N. Nevada Field Trip -31-(1932) A.M. Smith + C. Stoddard



### Old Charleston Ditch

A ditch several miles long leading from 76 Creek to near the head of Badger Creek was built about 25 years ago at a cost of about \$25,000, by Moss and Holden, of Utah. The ditch tapped only one tributary of 76 Creek and according to report did not have enough water to be of value, and was abandoned after one year. Some years afterward men from Jarbidge cleaned it out, but could not obtain water enough for successful placer mining.

## Bruneau Canyon Placer



A placer prospect owned by Louis Burner is located about 2 miles north of the Prunty ranch, and on the Bruneau River, at the junction of the Bruneau and Copper Creek. Burner has 5 claims located. He stated that coarse gold had been panned. The bedrock is lava, and the best showing is on an old rim or terrace. Visited by Carl Stoddard, 6/7/32.

# Jarbidge, Elko County, June 9, 1932.



Jarbidge, located on the Jarbidge River near the Idaho boundary, is on the northern slope of the Jarbidge Mountains, a great mass of minor peaks and high ridges radiating from Jarbidge Peak, which rises to a height of over 10,000 feet.

The camp has been a gold producer since 1909, and the Elkoro Company, owned by the Guggenheim Corporation, has been milling for 14 years, for many years at the rate of from 100 to 150 tons per day.

The country rock is composed of at least 3 separate rhyolite flows, divided for convenience into upper, middle and lower.

In the Elkoro mine the ore is said to occur in the lower part of the upper and the upper part of the middle flows. Recently O. H. Hershey, geologist for the Elkoro Company, decided that the fault in which the ore occurs has a horizontal

Jarbidge, Elko County, continued

displacement of about 1,000 feet, as well as a 900-foot vertical displacement.

The rhyolites are the same in age and appearance as those resting on the Paleozoic sedimentaries in the Charleston district on the south side of the mountains. A yellowish, ashy and clayey tuff found on top of the lower rhyolite at Jarbidge is very similar to the false clay "bedrock" at Charleston. The groundmass of the lower rhyolite is aphanitic, and the rock contains very large glassy quartz phenocrysts. Much of this rhyolite is found at Charleston, lying on the Paleozoic quartzite and limestone. Although the later rhyolite flows are of similar structure the "middle" has much decomposed feldspar, and the upper has smaller phenocrysts.

Beneath these rhyolites lies Paleozoic quartzite at Jarbidge. Fifteen or 20 miles north, on the East fork of Jarbidge River, across the line in Idaho, the deep canyon exposes flows of Tertiary rhyolite, on top of which lies 100 feet or so of clay and washed, rounded gravels, the whole capped by a recent basalt flow. (See Fig. 22.) This may indicate a late Tertiary age for the washed placer gravels of Charleston, possibly in the Pliocene.

Fig. 25. Jarbidge, Nevada, looking W. from Elkoro Mill. Even at 6100 feet elevation the sagebrush is always with us. Higher in the mountains is a limited ed growth of small pine, fir and cedar. The high rough cliffs are of rhyolite.

Fig. 24. Looking S. up Main Street, Jarbidge. There are numerous log houses built about 1908.

We shown through the mill by Mr. John F. Park, mine superintendent and assistant manager. Mr. Park wished to take us through a portion of the mine, but any

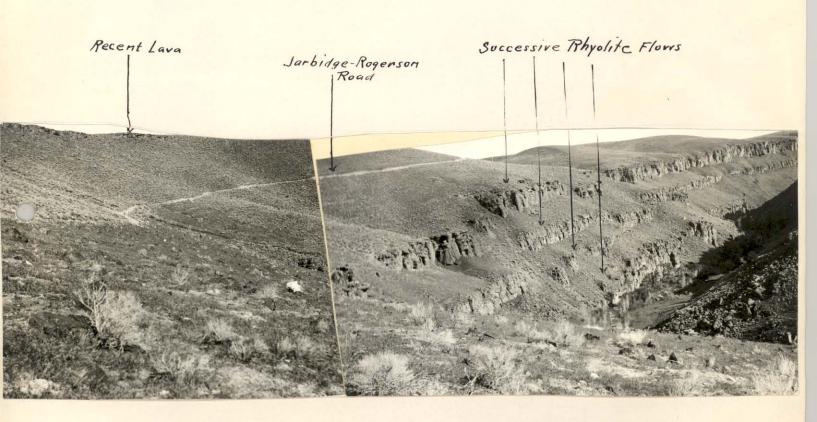


Fig. 22. Tertiary lava flows overlain by about 100 feet of later washed gravel and clay, and capped by a recent lava flow. On East Fork of Jarbidge River, about 15 miles NE of Jarbidge.



Fig. 23. Jarbidge, Nevada, looking W from Elkoro
Mill. Even & 6100 feet elevation the sagebrush is always with us. Higher in the mountains is a limited growth of small pine, fir and cedar. The high, rough cliffs are of rhyolite



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<u>Jarbidge</u>, <u>Elko County</u>, continued. short stay prevented.

Information Circular 6545, U. S. Bureau of Mines, by John Furness Park, supplies complete information regarding the general geology, mining methods and costs at this very interesting property.

### Elkoro Mill



Ore from the mine at present is delivered in trains of 1-2/10 ton sidedump Day-Stanford cars and dumped into bins, from which it is fed onto sorting belts,
where about 1/10 of the total is removed by hand picking. Passing a gyratory breaker
it is fed into a ball mill, and ground in cyanide solution. About 300 lbs. of
litharge—sometimes litharge and lead acetate—is added at the ball mill per month.
Almost neutral solutions are used—odor of HCN throughout mill. Oversize is returned to ball mills from Dom-classifiers—final product, 80 per cent will pass 200
mesh. Dom-agitators and thickeners—open launders instead of pipes throughout mill.
Very little foam made. Diaphram pumps on thickeners. Usual zinc dust precipitation—
no Crowe process. Filter press is washed and ironed with electric flat iron—said to
work much better. Precipitate and flux fed to tilting furnaces in paper bags.
Unique original meter for measuring unprecipitated solution.

### Depletion of Mine

Mr. Park stated that the mine was nearing exhaustion, and unless new ore supplies are found, could run but 2 months more. The townspeople say that such a report has been given out several times in past years, but the mine continues. It is to be hoped that new ore will be found. There is one below the water lavel, but mining and pumping cost would be excessive, so the operators declare.