shaft itself.

During the past week the writer has spent a considerable time going over the property for the purpose of determining how to proceed with the further exploration. A number of measured sections were run at approximately N 65 W which is at right angles to the trend of the formation. The most southerly section was along the common end line of the Igo, Ugo, Plutus, Plutus No. 2, Rico and Dolores claims. Next north was approximately 650-ft north of the discovery shaft of the Dolores. Another was near the end line between the Dolores and Cinnabar, and still another on the Eureka, the most northerly claim of this tier. A considerable portion of the Rico and Dolores claims is covered by overburden so there is little opportunity to get at the formation without excavating.

The general trend of the formation is from NE to SW with moderate though variable dip to the east. Nearly every member is crossfractured and jointed. There is some faulting though it is not excessive. Shearing is conspicuous with all the accompaniments of severe stresses. The formation consists of metamorphic rocks, mostly schistose beginning with the slate on the east. There are several types of schist, -micaceous, sericitic, chloritic, phyllitic and quartzose, with many modifications and combinations. Interspersed between the schists are narrow belts of limestone and argillaceous material, making in all a very complex series of metamorphic sediments. Lenses of bull quartz some showing no other mineral, some carrying siderite, chlorite, magnetite and the carbonates of copper, -one or all, and rarely cinnabar (in very limited areas) occur conspicuously throughout the area, usually conforming, in a general way, to the trend of the metamorphic series.

The most important mineralization appears to occur in a strong shear zone in siliceous schist, bounded on the east or hanging wall by a pale red, somewhat gritty schist containing considerable calcareous material. This is finely laminated and somewhat loosely consolidated, disintegrating rapidly when exposed to air and water. This is partly responsible for the caving of the Rico shaft at the 100-ft station. Cinnabar has been reported in this formation (hanging wall) but none was seen by the writer. The foot wall is rather indefinite. The particular band of dark schist from which the only profitable cinnabar has been mined to date does have a definite boundary which, for all requirements, may be considered a foot wall. Beyond this to the west there seems to be a more resistant member of the series, characterized by stretched pebbles up to three inches in longest diameter, coated with a brilliant red jasper. Whether this is actually the foot wall of the shear zone or not it is impossible to tell at this time.

The result of the sectioning reduces the question of further exploration to four zones (see map) which seem to be the most likely areas. These zones are distributed over the length of the Rico, Dolores, Cinnabar and Eureka claims. This does not necessarily mean that the ground covered by the other claims is valueless. There are no known occurrences of cinnabar in large quantities on these other claims and the only quantitative information is just that it pans or does not pan. In most instances the pannings of material from these border claims are small. These formations which seem to have been best suited for the deposition of cinnabar do not occur, so far as we know, on these border claims to the east. Isolated exposures and some test holes on the western tier of claims show some of the formation best suited for the deposition of cinnabar but so much of the ground is covered by overburden that location and correlation of the several types and belts of country rock is difficult.

No definite width can be assigned to the zone of probable ore deposition until it has been crosscut in several places. It is believed that the width will be

well under 100-ft. The same is true with respect to the probable length of the ore shoots, though on the Rico and Dolores the available data might be interpreted to indicate an ore shoot possible about 350-ft long, extending from south of the Rico shaft to the Dolores shaft. This shoot is assumed to range to the southwest, with its northern boundary apexing at no great distance north of the Dolores or Larsen shaft.

The Dolores-Rico shoot might be prospected further through the old Larsen shaft. Before this could be attempted the Dolores (Larsen) shaft would require retimbering down five sets. A drift to connect with the Rico (A on map) shaft should be driven at a level to come well under the caved area at the 100-ft level in the Rico shaft. In this way it might be possible to reopen the Rico shaft. This is desirable if practicable because the whole present surface arrangement is based on the assumption that the Rico shaft will be outlet for all ore going to the reduction plant.

If it should seem advisable to carry out some preliminary investigations on the Dolores-Rico shoot before rigging up to continue sinking through the Dolores shaft and drifting south to the Rico shaft, about three diamond drill holes might be put down through the hanging wall, to intercept the projected mineralized area at a mean depth of 250-ft below the lowest workings. The most southerly hole should be placed to bottom about ~~100-ft~~ 100-ft southwest of the Rico shaft. The most northerly should not bottom north of the projection of the Dolores shaft. The third hole might be spaced nearly equidistant between the other two, depending on surface conditions.

Following the completion of the drilling or drifting on the Dolores-Rico shoot one drill hole (C on map) to reach a vertical depth of 200-ft, is recommended to be put down near the point indicated on the accompanying map. This is approximately 450-ft north of the Dolores or Larsen shaft, and not far from the center of the Dolores claim. At present there is a shallow open cut about 90-ft long across the formation at this point.

Before any drilling is done in the vicinity of the common end line between the Dolores and Cinnabar claim (D on map) some more detailed geological study is desirable. Whether there is a real or apparent change in the normal course of the mineralized shear zone is not clear from data now available. This section has certain favorable indications and it is reported that commercial quantities of cinnabar occur, but nothing more than indications were seen by the writer.

Next in importance to the area within which the Rico-Dolores shoot and its extensions may lie, is an area north of the common end line between Cinnabar and the Eureka claims, extending in NE direction almost to center of claim. Beginning at the south end of Eureka claim and covering practically entire width of claim for not less than half the length, detailed geology should be done. This work should be supplemented by dependable quantitative determinations. This area seems to have possibilities with enough data available in present working to warrant such study.

