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OCT. 8 - 1960

ENP At Bottom of shaft (14')
⑤ on E side.

Along level just
outside of E fissure
wall. For strike length
of about 3 ft.

Iron-stained crushed
granite

ENP
⑥ Specimen sample of
green rock just
outside of W fissure
wall

OCT. 8 - 1960

ENP

~~(6)~~
(7) Iron stained granite
wall against volc-
dike - Crushed &
well iron stained

Sample is ± 1 ft. across

E contact & mostly
in granite

ENP

(8)

Along W wall of peg-
dike - About 12" of
iron stained granite plus
a few inches of crushed
peg. $\frac{95}{10}$

Cut on peg dike
is $\pm 250'$ in a direction
555W from shaft.

Hole is $\pm 4'$ deep x
along W. wall of gty-fels
peg dike. Dike is only 2 or 3
feet wide.

NE 1/4

Sec 32

T2N - R9E

Min. Survey 4471

"Apache Caves"

29 Jan - 1957

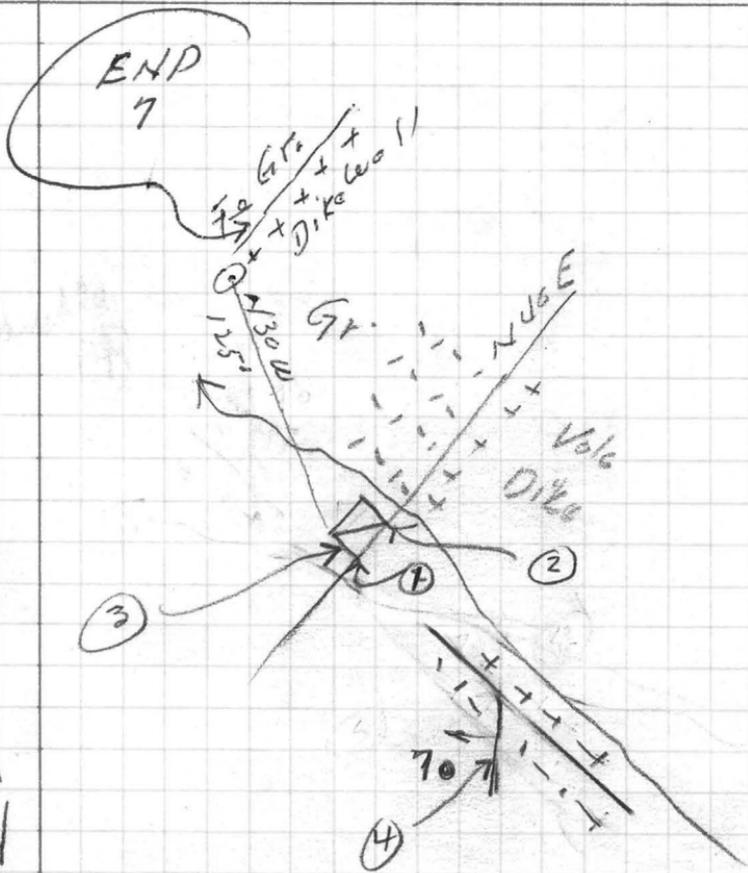
Raymond C. Taylor

Raymond H. Taylor

711 West Piedmont
Phoenix

BR 6-4367

WE 5-9331
Extra 455



Several en echelon
fracture zones show
in N^{1/2} of claim

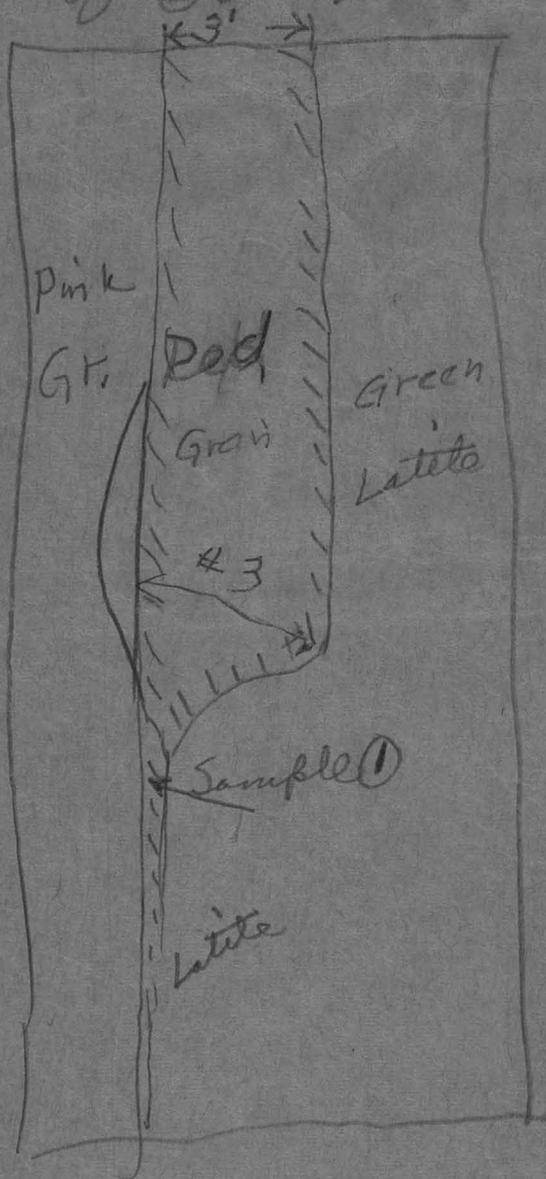
N20 E to N40 E

One carries a peg
dike with gtz +
tourmaline

Others are bleached
chloritized + iron
stained

Strongest is a
discovery shaft.

SW Wall
of Shaft



± 15'

APACHE CAVES CLAIM

SAMPLE LIST

ENP ①

From 4" to 6" width. (granite)
Large and crushed rock,
stained by red iron oxide
along and near fissure, which
cuts south (east) corner of
shaft.

Fissure strikes $N40^{\circ}E - S40^{\circ}W$

About 12 ft. below collar
on south side.

— — — —

ENP ②

From (north) east corner of
shaft about 12 ft below
concrete collar.

From $N40^{\circ}E - S40^{\circ}W$ fissure
zone cutting southeast side of
shaft.

About 14 inches (true width)
crushed rock - Iron stained.

Good fissure wall on southeast
side.

ENP (3)

South (west) side of shaft

Sample across widest part of iron-stained zone, bounded by fissure walls. About 42 inches of crushed granite and gouge. Strong iron oxide staining.

exposed

ENP (4)

From fissure zone, in creek bank about 25 ft from shaft in a direction $560^{\circ}E$

In granite near a volcanic dike was striking $N45^{\circ}W$, with granite on the south west.

