CONTACT INFORMATION
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Arizona Geological Survey
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Arizona Department of Mines and Mineral Resources Mining Collection

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PRINTED: 04/29/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: OLD PUEBLO MINE

ALTERNATE NAMES:
QUIEN SABE MINE

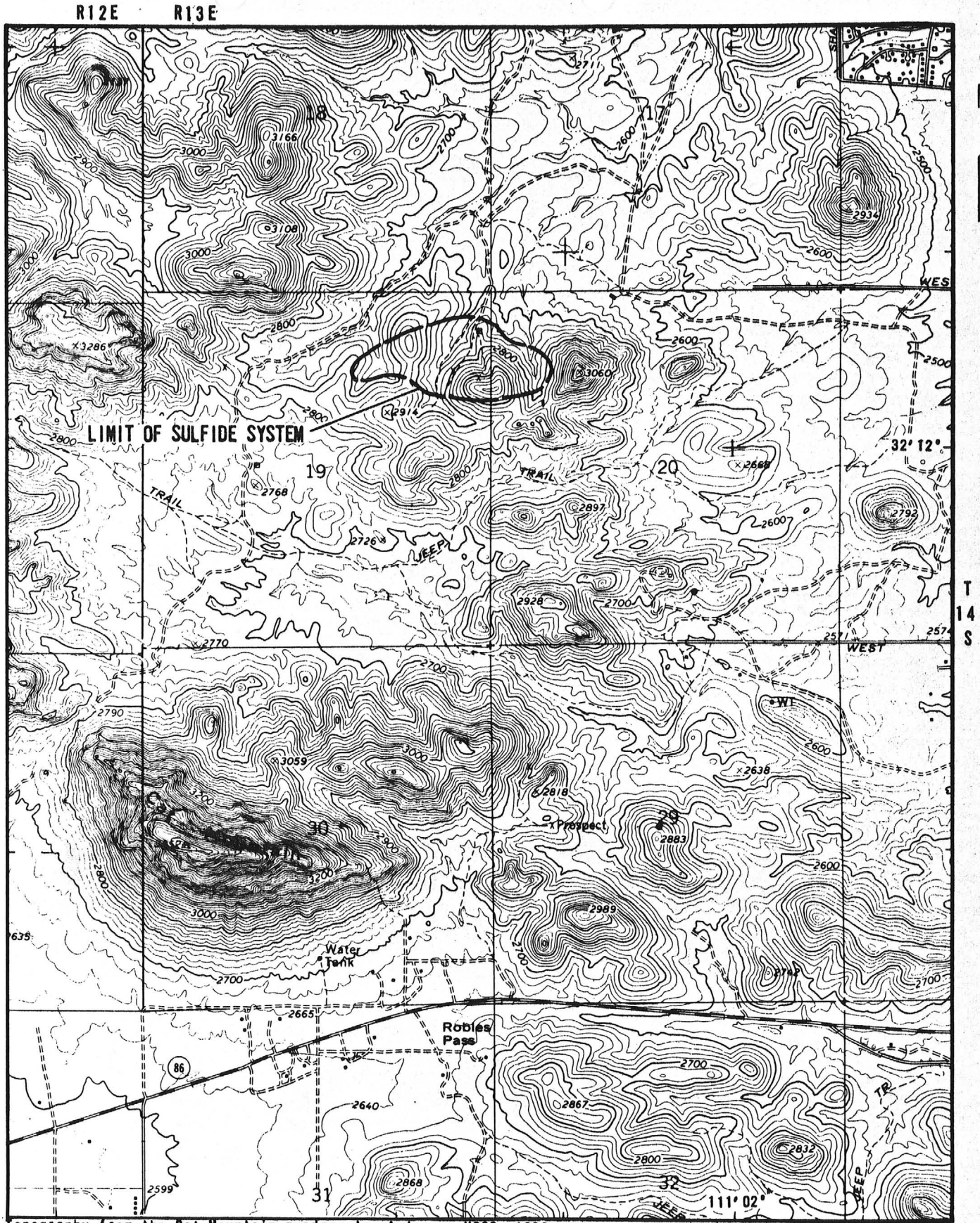
PIMA COUNTY MILS NUMBER: 20

LOCATION: TOWNSHIP 14 S RANGE 13 E SECTION 19 QUARTER NE
LATITUDE: N 32DEG 12MIN 19SEC LONGITUDE: W 111DEG 02MIN 45SEC
TOPO MAP NAME: CAT MOUNTAIN - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
COPPER OXIDE
COPPER SULFIDE
SILVER
GOLD LODE

BIBLIOGRAPHY:
AZBM BULL. 189, P. 102, 1974
ADMMR OLD PUEBLO MINE FILE



Topography from the Cat Mountain quadrangle, Arizona: USGS, 1968.

TOPOGRAPHIC MAP OF THE QUIEN SABE AREA
PIMA COUNTY, ARIZONA

Scale 1" = 2000'

COBB, MRS. MARY C. 8-13-51 PIMA
C/o Stanley M. Secrist
Arizona Trust Co.,
136 N. Stone Ave.,
Tucson, Arizona

See OLD PUEBLO MINE, Amole Mining District

Claims- Marion
Patent- Battle Axe,
ed - Quien Sabe
Little Betsey, Section 19

Remarked that

Lloyd & Tom Stump

have lease option on this

property 1/1970 —

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

VERBAL INFORMATION SUMMARY (SHORT FORM)
May be Reproduced
May Be Inserted Into Mine File Or Added To "Rumor Page"

1. **Information from:** Bob Stump

   Address: Tucson, AZ

2. **Phone:**
3. **Mine:** Old Pueblo/Quien Sabe
4. **ADMMR Mine File:** OLD PUEBLO
5. **County:** Pima
6. **MILS Number** #20
7. **Operational Status:** Developed Deposit
8. **Summary of information received, comments, etc.:**

Mr. Stump worked for McFarland & Hullinger in the 70's. They reportedly shipped copper oxide flux ore from the vicinity of the mine at that time. Mr. Stump believed that Cominco core drilled the deposit and found ore averaging .6% CU. A new housing development and golf course are now adjacent to the deposit.

Date: April 20, 1989

Harrison E. Matson - Mining Geologist
(signature) ADMMR

OLD PUEBLO MINE PIMA COUNTY

HM WR 4/8/88: A report on the Quien Sabe oxide copper deposit, aka Old Pueblo MIne, Pima County was obtained for addition to the file. Since the deposit is in an area of increasing urbanization and is rather low grade, any further development of this prospect appears unlikely.

MILS #20

QUIEN SABE

PIMA COUNTY, ARIZONA

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DEPT. OF MINES &
MINERAL RESOURCES