Summing up the outlook at these properties it would seem that there are potential areas along the center line of the bank of claims beginning with the Edna on the south, through the Eureka on the north. At least the more favorable portions of this belt should be thoroughly studied. The importance of accurate observations, careful sampling and assaying cannot be over-estimated. Practically everything to date seems to have been done in a haphazard manner. Fine equipment, standing idle, in a location surrounded by so many natural advantages is indisputable evidence of a lack of careful and capable direction. The property has merit. Just how much merit is a matter to be determined by intelligent prospecting.

Phoenix, Arizona,  
December 14th, 1935.

Respectfully submitted,

PRINCIPAL ITEMS OF EQUIPMENT: Dr. H. J. BAILEY CINNABAR PROPERTY.

Prim engine: 80 HP. Sybol L Type U, No. 1298. Speed 210 RPM. Bore 18.006  
Clutch pulley 48x4 - 7. With starting compressor, circulating water tan, 2 air  
starting tanks.

Chicago Pneumatic compressor: single stage, pulley 48 x 7 - 3 Cooling  
water pump, and air receiver 10-ft x 4-ft.

1 U.S. Motor: 25 HP, 220 V 1200 RPM, Serial 78365, Frame 560B, 62/31  
Amps 3 phase. Paper pulley 9.5" diam 10" face 3 3/8" bore .

Westinghouse Generator: D.C. 50 KW, 400 Amp, 850 RPM. Pulley 18" diam  
16" face. Outboard bearing.

Continuous leather belt, engine to generator.

Induction Motor: 3921099, Type KT750-4-5- 1500; 3 Phase, Form C, 50  
Cycles, 220 Volts 13 Amps 5 HP, 1450 RPM, General Electric. Flex coupling.

Westinghouse DC Motor: #7, Type S; 30 HP, 220 Volts 116 Amps, 1025 RPM,  
Style No. 45571, Field Serial No. 47570 Pulley: 8" diam 10" face.

Cutler-Hammer 10 Hp, 125 V 74 Amp Arm. Resist for Starting Duty; Field  
Resist for Regulating Duty. Serial #544608

General Electric Switchboard Pannel: #71672, Type GGD, 500 Amps, with  
(1) pull out-out, (2) knife switch, (3) Thompson Ammeter O-600, (4) Circuit breaker  
with dash-pot release, (5) Thompson Ammeter O-175, Fuse Blocks.

Schults-Martin Controll 10 HP

Starting rheostat: General Electric, 2 HP, Cat No. H1906, CR 107

Turnbul Enclosed Electric Switch; 100 Amp, 250 Volt 3 pole.

U.S. Electric "Auto Start" Switch: 30 HP, 220 Volt, 3 phase 50/60 cycle,  
Type KGR, Cat No. 6432 with stop and start push buttons.

General Electric, Auto Start Switch: CR 4011 A 2; DL 3650424 O 10 D C  
1 1/2 HP, 115 Volt 12.6 Amps.

Sampson Hoist Serial 3534

Hoist Motor: General Electric, Type MT 65502, Model No. 12EB64, 440 Volt  
Sec. V. 138 Amp 28 Sec. Amp. 71. 3 Phase, 60 cycle, 1110 RPM, 20 HP, Serial No. 5195101  
Drum Switch: General Electric CR 3202 1300 J.

Watt-hour Meter: General Electric, single phase, 17420 - 15271933 60 Cy  
230 volts, Type I - 16

Turnbull Electric Switch: 60 Amp 125/250 volt 3 pole, Cat M 41322  
Type "C"

2 Turnbull Entrance Switches: 30 Amp, 250 volts.

Trumbull Electric Switch: Type "C" 400 Amps 250 Volts Cat No 40325

2 Westinghouse Current Transformers: Style S19625A 25/60 cycles, 50 volt amps to 5 amps Serial 1658605 - 1658628

Westinghouse Polyphase Watthour Meter: Type OB/426278 5 Amp 115 Volts Serial 9503226 60 cycles.

Type "C" Trumbull Electric Switch: 100 Amps 250 Volts 3 pole Cat 40323

Type "C" Trumbull Electric Switch 200 Amps 250 volts 3 pole Cat 40324

1 Water tank at shaft collar: 10-ft diam x 6-ft high. Galv. Iron.

1 Water tank for Primm engine cooling system.

U.S. Motor: 20 Hp 220/440 Volt, Type GF, 1200 RPM Betial S0788 Frame 9.7 Amps 50/25 3 phase High Torque.

U.S. Motor: 5 HP, Serial 82176, 220/440 volts 16/8 Amps 882 Frame, Type GF 900 RPM, 3 phase. Rating 40 deg.

4 Entrance Switches: Trumbull Type "C" Electric Switch, 30 Amps, 500 V 3 pole. Cat. 40351

5 Auto-start U.S. Elec. Mfg. Co., motor switches, Type KXR, Max HP 7½, Form B, 440 Volts 50/60 cycles, Cat 7024B

1 Trumbull Type "C" Electric Switch, 100 Amps, 250 Volts, 3 pole, Cat. 40323

Trumbull Electric Switch Type "C" 200 Amp, 250 volt 3 pole Cat. 40324

36 flasks for mercury.

ESTIMATED REPLACEMENT COSTS OF BUILDINGS.

Office	575.00	Headframe	550.00
Engine House	450.00	Trestle	450.00
Change House	150.00	Crusher Frame	500.00
Tool House	50.00	Residence	2800.00
Hoist House	110.00	Garage	250.00
Assay Office	120.00	Tank House	200.00

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No assay equipment of any considerable value; principally chemicals.

Miscellaneous mine tools, including air drills and steel, probable value \$500.

Pipe, fittings, parts, track, cables, buckets etc about \$1500.000  
Retort, complete with oil burners, fuel tanks, blowers etc \$5000

The above list is as of September 7th, 1934.

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

July 14, 1958

To the Owner or Operator of the Arizona Mining Property named below:

Rico Mercury Mine (Maricopa County)	mercury
(Property)	(ore)



which we would like to have

it form with as complete detail  
assay returns, shipment returns  
and which might interest a

*Handwritten signature*  
Dr. H.T. Bailey  
Professional Bldg.  
Phoenix, Arizona

*Handwritten signature*  
Frank P. Knight

FRANK P. KNIGHT,  
Director.

*Handwritten initials*  
RW 110



Enc: Mine Owner's Report

*Handwritten notes*  
See ABM. Bul. 122 p.p. 51, 52, 53, 54  
See 10 8252 p69 (1955)

MR-30

DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA  
OWNERS MINE REPORT

Date July 9, 1940

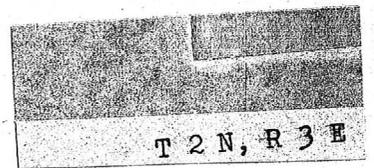
- 1. Mine Rico Mercury Mine.
- 2. Mining District & County Winnifred Mining Dist. Maricopa County, Arizona
- 3. Former name Sam Hughes Mercury Mine.
- 4. Location About 11 miles N.N.E. of Phoenix, Arizona
- 5. Owner Dr. H. T. Bailey
- 6. Address (Owner) Professional Bldg. Phoenix, Arizona
- 7. Operator James B. Girand
- 8. Address (Operator) 405 Ellis Bldg. Phoenix, Arizona.
- 9. Gen. Mgr. James B. Girand

Girand, James B.  
~~405 Ellis Bldg.~~ 1622 Palmcrest Way. S. E. ('48)  
Phoenix, Arizona.

No mill, Furnace Plant.

7-9-40 employed Only a few at present.

- 15. Production Rate Developing now.
- 16. Mill: type & Cap. Cottrell Kiln and Condensers, 25 tons per day.
- 17. Power: Amt. & Type Electric 50 KW. 3 Phase 60 Cycle
- 18. Operations: Present  
Reconditioning both mine and surface plant looking to immediate operation.



- 19. Operations Planned It is planned to recondition the present workings of the Rico shaft, rehabilitate the Furnace Plant and put it in operation also.

- 20. Number Claims, Title, etc. There are fourteen and a fraction (small) patented claims containing 286.021 acres. Title clear.

- 21. Description: Topography & Geography These claims lie at the foot of the North Phoenix Mountains, and are generally level with some rolling and small hills. It is on the plain of the of the Salt River Valley Irrigation District and only a few feet above the Arizona Canal, distance some one and one-fourth miles. The claims are located in Sections 3, 27, and 34, in Tp. 2. N. R. 3. E.

- 22. Mine Workings: Amt. & Condition There are several shafts on the property, the deepest being the Rico on the north end line of the Rico claim, next the Dolores 130 feet, about 200 ft. northerly from the Rico shaft, and on the Dolores claim. Others range from 40 to 50 feet to 10 foot location holes. The Rico has several levels and four or five hundred feet of drifts, some up raises and stoping. Condition of this shaft is bad and we now are cleaning and retimbering. Have reconditioned down to the 100 level, in part.

23. Geology & Mineralization Geology of district has been fully covered in the report on the District by U. S. Geological Survey Bulletin 690-D, "Quicksilver Deposits of the Phoenix Mountains", by Frank Schrader. Briefly the formation is schist, several varieties with intercalated bands of quartz.
24. Ore: Positive & Probable, Ore Dumps, Tailings Never having been below the 90 foot level, I have only seen the thin banded ribbons of cinnabar which the shaft followed down. I acquired the property solely on the report of Dr. H. W. Gould, of Gould & Company, San Francisco, one of the outstanding mercury authorities. He was well impressed with the showing and in his report, a copy of which I have on file in my office, he says, "The main ore shoot at the Rico shaft lies in the plane of the vein with a rake to the southwest and a dip of about 65 degrees to the east, and varies in width from a few inches to five feet, It consists of narrow parallel veins of cinnabar and quartz some of which are very high grade, and there is as much as four inches of almost solid cinnabar. He states that the property is well worth putting into condition.
- 24-A Vein Width, Length, Value, etc. Southwest and a dip of about 65 degrees to the east, and varies in width from a few inches to five feet, It consists of narrow parallel veins of cinnabar and quartz some of which are very high grade, and there is as much as four inches of almost solid cinnabar. He states that the property is well worth putting into condition.
25. Mine, Mill Equipment & Flow Sheet The Furnace Plant requires some alterations according to Gordon I. Gould, a son of Dr. Gould, who recently visited the property at my request to make an estimate of the cost of reconditioning it. But in the main it is in fair condition to operate, it will require about thirty days to go into production.
26. Road Conditions, Route Go north of 7th street. Turn east at Northern Avenue, Cross Canal, follow road. Paved roads with exception of last half mile or so.
27. Water Supply At present very limited a small well furnishes all the water but it will have to be augmented, Shaft supposed to have water below the 245 ft. Probably scant, but water no problem as it can be obtained from wells tapping the underflow of the Salt River Valley near the claims.
28. Brief History History according to Gould who has made several trips of inspection is rather sketchy, first located perhaps 40 years ago, recently consolidated, Sam Hughes one of the early locators. small production made at different times. No one knows how much mercury was recovered after installation of furnace, but it is known to be small. The furnace did not function properly so rumor has it, which Dr. Gould says is true.
29. Special Problems, Reports Filed We are also making extensive tests looking to the installation of a concentrating plant to work in conjunction with the Furnace plant, to care for the fine ores and furnace only the coarse which seems to be the best present day practice in furnacing.
30. Remarks This is in a known quicksilver belt. It has been likened to the schist belt in Yuma County where they have been down to the 600 level and still in good ore. The ore occurrence is lenticular and naturally varies in widths and richness. Other reports corroborate that of Dr. Gould. All on file in my office.
31. If property for sale: Price, terms and address to negotiate. I now have property under lease and bond.  
For information write: J. B. Girand  
405 Ellis Building  
Phoenix, Arizona.
32. Signed..... James B. Girand  
405 Ellis Building  
Phoenix, Arizona
33. Use additional sheets if necessary.

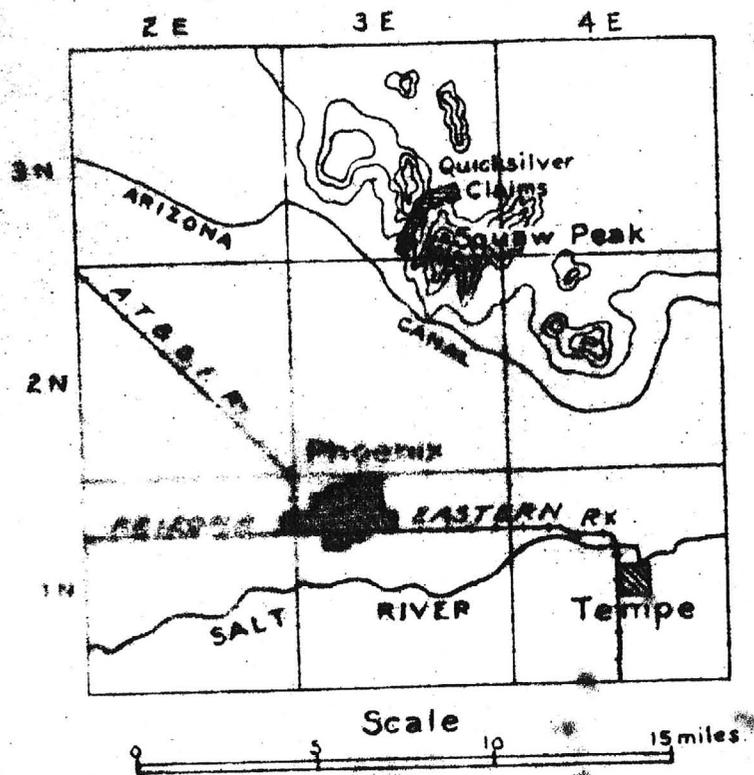


Fig. 8.—Index map showing location of quicksilver deposits with respect to Phoenix.

#### RICO GROUP

The most promising prospect in the district is owned by Sam Hughes, who lives on the ground, and is known as the Rico Group. More consistent effort to develop a mine has been made on this group than elsewhere in the district.

Fig. 9 shows the relative positions of the claims and the location of the groups. The Rico Group consists of nine claims and a 20-foot strip across the south end of the Dolores. The Rico and Mary Ann claims, and seven claims of what is now known as the Eureka Group, were held originally as one group by Hughes, Louis Larsen, and F. E. Jetter. On dissolving the partnership, the original group was split up into two groups, and new locations made. As Hughes' original discovery and shaft was on the end of the Dolores, he was given the south 20 feet of this claim. In October, 1925, an option was held on the Rico Group by the Arizona Quicksilver Corporation.

Hughes, through misapprehension, allowed part of his ground, which is included in a homestead entry, to go to patent without protest. A

