Form 4-802 ebruary 1958) Serial Number

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Area 2



MINERAL REPORT

Nineral Patent Examination

Blue Bird and Ella Lode Hining Claims

James G. Hulse, et al.

Atlanta Hining District

(Title)

LANDS INVOLVED

Unsurveyed T. 7 H., R. 68 E.

Mount Diablo Meridian
Lincoln County

December 23, 1959

(Date)

Ву

Earl M. P. Lovejoy, Valuation Engineer (Mining)

Approved

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#### Introduction -

The Mineral Patent Application of James G. Hulse, Nevada-047340, concerning the Blue Bird and Ella lode mining claims, was received in the Reno office on March 17, 1958. Following receipt of additional information the case was sent to Washington for adjudication on January 18, 1959, and returned from there on March 7, 1959. The case was given to Lands and Minerals on September 3, 1959, and assigned to me on October 2, 1959. Field examination was conducted on November 10 and 11, 1959.

## Geography -

The Blue Bird and Ella claims are about one mile south of the old mining town of Atlanta, in Lincoln County. Atlanta is about 45 miles north of Pioche. There is good dirt road leading 21 miles to Atlanta from U.S. Highway 93 about 35 miles north of Pioche.

Astronomic observation places the northeast corner of the Blue Bird and the northwest corner of the Ella claims at 38°27'20" N. latitude, and 114°20'07" West longitude.

The elevation of the claims is not known accurately, but Mr. Hulse stated that it was about 6,400 feet above sea level. The climate is the usual dry desert one, with hot dry summers, and cold, at times snowy, winters. Snow lay sparsely on the ground at the time of my investigation.

## Geology -

The geology of the Atlanta Mining District was briefly described by Hill (1916, p. 117). In general, the area is in the northern part of the Wilson Creek Range which consists primarily of Tertiary volcanics which have been but slightly deformed. Locally, hills of much older Paleozoic sedimentary rocks rise above the volcanic flows and breccias which cover most of the area.

In the Atlanta district, according to Hill (loc. cit.) "the mountain south of the town is composed of a fine-grained vitreous white quartzite, in thick beds which dip east-northeast at medium to low angles. The ridge east of the town is composed entirely of light-gray crystalline limestones in beds 2 to 4 feet thick, which strike east and west and dip 15° - 30° N. These two formations are separated by a fault which strikes N. 30°W. and dips 60° SW. North of Atlanta Peak dark limestones apparently overlie the quartzite, though this relation is not certain, as a detritus-filled canyon separates the exposures."

Hill believed that the quartzite was of Cambrian or Ordovician age, but Mr. Hulse stated that from knowledge he had received it was believed to be of

Silurian age, which is rather remarkable considering the paucity of Silurian rocks in the Basin and Range. There are no fossils in the sediments. I do not know the age of the rocks.

Hill continues: "A light-gray to white biotite rhyolite tuff overlies both the quartzite and limestone and has been involved in the faulting. About 200 feet of the tuffs are exposed. They are overlain by dark-red flow rhyolites, which form a large number of the buttes north and west of Atlanta."

The deposits which form the discoveries for the Blue Bird and Ella lode claims are in the white biotite tuff.

On the Blue Bird claim, the ore deposit consists of oxidized minerals of uranium (uranophane) that have been deposited in westerly trending silicified zones which formed in small fractures of similar strike. The only surface manifestation of the deposits is the small hill consisting of silicified tuff; this material is much harder and more resistant to erosion than the unsilicified tuff. Apparently the silicification is a surface phenomonon because it does not seem to continue to great depth. On the Ella claim the ore deposit consists of sparse gold in limonitized tuff. The loci of the limonite zones are west trending fissure zones in the tuff.

For the record, I cannot agree with the observations of Mr. Bruce Condie, mining engineer and geologist concerning the geology of the Blue Bird and Ella claims. (see Item 12 of Hulse patent application - Affidavit in Re character of said mining claims).

## Mineral Character -

Mr. Hulse stated that three carloads, averaging about 49 tons each, of uranium ore were shipped to Vitro Uranium Corp. in Salt Lake City. These shipments averaged 0.32%, 0.30%, and 0.28% U308. From the extent of the workings and the size of the dump I would not question the statement. The radioactivity readings obtained indicate a good grade of uranium hence, I took no samples from the Blue Bird claim. There is no question concerning the mineral character of the Blue Bird lode.

Mr. Hulse stated that the Blue Bird and Ella lodes had been located by his father many years ago. He stated that his father had mined small amounts of gold from the Ella lode, but that it never had produced very much. There is alteration in the fissure zones, and mineralization to a certain degree. Mr. Hulse said that there was no uranium on the Ella claim. I found none. This conflicts with Mr. Bruce Condie's statement on page 2 of Item 12 of Mr. Hulse's patent application.

The production in the Atlanta Mining District, on which these claims are located, has been recorded by the Nevada Bureau of Mines (1943, p. 83) for years between 1870 and 1917 as follows:

Atlanta Silver, Gold, Copper, Lead

Year	Tons	Gross Yield
1870 1871 1875 1876	373 34 3	\$23,153 2,898 604 424 2,076
1877 1878 1917	10 9 250 683	2,076 2,272 2,041 \$33,468

In addition, there has been production subsequent to 1917, but there has been no record kept. Total production for the district is probably close to \$100,000.