QUIEN SABE

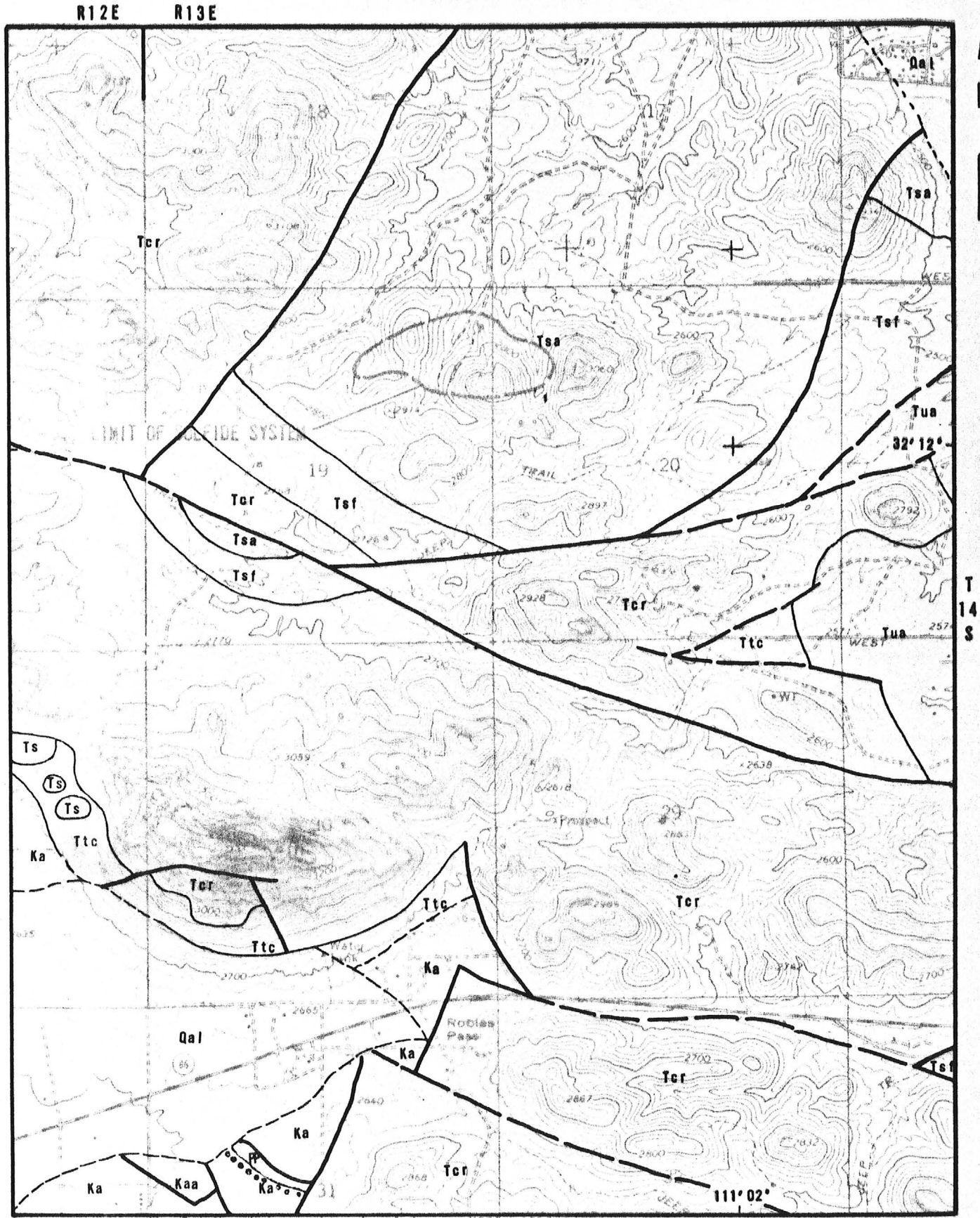
PIMA COUNTY, ARIZONA

EXPLANATION

Qal	Alluvium	QUATERNARY
Tsa	Shorts Ranch Andesite	TERTIARY
Tsf	Safford Formation	
Tcr	Cat Mountain Rhyolite	
Ts	Spherulitic rhyolite	
Ttc	Tucson Mountain Chaos	
Tua	Undifferentiated andesite	
Ka	Amole Formation, undifferentiated arkose, siltstone, shale (contains basal conglomerate)	CRETACEOUS
Kaa	Amole Formation, arkose	
ℙ	Snyder Hill Formation	PERMIAN

Amole Formation, basal conglomerate

fault



Sturdevant, J., 1964, Geologic map of the Southeast Tucson Mountains, South Amole, Pima County, Arizona: BCMC SW Dist. report, Tucson Mountains Alteration Areas, 1963.

GEOLOGIC MAP OF THE QUILEN SABE AREA
PIMA COUNTY, ARIZONA

Scale 1" = 2000'

S. Tucson M[illegible].

marginal size because of land restrictions?