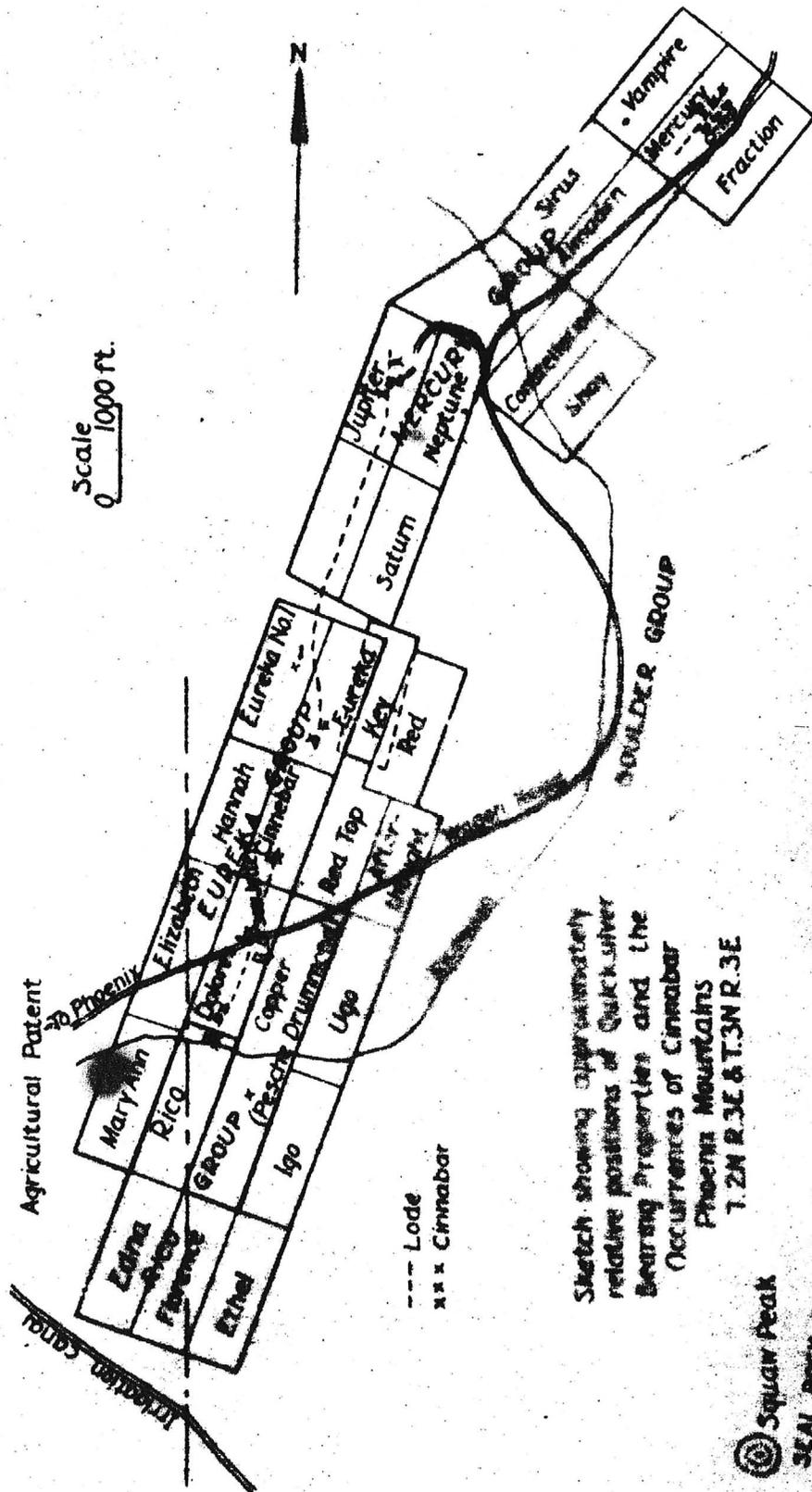
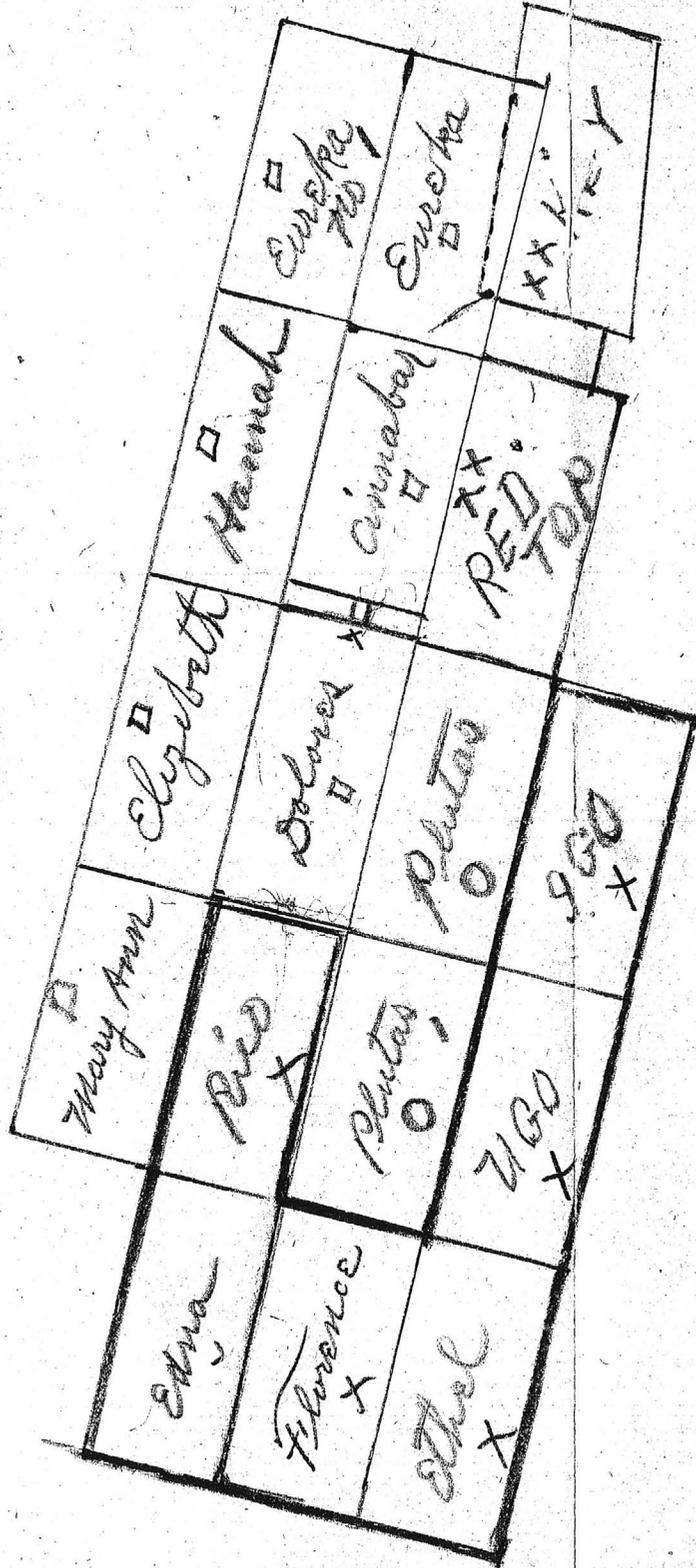


