

N. Nevada Field Trip (1932)  
A. M. Smith + C. Stoddard

-16-

0950 0009

(115)

Item 15

Elko District, Beryl, continued.

tion of America, states in Metals & Alloys, Aug. 1929, p. 69:

"Beryllium ores - beryl particularly - are relatively common, and a recent survey of the known deposits has shown sources adequate for many years to come at American-delivered prices ranging from \$35. to \$60. per ton."

Feldspar has recently been successfully separated from quartz by 3-step flotation. Possibly more work along this line would result in an efficient method of separating beryl from quartz, feldspar and mica in low grade ore. It has been suggested that a more cheap and simpler method of concentration might be worked out for the Ruby Mountain ore, by crushing, screening and classification. Beryl is a very hard mineral, and in the Elko County ores occurs as loose crystals in the matrix, and therefore might lend itself to some method of separation based on these characteristics.

At present the Elko deposits cannot be mined, concentrated and marketed at a profit. However, they possess a potential value, and if the demand increases in the future, they might be worked at a profit.

0950 0009

→ (115)

On June 30, 1932, we visited the plant and mine of Tri-O-Lite Products Company, located near Carlin, Elko County. The property is owned and operated by Mr. Hurd, of Carlin. Although the mill has a large capacity, depressed market conditions have resulted in only 10 or 12 carloads of specially prepared grades of diatomite being shipped during the past year. In general it has been shipped in small lots to manufacturers of widely differing products, and is carefully prepared to meet the special requirements of each as to weight, moisture, air space, mesh, etc. (See Eurdly-Wilmot for mill) At present Mr. Hurd is conducting a series of very interesting experiments on prepared diatomite for the Bell Telephone Company and General Electric Company, in an effort to find suitable insulation for apparatus to





Fig. 1. Diatomite preparation plant of Triolite Products Company, near  
Carlin, Nevada.



Elko District, continued.

be used in television. So far diatomite has been found to be superior to anything tried for the purpose.

The plant is located about 2 miles north of Carlin on a siding of the S.P.R.R. North of the plant 2 miles is the mine which is on a large bedded deposit, the outcrop of which may be traced several miles northwesterly. It occurs in lake beds of Tertiary age, dipping SE at an angle of  $36^{\circ}$ , and at the mine shaft the strike is N 35 W. Mining is done underground through flatly inclined shafts following the dip of the beds; the stoping is by the worm and pillar method. The ground stands fairly well; in one place a stope 280 feet long, from 20 to 30 feet in diameter extends underground without timbering.

The commercial strata are of highest quality fresh water diatomite, very light and white, but the mineable beds vary in thickness from 1' to 5', interbedded with hard strata of limestone and sand. The material is hand sorted, a very clean product entirely free from sand and silica being obtained, which is conveyed to the mill by motor trucks.

A description of the deposit of the Tri-O-Lite Company is given by V. L. Eardley-Wilmot, in a bulletin published by the Canada Department of Mines, Ottawa, entitled "Diatomite, Its Occurrence, Preparation and Uses".

---

Fig. 1.     Diatomite preparation plant of Triolite Products Co., near Carlin, Nevada.

---

On the morning of June 2nd, we departed from Elko in company with F. Davis and Stanley E. Davis to visit the Railroad or Bullion District, and the property of the Nevada Bunker Hill Mines Company. The property is located 31.5 miles southwest of Elko, reached over a winding road of moderate grades.

The history and description of the district as recorded by Lincoln is com-