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PRINTED: 06/25/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: TWIN LEDGE

ALTERNATE NAMES:

FRANKIE AND JOHNNIE  
YELLOW JACKET

YAVAPAI COUNTY MILS NUMBER: 1136

LOCATION: TOWNSHIP 13 N RANGE 2 W SECTION 33 QUARTER NW  
LATITUDE: N 34DEG 27MIN 50SEC LONGITUDE: W 112DEG 28MIN 30SEC  
TOPO MAP NAME: GROOM CREEK - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:

MOLYBDENUM  
COPPER SULFIDE  
SILVER  
GOLD

BIBLIOGRAPHY:

KIRKEMO, H. ETAL. INVEST. MOLY. DEPTS USGS  
BULL 1182-E P E32  
ADMMR FRANKIE AND JOHNNIE FILE  
YAVAPAI MAGAZINE JULY 1918 P 4 SHARLOT HALL  
MUSEUM PRESCOTT, AZ

UNITED STATES  
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

506 Federal Building  
Salt Lake City 1, Utah  
September 27, 1943

MEMORANDUM for Mr. S. E. Zimmerley  
U.S. Bureau of Mines  
Salt Lake City, Utah.

Enclosed is copy of a report by Donald H. Kupfer of the Geological Survey  
entitled "Brief examination of the Twin Ledge Molybdenum Prospect, Wolf Creek,  
Yavapai County, Arizona." A copy has been sent to Mr. Hedges in Tucson.

*S. G. Lasky*  
S. G. Lasky,  
Regional Geologist.

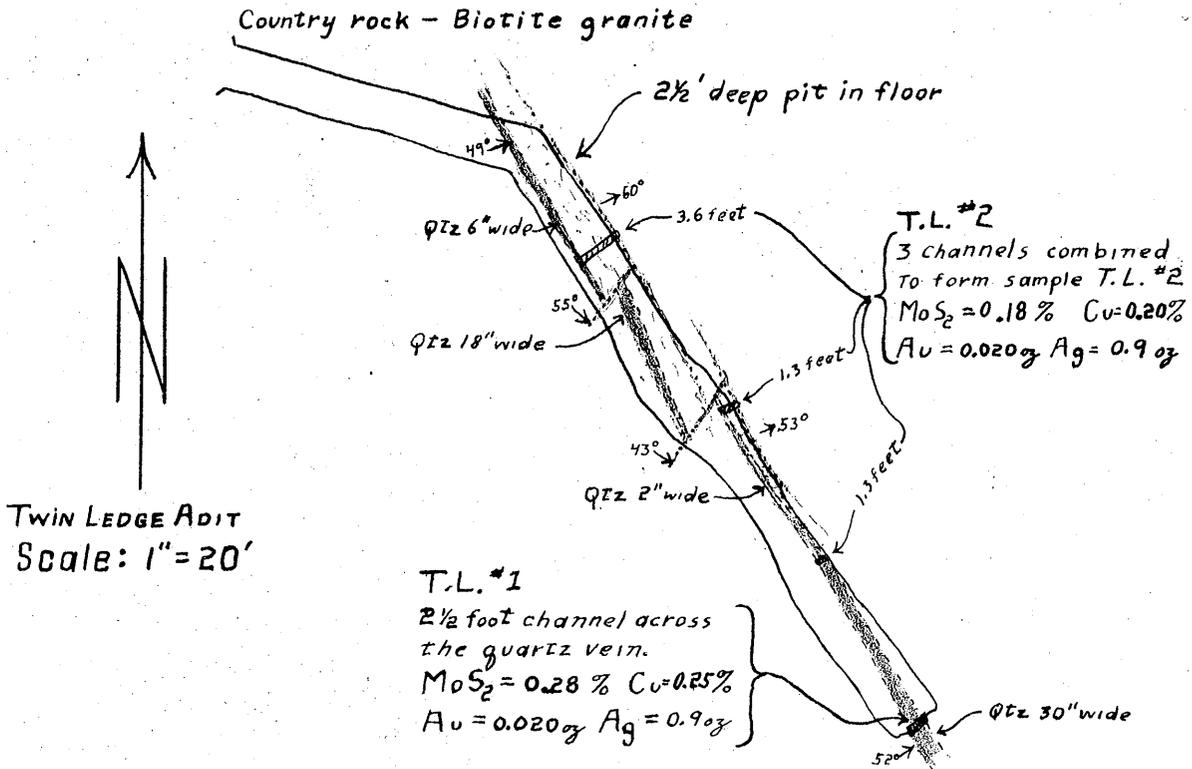
Enclosure 279.

U. S. Bureau of Mines  
RECEIVED

SEP 28 1943

Salt Lake City, Utah





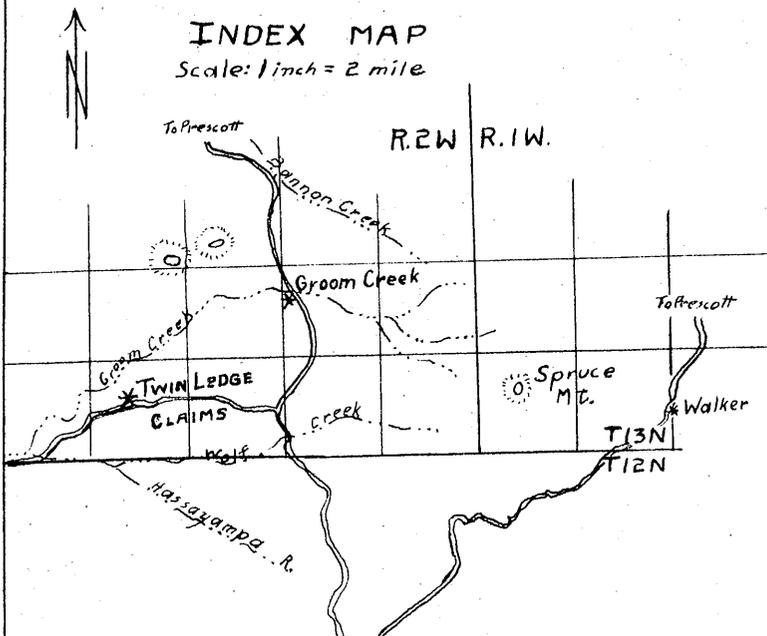
55°  
 Fault with 55° dip

Quartz vein

Sample channel

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TWIN LEDGE  
 MOLYBDENITE  
 PROSPECT

Wolf Creek  
 Yavapai County  
 Arizona

August 24, 1943

Donald H. Kupfer  
 U.S.G.S.

May 27, 1957

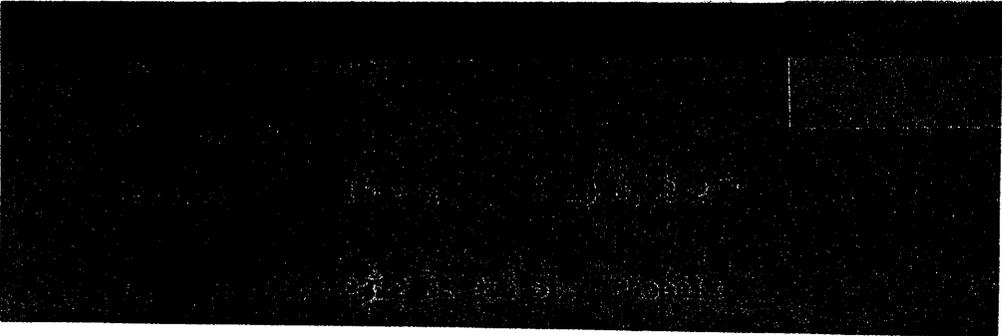
FRANKIE & JOHNNIE

YAVAPAI COUNTY

No information on this property.

MARK GEMMILL

See: Geological Survey Bulletin 1182-E (1965)  
"Investigations of Molybdenum Deposits in the Conterminous  
United States 1942-60" pE32.



U. S. Department of Interior  
Geological Survey

*checked*

Report on a Brief Examination of the  
TWIN LEDGE MOLYBDENUM PROSPECT

Wolf Creek, Yavapai County, Arizona

Donald H. Kupfer

August 24, 1943

SUMMARY

A one foot wide quartz vein is exposed for several thousand feet on the surface. Sampling of a well exposed section of the vein indicates a grade of about 0.2%  $\text{MoS}_2$ , 0.2% copper, and \$1.50 in gold and silver. No further work is recommended.

REPORT

Location (see cut).

0.0 mile. Prescott County Court House. Head northeast on U.S. Highway 89.  
0.3 mile. Turn south (right) onto the paved Senator Highway.  
5.7 mile. Groom Creek, end of pavement. Continue on graded dirt road.  
7.3 mile. Junction. Turn sharply right onto graded road heading southwest.  
9.1 mile. Small draw, Twin Ledge quartz vein crosses road at this point.  
9.2 mile. Road makes sharp turn in a draw. Twin Ledge adit is up draw (north) about 50 feet. The graded dirt road continues westward about two miles and joins U.S. Highway 89 at a point about six miles south of Prescott.

The Twin Ledge claims (El. 5800 feet) are located on Wolf Creek, about  $3\frac{1}{2}$  miles southwest of the summer resort of Groom Creek. The claims are in Section 33, T. 13 N., R. 2 W., and are in Yavapai County, Arizona (U.S.G.S. Bradshaw Quadrangle).

Ownership

The three unpatented Twin Ledge claims are posted with Marguerite Williams of Groom Creek as owner. Mrs. Williams says that she has recently traded the claims to W. G. Hockett, 2322 N. Ninth St., Phoenix, Arizona.

Geology and Development

The claims are located on a north-northwest trending quartz vein that cuts the granite country rock. Reasonably continuous outcrops were followed for about 1000 feet. Mr Williams says that the quartz veins can be followed for several miles in each direction, and that one-half mile to the east is a similar, parallel vein. On the surface the quartz vein averages (in outcrops) about 24 inches wide, but in the adit it only averages 8 inches wide. Probably the wider areas form conspicuous outcrops on the surface, while the narrower areas do not outcrop at all. Thus examination of the surface exposures gives an exaggerated idea of the width of the vein.

The quartz vein is oxidized near the surface, and although several shallow pits have been dug along its length, none of them get below the oxidized zone. In this oxidized zone the quartz is stained with malachite and limonite, and fresh faces show pyrite and an occasional fleck of molybdenite.

A 100 foot adit is located on the center claim and is the only significant development. The face of the adit is thirty feet below the surface. Molybdenite and chalcopyrite are scattered through the quartz exposed in the adit. Chalcopyrite is also found disseminated in the first few inches of country rock next to the vein. Molybdenite "paint" coats several of the faults and fractures near the quartz vein.

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Samples

<u>SAMPLE</u>	<u>MoS<sub>2</sub></u>	<u>Copper</u>	<u>Silver</u>	<u>Gold</u>
Williams Sample (reported verbally)	2.5 %	3.0 %	22.0 oz.	0.1 oz.
U.S.G.S. TL#1 (Union Assay Office)	0.28%	0.25%	0.9 oz.	0.020 oz.
U.S.G.S TL#2 (Union Assay Office)	0.18%	0.20%	0.9 oz.	0.020 oz.

The WILLIAMS SAMPLE was taken a few years ago by Mr. T. J. Williams and assayed in Colorado. He reported the values from memory. Mr. Williams watched the cutting of Sample TL#1 and said he took his sample in the same way and from the same place.

SAMPLE TL#1 is a 2½ foot channel across the quartz vein exposed in the face of the adit (see cut). Weight four pounds.

SAMPLE TL#2 is a composite of three channels cut across the back of the adit and twenty feet apart (see cut). These channels include the quartz vein and the mineralized rock on each side. Weight five pounds.

Mr. Williams says that three or four years ago, he shipped six tons of ore from the pit in the floor of the adit (see cut) and that an ore buyer in Prescott paid \$22 per ton for the gold and silver content.

Recommendations

Because of the low grade indicated by samples TL#1 and TL#2, no further work is recommended.

Donald H. Kupfer  
Jr. Geologist, U.S.G.S.

September 13, 1943

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Road Conditions, Route: Roads are very good both ways to Prescott, Arizona.

WaterSupply: Water will have to be developed.

Brief History: This property was first located and prospected for gold, as all the old properties in this district were, but with some copper showings the present owner is developing for copper.

Remarks: The property will need a complete mining plant if extensive development is done, and it would be necessary to develop water.

It is my opinion that no big ore bodies will be developed, but it is possible to find some small ore shoots.

(Signed) A. C. NEBEKER

DEPT. MINES & GEOLOGY  
DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA

FIELD ENGINEERS REPORT

JAN 19 1943

PHOENIX, ARIZONA

Date Jan 17th, 1943

Engineer A. C. Nebeker

Mine Frankie & Jonnie

District Hassayampa, Yavapai Co, Ariz.

Location Prescott, Ariz.

Former name

Owner W. G. Hokett

Address 2322N. 9th Street, Phoenix, Ariz.

Operator same

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals gold, silver and copper

Men Employed none at present

Production Rate none

Mill: Type & Cap.

Power: Amt. & Type hand work

Operations: Present just enough work done to get a few samples

Brief History: This property was first located and prospected for gold, as all the properties in this district were, but with some copper showing the present owner is developing for copper.

Operations Planned Plans to extend the present tunnel and cross cut the fractures

Special Problems: Reports Filed

Number Claims, Title, etc. There are six claims known as the Merry Weather, Merry Weather NO's 1 and 2, Twin Ledge, Twin Ledge NO's 1 and 2. Title was first acquired by purchase and since then by doing assessment work and recording same.

Description: Topog. & Geog. The property is out from Prescott about 11 miles by road. Go out south of town on the Senator Highway past Groom Creek and then follow the Wolf Creek to the property. The workings are not more than 50 yards off the road. The claims are in the Forest Reserve and the surface is well covered with pine and scrub oaks. There are many gullies which make a rough surface and the drainage is into the Hassayampa River.

Mine Workings: Amt. & Condition I saw only one main workings and this consisted of a tunnel driven in along a vein for approximately 90 feet. About 40 feet in where the tunnel makes a slight turn a winze about 4 feet deep was sunk in the bottom of the tunnel. The condition is good and ground all hard and safe.

Use additional sheets if necessary. Separate sheets on each problem.

Geology & Mineralization The formation consists mostly of a granite or granodiorite and where the cooling plane slipped and formed local swells, these have filled with quartz and appears as a quartz vein. This vein is about 18 inches thick and carries values in gold-silver-copper. The values are in the sulphides which occur with the quartz. The vein strikes N 40 W and dip 60 S.W. There is also a small intrusion of quartz porphyry, which may have developed more Ore: Positive & Probable, Ore Dumps, Tailings (ore than the present tunnel.)

There is no ore blocked out and the samples taken from the 15 inch vein in the tunnel assayed Gold .02 ozs, Silver 2.50 Ozs, copper 1.90%. Sample from right wall above winze assayed, gold, .02 Ozs, silver 1.80 Ozs, copper 1.65%. Bottom of winze gave gold, .08, silver 4.80 Ozs, copper 2.15% Mine, Mill Equipment & Flow Sheet

There is no mill and the mine is not yet developed enough to justify putting a mill on.

Road Conditions, Route Roads are very good both ways to Prescott, Ariz.  
 Principal Metals Gold, silver and copper  
 Production Rate none  
 Mill: Type & Cap.

Water Supply Water will have to be developed.  
 Operations: Present just enough work done to get a few samples  
 Power: Amt. & Type hand work

Brief History This property was first located and prospected for gold, as all the old properties in this district were, but with some copper showings the present owner is developing for copper.

Operations Planned Plans to extend the present tunnel and cross out the structures

Special Problems, Reports Filed

Remarks The property will need a complete mining plant if extensive development is done, and it would be necessary to develop water. It is my opinion that no big ore bodies will be developed, but it is possible to find some small ore ~~mines~~ shoots.

Description: Topog. & Geol. The property is out from Prescott about 12 miles by road. 60 out about 200 ft from town on the south side. The workings are not more than 50 yards from the town. The claim is in the Forest Reserve and the surface is well covered with pine and scrub oak. There are many gullies which make a rough surface and the drainage is into the Mesquippa River.

Mine Working: Amt. & Condition I saw only one main working and this consisted of a tunnel driven in along a vein for approximately 30 feet. About 60 feet in where the tunnel makes a slight turn a winze about 4 feet deep was sunk in the bottom of the tunnel. *A. C. Nebeker*  
 Signed..... A. C. Nebeker

Use additional sheets if necessary. Separate sheets on each problem.