2630 0022

# UNITED STATES DEPARTMENT OF THE INTERIOR

DIVISION OF INVESTIGATIONS

RAPR 29 1940 &

OFFICE OF SPECIAL AGENT IN CHARGE

Carson 020854 Edward R. Bacon DI 13180 Salt Lake City, Utah April 23, 1940

COPY FOR GROLOGICAL SURVEY

APR 2 5 1940

Approved:

(SIGNED) N. F. WADDELL Special Agent in Charge

Mr. Bradley B. Smith, Director of Investigations, Department of the Interior, Washington, D. C.

Dear Sir:



On December 22, 1939, Mr. Wm. J. Foreman, whose post office address is Reno, Nevada, and who is attorney-in-fact for Edward R. Bacon, filed mineral application, Carson 020854, the field notes, the power of attorney, Proof of Posting Plat and Notice on the claim and the Agreement of the Publisher. January 16, 1940, the abstract of title was filed and publication ordered in the Lovelock Review Miner. January 25, 1940, the Special Agent in Charge reported "withhold patent pending investigation." The total net area of the Henriettie lode claim is 19.532 acres.

Field investigation was made on April 12 and 13, 1940.

# Location

The Henriettie lode claim under Mineral Survey No. 4751 is located in the Kennedy Mining District, Pershing County, Nevada, or in the SE Sec. 2, T. 28 N., R. 37 E., M. D. M. The mine is situated on the north slope of Granite Mountain, locally known as Cinnabar Mountain, one of the highest peaks of the East Range. The closest town is the old mining community of Fitting, located in Spring Valley.

DATE MAY -6 1940

REFERRED TO Geological Surn FOR APPROPRIATE ACT IN

(SIGNED) D. H. Rosier, Jr.

Director of Investigations.

CONFIDENTIAL NOT FOR PUBLIC INSPECTION

Orig. & 2 cc: Central Office 1 cc: Region III

## Topography

The Henriettie lode claim is situated at an altitude of approximately 7,000 feet. To reach the mine workings it is necessary to traverse French Boys Canyon for a distance of about four miles. The topography is rough and mountainous and the surface is covered by talus, among which is a scattered growth of sage brush and very little grass.

## Geology

Progressing up French Boys Canyon from Spring Valley a thick series of slates was observed to dip away from Granite Mountain to the south. The north side of the canyon in the lower portion was composed of a massive jasper, some of which was "opalescent" in character. The main mountain mass, as the mine was approached, was determined to be a diorite, which probably was intrusive into the Triassic rocks. Most of the country rock observed was a bright gray, medium grained rock showing abundant hornblende and biotite in a feldspathic base whose individual crystals were not distinct to the naked eye.

Microscopic examination of similar rock showed that the feldspars were mainly oligoclase and mottled intergrowths of oligoclase, or albite with orthoclase. Green hornblende was abundant, being more or less intergrown with augite that is pale green in a thin section.

In places a rhyolite was observed which apparently resulted from a series of thin flows. A dark green rock was found with some of the rhyolite which appeared to be an andesite composed chiefly and colored by the chlorite present.

The strike of the vein is approximately S 75° W, with a dip of 45° to the south. The upper workings of the mine showed a decided zone of oxidation close to the surface and as the cover became greater, the ore progressed into the sulphides.

The vein varied from 8 inches to 4 feet in width, and the heavy sulphide minerals as observed consisted of:

- (1) Galena (PbS)
- (2) Pyrite (FeSg)
- (3) Chalcopyrite (CuFeSg)
- (4) Bornite (Cu3FeS3) (5) Chalcocite (Cu2S)
- (6) Arsenopyrite (FeSgFeAsg)



These ore minerals were deposited in a vein in which the gangue mineral was a dense amorphous quartz. Shipments of ore from this vein show that the sulphides were closely associated with finely divided particles of gold and silver.

#### Improvements

The improvements of the Henriettie lode claim were in excess of the \$500.00 required. Practically all the development was on the Henriettie vein and the several surface workings, as the drifts and shafts were connected by underground workings. The mine had been developed according to good mine practices.

The main drift was examined for a distance of approximately 575 feet. From the drift numerous stopes and raises had been carried up from the vein. It was also observed that at least three underhand stopes of unknown depth had been developed by means of windlass operations.

#### Discovery

A true and valid discovery has been made on the Henriettie lode claim. The first 200 feet of the main drift examined was a typical exidized vein in which the sulphides showed leaching action and the iron minerals had altered to the limonites. This graded into the massive sulphide cres listed before under "Geology" of this report.

Considerable ore had been mined and it was found to have been milled and concentrated in a small mill, now abandoned, approximately a quarter of a mile from the mine portal. In 1937 and 1938 the Lamb brothers residing at the Lamb Service Station at Oceana, Mevada, leased the property and made several small shipments to a Salt Lake City smelter. They informed the Special Agent that the crude ore settled for a sum between \$50.00 and \$80.00 per ton. The tonnage that they shipped could not be ascertained.

In summary, the development work of this property is in excess of the sum of \$10,000.00, and a true and valid discovery of ore bearing minerals has been made, as evidenced by the ore in place and the past production from the property.

Respectfully submitted,

H. J. ban der Ver

H. J. Van der Veer Special Agent