Fig. 9.—Claim map of the Rico, Eureka, and Mercury groups, Phoenix Mountains.

North  
↑



Sam Hughes xx  
 Sam Pearkey 0  
 Larsen + letter 7

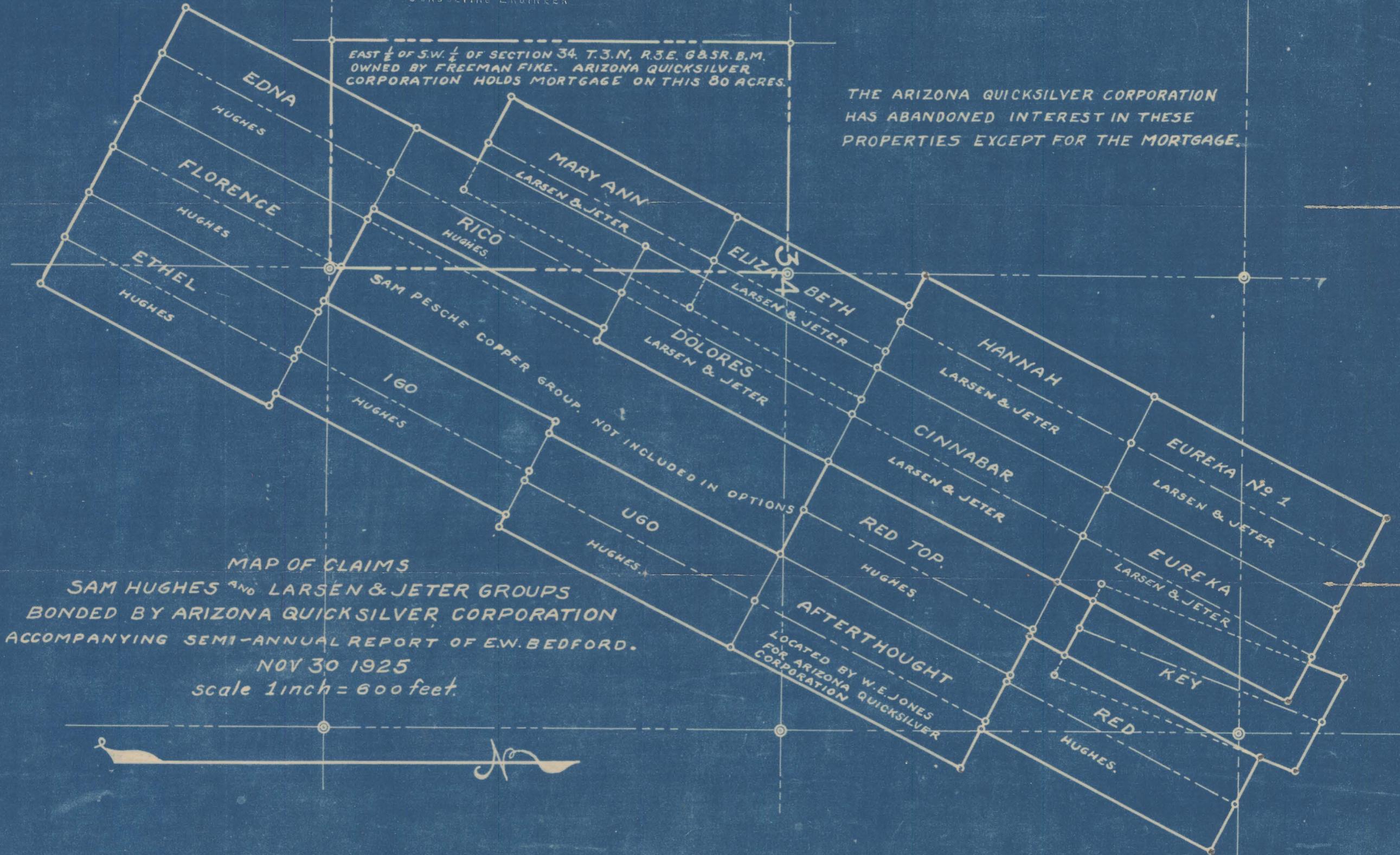
Cinnabar Lusen Group x.

Insert between pages 11 & 12

ARTHUR L. FLAGG  
CONSULTING ENGINEER

EAST 1/2 OF S.W. 1/4 OF SECTION 34, T.3.N., R.3.E. G&SR. B.M.  
OWNED BY FREEMAN FIKE. ARIZONA QUICKSILVER  
CORPORATION HOLDS MORTGAGE ON THIS 80 ACRES.

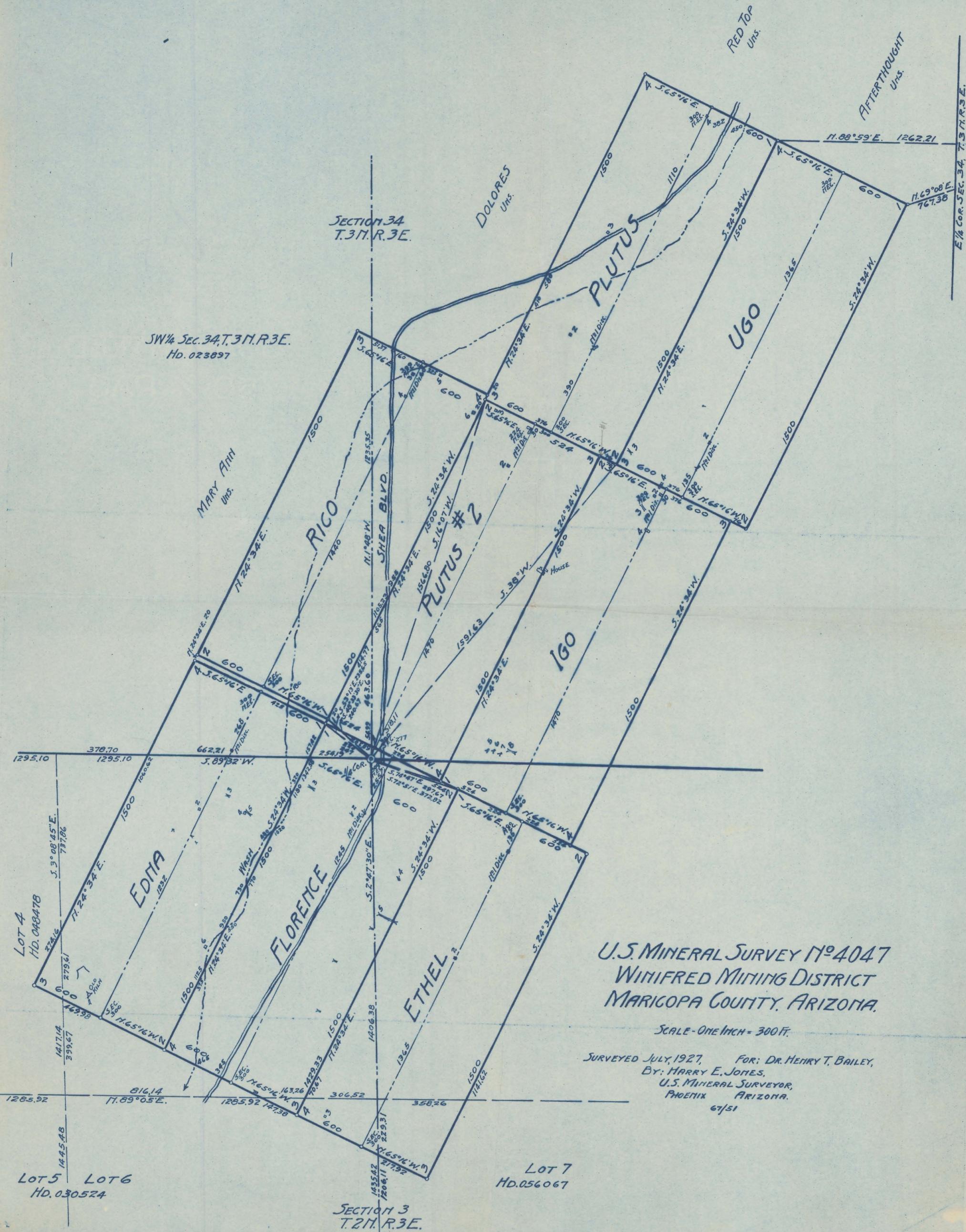
THE ARIZONA QUICKSILVER CORPORATION  
HAS ABANDONED INTEREST IN THESE  
PROPERTIES EXCEPT FOR THE MORTGAGE.



MAP OF CLAIMS  
 SAM HUGHES AND LARSEN & JETER GROUPS  
 BONDED BY ARIZONA QUICKSILVER CORPORATION  
 ACCOMPANYING SEMI-ANNUAL REPORT OF E.W. BEDFORD.  
 NOV 30 1925  
 scale 1 inch = 600 feet.

PLATE II





SW 1/4 SEC. 34, T. 31 N. R. 3 E.  
 Hd. 023897

U.S. MINERAL SURVEY N°4047  
 WINIFRED MINING DISTRICT  
 MARICOPA COUNTY, ARIZONA.

SCALE - ONE INCH = 300 FT.