Granite cut by fissure striking $N-S$ and dipping 70° west.

Sample is from rock & gouge along fissure - About 6 inches wide. Heavy iron stain.

AFFIDAVIT

STATE OF ARIZONA)
 : ss
County of Maricopa)

E. N. Pennebaker, being first duly sworn, deposes and says:

I am a resident of Scottsdale, Arizona, and have been a Registered Geologist (No. 1105) in the State of Arizona since 1945. I am also a Registered Professional Engineer (No. 190) in the State of Nevada since 1941.

I graduated with honors from the College of Mining, University of California at Berkeley in 1924 with the degree of Bachelor of Science in Economic Geology, following which I continued graduate studies in geology at this University for an additional one and one-half years.

Since then I have been employed by many mining companies, both in the United States and abroad, for over thirty years in the examination and field study of mineral deposits for the purpose of finding new ore bodies or extending those already known.

Since 1935 I have been employed at various times in Arizona to make special geologic investigations for Phelps Dodge Corporation, Miami Copper Company and its subsidiaries, The American Metal Company, National Lead Company, Consolidated Coppermines Corporation, and others.

I am a member of the following technical societies: American Institute of Mining, Metallurgical and Petroleum Engineers, Mining and Metallurgical Society of America, Society of Economic Geologists, American Association of Petroleum Geologists, Canadian Institute of Mining and Metallurgy, Geological Society of South Africa, and the Geochemical Society.

On September 23 and October 8, 1960, I examined the Apache Caves lode mining claim, Mineral Survey No. 4471, situate in the NE $\frac{1}{4}$ of Section 32, Township 2N, Range 9E (unsurveyed), Gila and Salt River Base and Meridian. This is in Maricopa County near the west base of the Superstition Mountains and about 8 $\frac{1}{2}$ miles northeast of Apache Junction. On the "Map of Arizona Mining Districts", published by the Arizona Bureau of Mines in 1946, this area is designated as "Goldfields Mining District".