#### Mining Claims -

The two mining claims involved in this examination, the Blue Bird and the Ella lodes, were located by James Hulse and Phil Hulse. The notices of location are dated August 24, 1947: they were recorded November 29, 1947 in Book 0-1 on pages 229 and 230, in the County Recorder's office in Pioche. In the Discovery Monument on the Blue Bird claim I found notices of location for the Blue Bird lode made in 1933, and notices of labor waivers for 1933 and 1934. These are immaterial to the present examination, but they indicate that the claims occupy land known to have had mineral value prior to 1947. The record search and information supplied in the patent application was not checked.

# Workings -

The value of the workings on both claims is obviously far in excess of the statutory requirement of \$500. On the Blue Bird lode a shaft and workings have been developed as stated in the Field Notes prepared by Frank W. Millard, Licensed Mineral Surveyor. There are prospect pits, drill holes, a main shaft and workings, all of which are valued far in excess of \$500 on the Blue Bird lode. There are two adits with cross cuts on the Ella claim, the total value of which is far in excess of the \$500 required, although there may be some doubt that these workings were developed by the present owners, or their predecessors in interest.

# Discovery -

There is no question concerning the discovery of valuable mineral on the Blue Bird claim. Almost 150 tons of uranium ore have been shipped. There is in the workings more than sufficient ore in sight to justify a prudent man in the further expenditure of time and money. Geiger counter readings were recorded as follows:

Detectron Geiger Counter, DG-9, in calibration.

			mn/hr
Background count in car	O.1 scale	10 sec. response	0.02 to 0.05
Ground count at shaft	O.1 scale	10 sec. response	0.08 to 0.10
Ore sample at shaft	1.0 scale	10 sec. response	0.6 to 0.8
Count on dump	0.1 scale	10 sec. response	0.06 to 0.08

On the Ella claim, however, I found no evidence of radioactivity. Mr. Hulse said that his father had developed the workings on these claims while mining for gold. However, we obtained three samples, the locations of which were directed by Mr. Hulse, which I submitted to the U. S. Bureau of Mines in Reno for assay. All three samples showed only traces of gold (i.e., less than 0.05 oz. Troy/ton) two showed traces of silver (i.e., less than 0.05 oz. Troy/ton) and one showed 0.05 oz. Troy/ton silver. These would hardly constitute a discovery.

I remarked to Mr. Hulse at the time of sampling that in the event we could find no satisfactory discovery we might either have to resample the workings or reject the application. My own personal feeling is that resampling will provide us with no additional information, because we sampled the most mineralized portions on the claim.

### Posting of Plat -

The typewritten legal-sized sheets which contained the data necessary to comply with the mineral patent laws were posted in open, conspicuous places. That on the Blue Bird claims was posted on the headframe. That for the Ella claims was posted at the point of discovery.

## Conclusions -

There has been conformance with the mineral patent laws for the Blue Bird lode mining claim. All information pertaining to the physical features of the claim was checked in the field. There is a discovery of valuable mineral such as to comply with the mining laws.

There has not been total conformance with the mineral patent laws for the Ella lode mining claim. All information pertaining to the physical features of the claim was checked in the field. I do not believe that there is a valid discovery of valuable mineral on the Ella lode such as to comply with the mining laws.

1/ The assay values were reported from the U. S. Bureau of Mines Station in Reno by telephone. There is no formal assay certificate.

## Recommendations -

I recommend that the Blue Bird lode mining claim be allowed to go to patent. I recommend that the Ella lode mining claim not be allowed to go to patent. I do not recommend contest charges against the Ella lode mining claim.

Respectfully submitted,

Earl M. P. Lovejoy, Valuation Engineer (Mining)



Figure 1. General view of vicinity of Blue Bird and Ella lode mining claims, looking north. Dump and headframe on Blue Bird claim is left of road. Road passes north through east end of Blue Bird claim. Town of Atlanta is just out of view to north behind large hill at right. Mt. Wheeler in background.

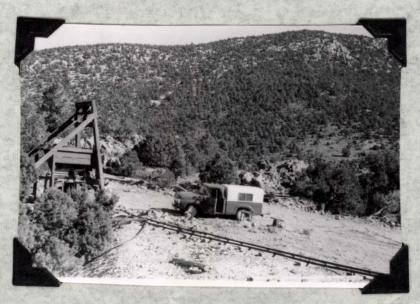


Figure 2. View to east from dump on Blue Bird claim showing outcrops of silicified biotite tuff in which uranium minerals are found. Hill in background is composed of Silurian (?) quartzite which dips east (away from observer). The northern workings of the Ella lode are visible near right side of photograph.

## Bibliography

- Couch, Bartrand F. and Carpentor, Jay A., University of Nevada Bull. Vol. XXXVII, No. 4, Geology and Mineral Section No. 38. Nevada's Market and Mineral Production (1859-1940) 1943.
- Hill, James M., U. S. Geology Survey Bull. 648, Notes in Same Mining District in Eastern Nevada, 1916. (p. 114-120).