SURVEYED JULY, 1927, FOR: DR. HENRY T. BAILEY,  
 BY: HARRY E. JONES,  
 U.S. MINERAL SURVEYOR,  
 PHOENIX ARIZONA.  
 67/51

LOT 5 LOT 6  
 HD. 030524

LOT 7  
 HD. 056067

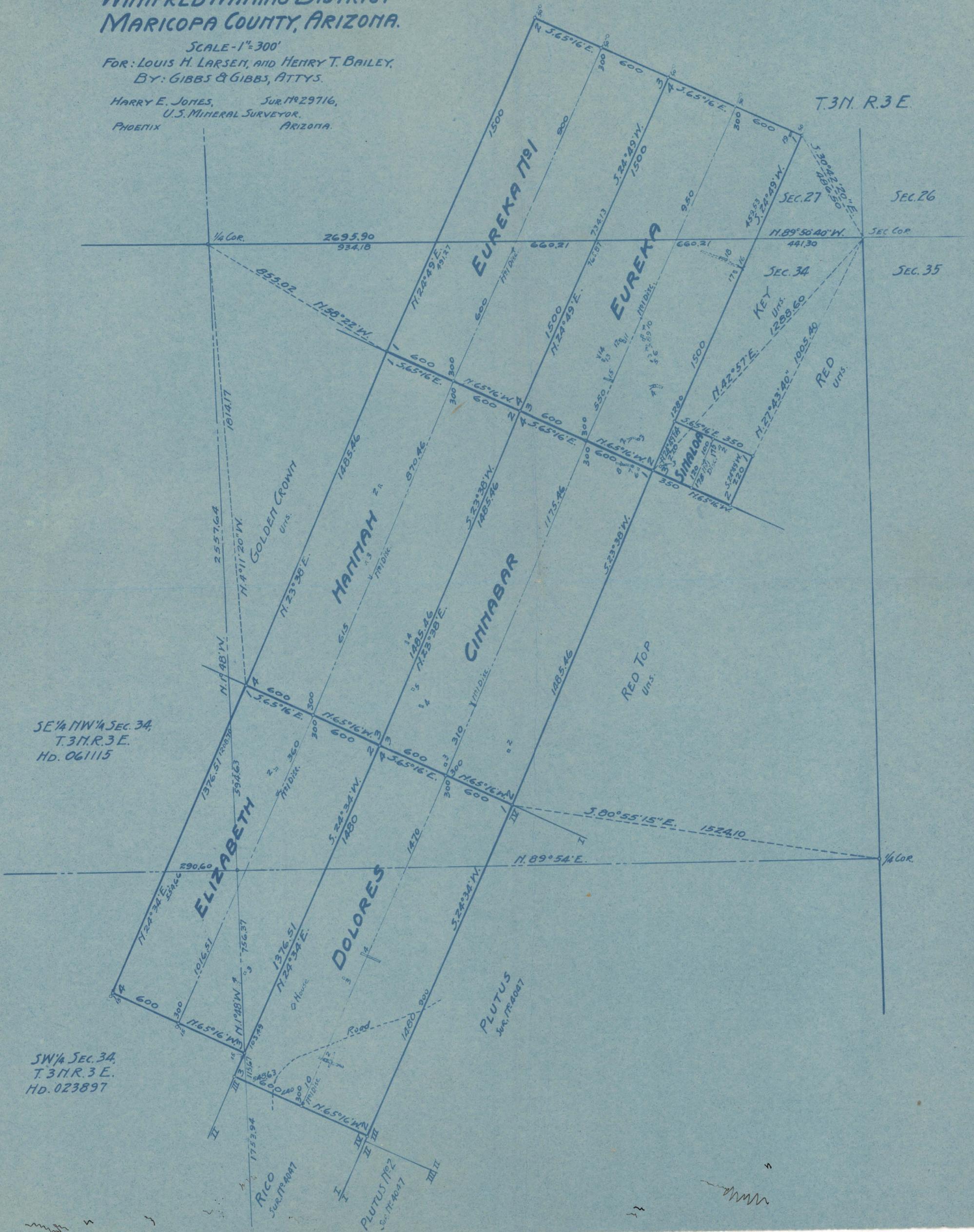
SECTION 3  
 T. 21 N. R. 3 E.

SECTION 34  
 T. 31 N. R. 3 E.

Rico Quicksilver Mines  
 U.S. MINERAL SURVEY No. 4111,  
 WINIFRED MINING DISTRICT  
 MARICOPA COUNTY, ARIZONA.

SCALE - 1" = 300'  
 FOR: LOUIS H. LARSEN, AND HENRY T. BAILEY,  
 BY: GIBBS & GIBBS, ATTYS.

HARRY E. JONES, SUR. No. 29716,  
 U.S. MINERAL SURVEYOR,  
 PHOENIX ARIZONA.



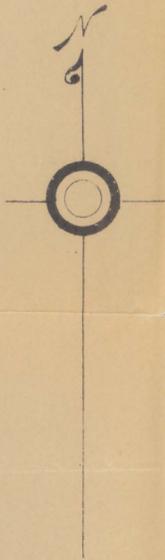
SE 1/4 NW 1/4 SEC. 34,  
 T. 3 N. R. 3 E.  
 HD. 061115

SW 1/4 SEC. 34,  
 T. 3 N. R. 3 E.  
 HD. 023897

RICO  
 SUR. No. 4047

PLUTUS No. 2  
 SUR. No. 4047

PLUTUS  
 SUR. No. 4047



HE 061115  
SE 1/4 NW 1/4 SEC. 34  
T3N R3E

H. 023897  
SW 1/4 SEC. 34  
T3N R3E

SEC. 27 SEC. 26  
SEC. 34 SEC. 35