PORPHYRY COPPER PROBABILITY STUDY
OCCURRENCE DESCRIPTION OUTLINE

I. SULFIDE SYSTEM (A-25 color anomaly)

A. Name Quien Sabe County Pima State Arizona

*B. Length: Exposed 2,000 ft; Extrapolated 4,000 ft.

*C. Width: Exposed 500 ft; Extrapolated 2,600 ft.

*D. Azimuth of Elongation ____ °; Sulfide Concentration ____ Vol. %

*E. Capping (circle one for each)

Oxidized Capping	yes	no		no data
Leached Capping	yes	no		no data
Intensity in Outcrop	subtle	apparent	obvious	no data
Color	red-brown	maroon	bleached-yellow	no data

*F. Absolute Age (m.y.); Min. ____; Max. ____; Average ____
Relative Age (bracket): ____

*G. Drillholes

1. Maximum Depth ____ ft.

2. Comments ____

*H. Geologic Setting (age, host rocks, intrusive relationships, oldest to youngest formations, contacts, alteration halo to core zone).

(See back of page)

I. Reference:

See list

Don Bulmer)
Howard Bartlett) pers. comm. 1971

*Note: See Rules and Conventions.

GEOLOGIC SETTING

Cat Mountain rhyolite (tcr) overlain by Shorts Ranch andesite (Tsa) intruded by (poorly exposed) sericitized quartz monzonite(?) (Tqm).

Note: a small outcrop at Tqm is mapped at Park Hill 22,000' WSW of Quien Sabe.

ALTERATION

Moderate spotty silicification in an area of quartz stockworks with copper oxides (chrysocolla). Sparse sulfide casts on the SE side of the color anomaly. Clay-sericite alteration with or without associated pyrite on the NW side of the color anomaly.

Sulfide distribution or pyrite casts not adequately described-- the same problem in other South Amole areas.

Sulfide System Name Quien Sabe

II. Diagnostic Reconnaissance Characteristics

A. District Prospect Zoning Outside of Sulfide System

1. Prospects/Mines

Metal/Type	Min. Diam. (feet)	(M) Mines (P) Prospects	Rock Types	Deposit Types
Cu X		P		
Pb-Zn				
Ag-Au				
Mn				
Other				
Other				

B. Dike Swarms

Rock Types	nd			
Length (ft.)				
Width (ft.)				
Azimuth (°)				
Age				
* Spatial Rel.				
Contacts				
Other				

*C. Important Regional Structures (other than dike swarms)

Type	Shear-fracture zone	Shear zone	
Length	2,000		
Azimuth (°)	75	330	
Recognition Factors	mineralized		
Age	T?		
Spatial Rel.	within system		
Contacts			
Other			

*D. Other Reconnaissance: (See back of page)

Sulfide System Name Quien Sabe

III. Center of Mineralization (zone of best copper)

A. Name none?

*B. Copper Mineralization

1. Type	*%	Av. Grade	Rock Type	*Other Data
a. Primary				
b. Enriched				
c. Skarn (replacement)				
d. Oxide X	100	0.2		
e. Mixed				

2. Current Mineral Inventory

a. Tons 20×10^6 ; Av. Grade 0.15-0.2 %; Cutoff 0.15? %

b. Other Credits leachable copper only given

3. Past Production

a. Tons none ; Av. Grade ____ %; Cutoff ____ %

b. Other Credits ____

C. Cover

1. 80-100? % Exposed at time of discovery

2. Projected Post Mineral Cover

a. Thickness (ft.) nd

* b. Formations Cat Mountain rhyolite

* c. Estimated Δ elevation of base of cover to top of cc blanket (ft.) ____

nd

3. Premineral Cover

a. Thickness (ft.) ____

b. Formations ____

REFERENCES

Brown, W. H., 1939, Tucson Mountains, an Arizona Basin Range type: GSA Bull., v. 50, no. 5, p. 697-760.

Jenkins, O. P., and Wilson, E. D., 1920, Geological reconnaissance of the Tucson Mountains: Ariz. Bur. Mines Bull. 106.

Sturdevant, J. A., 1963, Tucson Mountains, alteration areas A-20 through A-26: BCM-SWD.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Old Pueblo Mine

Date Aug. 13, 1951.

District Amole Mining District

Engineer Axel L. Johnson

Subject: Reconnaissance Report

Ownership. The claims are owned by Mrs. Mary C. Cobb of Great Falls, Montana. The agent for the sale of this property is Stanley M. Secrist with the Arizona Trust Co., 136 N. Stone Ave., Tucson, Arizona. Ownership consists of the following patented claims---- Marion, Battle Axe, Quien Sabe, and the south portion of the Little Betsey which lies in Section 19.

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In the area of the claims described here, the country rock is an andesite porphyry (named by W. Horatio Brown as Shorts Ranch Andesite). This andesite porphyry is of light purplish gray color. It has a dense groundmass with abundant phenocrysts of plagioclase, hornblende,and sometimes biotite may be found in the rock.

In this country rock, there is found numerous fissures, which are in most places nearly vertical. In these fissures, there has been deposited copper oxide minerals, mostly chrysocolla. These evidently were deposited from hot ascending solutions or gases with a high proportion of mineral matter in solution, which tried to escape through the fissures in the rock. At some locations, these fissures are so large and numerous thqt they have formed small merchantable deposits. Indications show that considerable ore had been shipped from an open cut on the Quien Sabe, and there was more ore exposed in this cut. The waste dump from this cut also appeared to contain ore which approximated direct shipping grade. Some ore had also evidently been removed from some of the drifts and smaller cuts on the property.

Mr. Secrist suggested the advisability of putting in a diamond drill hole to see if a layer of limestone rock below the dense andesite porphyry would be encountered in depth, as he thought such a rock formation would be more likely to contain more and larger ore fissures. According to the geologic study made by Mr. W. Horatio Brown, there is a layer of Safford Tuff underneath the Andesite, after which there is a layer of Rhyolite. Below the Rhyolite, there is a thick layer of Amole Arkose formation, which is interbedded with shales and thin-bedded limestones. According to Brown's geologic cross sections, this layer would perhaps be reached at a depth of from 1000 to 2000 feet. The complexity of the structures and the presence of numerous faults, however, prevents the possibility of being able to make any accurate estimate of the distance.

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However, the property certainly seems to warrant further exploration in depth. One diamond drill hole drilled vertically either from the surface, or from the bottom of the present #2 shaft on the Quien Sabe (now down to a depth of 517 feet), and drilled down into the Amole Arkose formation, may show up an ore deposit in depth. This, if favorable results were indicated, would the be followed up by further drilling.

Axel L. Johnson

Axel L. Johnson, Field Engineer,
Dept. of Mineral Resources,
P. O. Box 390, Tucson, Arizona.

Survey No. 2951

EXPENDITURE OF FIVE HUNDRED DOLLARS

I certify that the value of labor and improvements made upon, or for the benefit of, each of the locations embraced in said mining claim, by the claimant or its grantors, is not less than five hundred dollars, and that said improvements consist of:

Little Betsey,

No. 1 The discovery shaft, on the center line, 20 ft. from the N. end Center, is 4x6 ft., 40 ft. deep, with old incline shaft joining in from the east.
Value $500.00

No. 2 Shaft, bearing S. 85° 26' W., 388.12 ft. to center, from Cor. No. 4, is 5x7 ft., 108 ft. deep
Value $1620.00

Note: An undivided 1/9th interest in shaft no. 2, Quien Sabe Lode, hereinafter described.
Value $1666.66

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This shaft, being centrally located, is a proper and feasible main working shaft for the entire group of nine claims, five of which are included in this survey, and the remaining four being the Princess, Alcalde, Gold Leaf and Crown Lodes, unsurveyed, the Old Pueblo Copper Company, claimant. The bottom of this shaft, at its present depth is over 350 ft. below the surface of any of the claims in the group, so that by drifting and crosscutting therefrom, ore may be extracted from beneath all of the claims, and they be developed thereby. An undivided 1/9th interest in the value of this improvement is therefore properly assigned to each of these claims.

No. 3 Shaft, the center of E. side of which bears S. 36° 37' W., 260.63 ft. from Cor. No. 1, is 5x7 ft., 100 ft. deep.
Value $1500.00

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No. 5 Shaft, the center of E. side bearing N. 44° 24' W., 225.8 ft. from point 372.61 ft. on line 4-1, is 5x5 ft., 31 ft. deep.
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No. 6 Tunnel, the center of mouth of which bears N. 3° 33' E., 627.3 ft. from Cor. No. 3, runs in S. 31½° E., 4x6 ft., 291 ft. long, with 79 ft. drift to S.W. from point 225 ft. in from mouth, connecting with Shaft No. 8.
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No. 7 Shaft, the center of which bears N. 72° 33' E., 250.2 ft. from Cor. No. 3, is 5x7 ft., 99 ft. deep, timbered and equipped with gallows frame.
Value $1500.00

No. 8 Cut, the S. side of mouth bearing N. 21° 9' E., 223 ft. from Cor. No. 3, is 4x21 ft., 10 ft. face.
Value $100.00

No. 9 Cut, the S. side of mouth bearing N. 10° 16' E., 158 ft. from Cor. No. 3, is 6x16 ft., 6 ft. face.
Value $60.

Note: An undivided 1/9th interest in Shaft No. 2, Quien Sabe Lode, heretofore described.
Value $1666.66

ABM Bull 189 p. 84

MILS Sheet sequence number 0040190114

See: ABM Bull. 106, p. 6

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STATE OF ARIZONA
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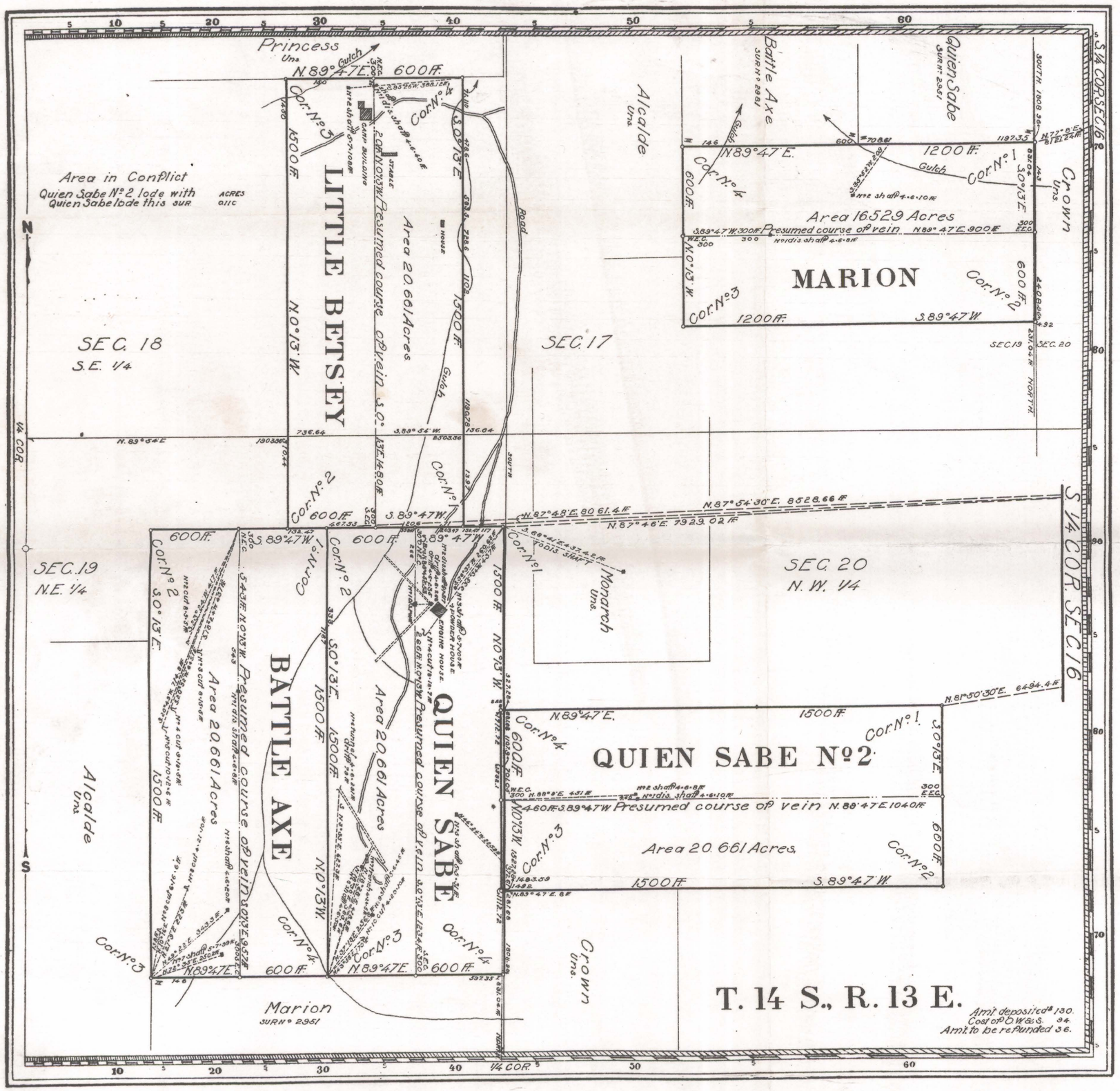
No. 7 Shaft, the center of which bears N. 72° 33' E., 250.2 ft. from Cor. No. 3, is 5x7 ft., 99 ft. deep, timbered and equipped with gallows frame.
Value $1500.00

No. 8 Cut, the S. side of mouth bearing N. 21° 9' E., 223 ft. from Cor. No. 3, is 4x21 ft., 10 ft. face.
Value $100.00

No. 9 Cut, the S. side of mouth bearing N. 10° 16' E., 158 ft. from Cor. No. 3, is 6x16 ft., 6 ft. face.
Value $60.

Note: An undivided 1/9th interest in Shaft No. 2, Quien Sabe Lode, heretofore described.
Value $1666.66



Claims Located Quien Sabe No 2 December 3, 1905
Marion February 6 1906
Others Amended " 12 "

Mineral Survey No. 2951

L.O.T. No.

ARIZONA Land District.

PLAT

OF THE CLAIM OF

OLD PUEBLO COPPER COMPANY

KNOWN AS THE

LITTLE BETSEY, MARION, BATTLE AXE, QUIEN SABE, QUIEN SABE No 2

IN Amole MINING DISTRICT,
Pima COUNTY, Arizona
Containing an Area of 99.063 Acres.
Scale of 300 Feet to the inch.
Variation 13° 40' E.
SURVEYED August 30-September 14, 1911 BY
Paul E. Fernald,
U.S. Mineral Surveyor,

The Original Field Notes of the Survey of the Mining Claim of Old Pueblo Copper Company known as the Little Betsey, Marion, Battle Axe, Quien Sabe, Quien Sabe No 2

from which this plat has been made under my direction, have been examined and approved, and are on file in this Office; and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and fix the locus thereof.

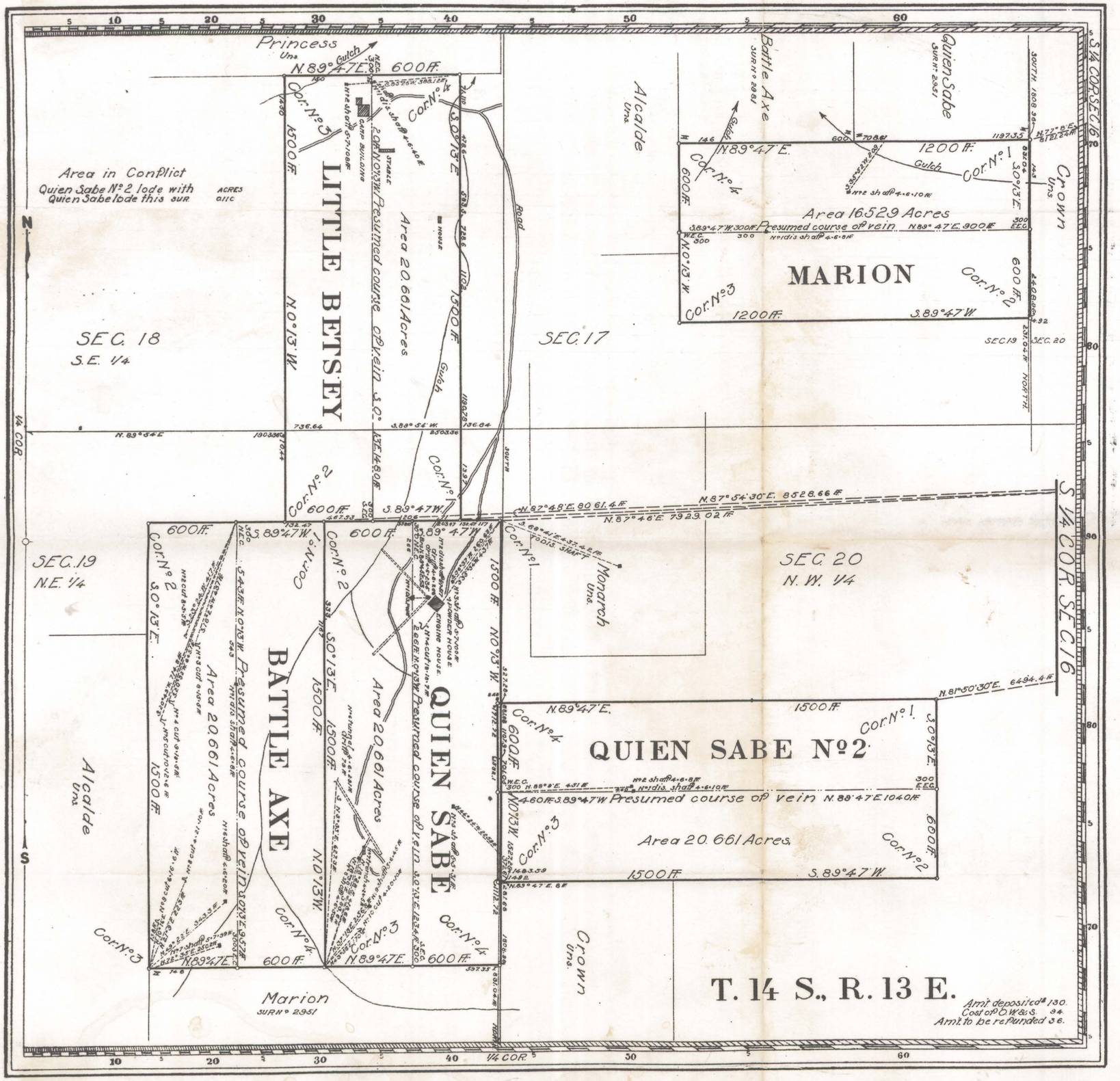
I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claims by claimant ____ or its ____ grantors, or for each of, and that said improvements consist of 14 shafts, 3 drifts, 8 cuts, 1 trench and 1 tunnel. Total value $2576.00 An undivided 1/8 interest value $1566.66 in improvement work on the Quien Sabe lode is credited to each of the lodes in this survey and reserved for the Princess, Crown, Alcalde and Gold Leaf lodes, unsurveyed,

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

U.S. Surveyor General's Office.
Phoenix, Arizona
January 8, 1912

Frank P. Ingalls
U.S. Surveyor General for
ARIZONA.



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that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

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ARIZONA.