0160 0015

Washoe County
Item 31

Report on Field Investigation

For Nevada State Bureau of Mines.

July 27, 1945.

These investigations were made with Mr. Fred Humphry and included brief visits to the following:

A---- Bob Baker's building stone deposit.

B-----Vada-Zorb processing plant at Clark Station. Later Eagle Picher

C-----Marl deposit referred to in U. S. Geol. Survey Monograph 11, "Geological History of Lake Lahontan" by I. C. Russell.

D-----Lime kiln and deposit in the vicinity of Nixon.

A At the Baker building stone deposit some samples of the tuff were selected by Mr. Humphry for tests now in progress.

B The Vada-Zorb plant was not in operation, and no one interested in it was there. In spite of that, the process employed in processing the diatomatious earth inspected. (Nevada Celatom Co.).

The crude ore is fed from a bin into primary crusher which is a single powered roll with toothed surface working against a smaller roll. This crusher product is carried to the screening plant by an inclined belt conveyor and is discharged upon a flat viborating screen. The viborating screen is equipped with a 1", 4 mesh and 8 mesh screen cloths. It is apparent that the plus 1" product is returned to the roll crusher for further reduction and returned to the viborating screen. It appears that two products are made and sacked, these being the minus 1" to plus 4 mesh and, the minus 4 mesh and plus 8mesh products. The minus 8 mesh material is apparently discarded a short distance from the screening plant. The second and third mentioned screen (wire) cloths have been left with a six inch bed of material on them. It is evident that the screening plant was overloaded and considerable fines were created in thes operation. This must have been a very dusty plant.

C The marl deposit reffered to in Russell's report was found on the west side of the Truckee River, three mile south of Nixon and about three hundred feet north of the dam. The deposit has the appearance of being about forty feet thick. Close examination shows that it is composed of several strata; lower, sand and small calcarous shells; middle, shore gravels and sand; upper eight to ten feet of marl. ~~Fifty percent is covered by recent gravels. It is estimated that~~

More than half of the area of the potential deposit is covered with a mantel of sand and gravel and, it is estimated that one to one and a half yards of overburden would have to be removed for every yard of marl mined. The deposit is small and estimated extend over one acre.

Two smaples were taken, one from the lower strata and the second from the upper strata. The CaO content of the first sample is low the material would have little value. The CaO in the second sample is fairly high.

Due to the small extent of the deposit no detailed work was justified.

D At small modern lime kiln has been erected at Nixon to burn a marbleized limestone obtained from a small quarry about seven miles north of Nixon on the indian reservation. This kiln has not been in operation for some time, and

The limestone is white and stained with iron on the fractures. It is estimated that between 1500 and 2000 tons of limestone may have been taken from the quarry. About 40% of that amount has been dumped on the flat below the quarry. About fifty feet north of the quarry, small islands of black carbonacious limestone are exposed. It was not possible to determine the extent of the deposit as it was covered by volcanics on the north and east and, sand and gravel on the south. The thickness of the strata has not been exposed in the quarry workings. The maximum quarry face is about 12' high. It is possible that there may be a considerable thickness of limestone and a better grade can be obtained at greater depth.

The use to which this limestone was put after burning is not known.