The principal production of the Goldfields district came from a mine situate about 3 miles southwest of the Apache Caves claim. This, formerly known as the Young or Mammoth property, is briefly described in Arizona Bureau of Mines Mineral Technology Series No. 37, Bulletin No. 137 entitled "Arizona Lode Gold Mines and Gold Mining" by Wilson, Cunningham and Butler (1934). In this article a production of \$67,000 worth of gold and silver is credited to the mine and ore is described as occurring in iron-stained granite.

I am familiar with the Goldfields district, having made examinations in this general area in past years.

The immediate area in which the Apache Caves claim is situate is a gently rolling pediment carved on granite near the base of the Superstition Mountains. Sitting on the granite here and there are scabs of volcanic rocks, and the granite bed-rock is traversed by both older pegmatite quartz-bearing dikes and by younger dikes of volcanic rocks.

The discovery shaft of the Apache Caves claim has been sunk on the steep contact of a dike of volcanic rock that cuts the granite. The shaft is about 14 feet deep and it exposes the steep contact, or plane of junction, of the dike and the granite. This contact is both regular and curving, and it forms a fissure that bounds strong iron staining near the edge of the granite. About 3 feet away and within the granite is another pronounced fissure striking N40°E and standing about vertical. The stronger mineralization, in the form of iron-staining, is confined between these two fissures and thus they form a clearly-defined lode that is about 3½ feet wide as viewed on the southerly wall of the shaft. Near the present bottom of the shaft the west wall curves in and the lode narrows, but in its narrower sections it is well defined and is richer in iron oxide. On the northerly wall, the lode is about 14 inches wide near the bottom of the shaft.

Five samples, each averaging several pounds in weight, were taken by me in and along the lode. These were delivered personally to the Arizona Assay Office of Phoenix, Arizona, which obtained the following results by assay, as evidenced by the attached certificates. Three other samples were also taken from localities away from the discovery shaft. All are described, as follows:

Sample #1

From 4 to 6 inches wide along and near the fissure which cuts the southeast corner of the discovery shaft, about 12 feet below collar. The vein material is gouge and crushed granite stained by red iron oxide and assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.4 oz. per ton | Trace |

Sample #2

From the same fissure as #1, but where it cuts the northeast corner of the discovery shaft. About 14 inches true width, some 12 feet below collar. The vein material here is iron-stained crushed granite and assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.4 oz. per ton | Trace |

Sample #3

From the south side of the shaft across the widest part of the iron-stained lode between the two fissure walls. The sample represents about 42 inches of crushed granite and gouge with strong iron oxide staining, which assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.4 oz. per ton | Trace |

Sample #4

This sample was taken from a fissure exposed in a dry wash bank about 25 feet distant from the discovery shaft. The sample is from gouge and crushed granite along the fissure and represents a width of about 6 inches with heavy iron stain. It assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.2 oz. per ton | Trace |

Sample #5

From the fissure along the east side of the discovery shaft, about 14 feet below collar. The sample is along but just outside of the fissure that constitutes the east side of the lode. The material is crushed granite for a sampled length of about 3 feet over a width of several inches, which assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.1 oz. per ton | Trace |

Sample #6

Specimen sample of green volcanic rock in the discovery shaft just outside of the west fissure wall. This gave the following result by assay:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.1 oz. per ton | Trace |

Sample #7

This sample is from a locality about 125 feet distant from the discovery shaft in a direction N30W. Here there is an iron-stained granite wall against a dike of volcanic rock. The sample consists of crushed and iron-stained granite over a width of about 12 inches adjacent to the wall. This assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.3 oz. per ton | Trace |

Sample #8

Sample #8 is from a locality about 250 feet distant from the discovery shaft in a direction about S55W, where there is a cut about 4 feet deep along the west wall of a quartz-bearing pegmatite dike. The sample is from along the west wall of the dike for a width of about 12 inches and consists of iron-stained granite along with a few inches of crushed pegmatitic quartz. It assayed as follows:

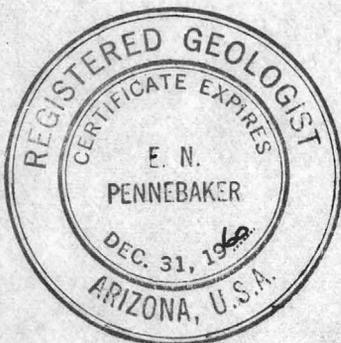
| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.2 oz. per ton | Trace |

The samples taken by me from within the lode exposed in the discovery shaft (Sample Nos. 1, 2 and 3) carry 0.4 ounces per ton of silver over widths up to 42 inches between the fissure walls of the lode. This is substantially higher than the material outside of the walls (as shown by Samples Nos. 5 and 6).

In conclusion, the Apache Caves claim:

- (1) Is in a recognized mining district with a substantial past production of gold and silver from the same rock formation revealed in the discovery shaft.
- (2) The discovery shaft exposes a lode structure with well-defined fissure walls.
- (3) The lode between these walls carries abundant iron oxide and a small but consistent amount of silver at relatively shallow depth.

In my opinion this constitutes a valid mineral discovery.



E. N. Pennebaker
E. N. PENNEBAKER

Subscribed and sworn to before me this 20th day of October, 1960.

Mary P. Carroll
Notary Public

My Commission Expires:

Jan. 18, 1961

AFFIDAVIT

STATE OF ARIZONA)
 : ss
County of Maricopa)

*Orig. 14 carbon
Single spaced
on legal size paper*

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about vertical. The stronger mineralization, in the form of iron-staining, is confined between these two fissures and thus they form a clearly-defined lode that is about $3\frac{1}{2}$ feet wide as viewed on the southerly wall of the shaft. Near the present bottom of the shaft the west wall curves in and the lode narrows, but in its narrower sections it is well defined and is richer in iron oxide. On the northerly wall, the lode is about $1\frac{1}{4}$ inches wide near the bottom of the shaft.

Five samples, each averaging several pounds in weight, were taken by me in and along the lode. These were delivered personally to the Arizona Assay Office of Phoenix, Arizona, which obtained the following results by assay, as evidenced by the attached certificates. Three other samples were also taken from localities away from the discovery shaft. All are described, as follows:

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| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.4 oz. per ton | Trace |

Sample #2

From the same fissure as #1, but where it cuts the northeast corner of the discovery shaft. About $1\frac{1}{4}$ inches true width, some 12 feet below collar. The vein material here is iron-stained crushed granite and assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.4 oz. per ton | Trace |

Sample #3

From the south side of the shaft across the widest part

4
lode

of the iron-stained ~~zone~~ and between the two fissure walls. The sample represents about 42 inches of crushed granite and gouge with strong iron oxide staining, which assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.4 oz. per ton | Trace |

Sample #4

This sample was taken from a fissure exposed in a dry wash bank about 25 feet ^{*distant*} from the discovery shaft. The sample is from gouge and crushed granite along the fissure and represents a width of about 6 inches with heavy iron stain. It assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.2 oz. per ton | Trace |

Sample #5

From the fissure along the east side of the discovery shaft, about 14 feet below collar. The sample is along but just outside of the fissure that constitutes the east side of the lode. The material is ~~iron-stained~~ crushed granite for a sampled length of about 3 feet over a width of several inches, which assayed as follows:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.1 oz. per ton | Trace |

Sample #6

Specimen sample of green volcanic rock in the discovery shaft just outside of the west fissure wall. This gave the following result by assay:

| <u>Silver</u> | <u>Gold</u> |
|-----------------|-------------|
| 0.1 oz. per ton | Trace |

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Silver

0.3 oz. per ton

Gold

Trace

Sample #8

Sample #8 is from a locality about 250 feet distant from the discovery shaft in a direction about S55W, ^{where} ~~Here~~ there is a cut about 4 feet deep along the west wall of a quartz-bearing pegmatite dike. The sample is from along the west wall of the dike for a width of about 12 inches and consists of iron-stained granite along with a few inches of crushed pegmatitic quartz. It assayed as follows:

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0.2 oz. per ton

Gold

Trace

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In my opinion this constitutes a valid mineral discovery.

E. N. PENNERAKER

Subscribed and sworn to before
me this 19th day of October, 1960

Notary Public

My Commission Expires: