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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: TWIG

ALTERNATE NAMES:

GREENLEE COUNTY MILS NUMBER: 19

LOCATION: TOWNSHIP 2 S RANGE 29 E SECTION 33 QUARTER SE
LATITUDE: N 33DEG 12MIN 42SEC LONGITUDE: W 109DEG 21MIN 50SEC
TOPO MAP NAME: CLIFTON - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
- LEAD
- ZINC
- SILVER
- GOLD

BIBLIOGRAPHY:
- ADMMR TWIG FILE
- ADMMR INFO

Last — Visit by L.A. Smith
4-22-1949.

2-3-58

Idle.

Twig Mine, Garfield Dist., Greenlee Co., Arizona — Lead, Silver, Zinc, Gold, Vanadium.

½ mile south of Mitchell Peak. [Sec. 33 T2S, R29E)

Owner: Roy Hagen, Clifton, Arizona.

Property: 3 Claims (Twig 1, 2, & 3). Patented.

Work :- Open cuts 75' in diameter, and 0-20 feet deep. (Twig I)
Shaft 65' deep. (" I)
Tunnel 120' long. - 100' lower than Pit. (Twig III.)

Geology & Minerals :- The deposit is along a breccia zone, 20-60 feet wide, which zone has pre-Cambrian Pinal Schist and quartzite, (heavily shattered and folded) and Tertiary Volcanics to the west. The fault strikes N 5°E and dips 70° West. The breccia zone contains fragments Pre-Cambrian and Paleozoic rocks, ores and Tertiary rhyolite and basalt. The breccia is cemented by gouge, manganese dioxides, vanadinite, wulfenite, pyromorphite, anglesite, calcite, and silver halogens. Rounded fault-drag composed in part of balls of galena, coated by Cerussite, weighing up to 500 pounds, are found

3 Cars of ore were shipped, during 1945 and 1946, by Lewis A. Smith, Edward Fitzgerald, & Bryce Willis. These ran:

1. 12% Pb, 2% Zn, 0.10 oz. Au, and 51 oz Ag.
2. 11% Pb, 3% Zn, 0.14 oz Au and 5.5 oz Ag.
3. 11.7% Pb, 2.5% Zn, 0.25 oz Au. and 4.9 oz. Ag.

The tons shipped was about 175 dry, or 180 tons wet. Some test were run to recover finely divided vanadinite, from the fault gouge, by means of dry washers and by.

tables (wet) These methods recovered about 55 and 67%, of the vanadinite, respectively. ~~The~~ Chert, in bands, also contained disseminated crystals and impregnations of vanadinite, but the grade was marginal and the material was stockpiled. Stratigraphically the average thickness of formations between the rhyolite and the Pre-Cambrian amounts to about 600', most places in the area, so that to encounter the Lower Longfellow limestone would require 500' of shaft to reach the source of the galena balls. The fragments of limestone adhering to the lead balls was from that formation. Further to the west, the Danenhauer Lead-Zinc Mine lies near the bottom of the Longfellow. Sediments and volcanics There, above the ore horizon was 700 feet, of which 150, or more, feet ~~was~~ consisted of post rhyolite formations. Therefore, we determined that there was a throw of 500-600 feet at the Twin with the down throw on the west. It was also concluded that the large size of lead balls indicated ~~the~~ an orebody of considerable size (or thickness). The large width of the gouge zone and the consistant dip of the fault face also indicates that depth calculation would probably be accurate. The fault gouge contains much limestone in large fragments which are partly rounded by attrition.