Hunt - Arnold Coll.

(61)

ITEM 14

FRANK L. LUCAS
Consulting Geologist
Salt Lake City, Utah

A GEOLOGIC RECONNAISSANCE OF THE GOLD CREEK PLACER ISLAND MOUNTAIN MINING DISTRICT ELKO COUNTY, NEVADA

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This reconnaissance was made during a visit to the district June 20th and 21st, 1936. The group of placer claims examined total 6000 acres and are located along Gold Creek, a tributary of the East Fork of the Owyhee River and approximately 74 miles north of Elko on the Elko-Rowland Highway. The highway is of easy grade and for the most part is of graded soil or sand.

The elevation of the area is not excessive, ranging from 6000 to 7500 feet above sea level. Weather conditions in this area permit about a 200 day operation schedule as the district is subject to a rather heavy snowfall during the winter months.

Transportation facilities are available by car and trucks from Elko the nearest railroad point. Timber and fuel must also be trucked in, as well as all other supplies.

Water conditions suitable to a placer operation are available through the construction of a large reservoir with intake and drainage ditches designed to deliver to this placer property a minimum of 7500 acre feet of water each operating season.

The group of placer claims examined are now known as the Gold Creek Placer. This placer is laid out in general to cover the creek bottom and hillsides contiguous to the creek for a distance of a little over six miles, as the creek flows, and it is understood that the claims cover the creek from its headwaters to the point that it flows into the Owyhee.

GENERAL GEOLOGIC CONDITIONS

The Rocks

The rocks of the district include quartzite and shale of Paleozoic age intruded by granodiorite of probable Mesozoic age. The granodiorite has in turn been cut by dikes of diabase. Lack of good exposures made a study of the bed rock at different points on the property impossible in the time allotted but it appeared as if the intrusives formed the mountain and the sediments the valley.

The boulders of the creek bed yielded besides the ordinary local rocks which were angular and indicated they had not been transported far, a good proportion of rounded conglomerate and jasper boulders which indicated that an older erosion period had deposited material no longer in place in the district. The boulders are also large enough and stream polished enough to indicate transportation from some distance by a stream large enough to transport such material. Such a stream was not limited to the present drainage area.

THE PLACERS

Study of the area reveals two types of placers.

1. Eluvial placers, that is, placers formed from gold that is released from its original bedrock encasement through agents of rock decay and weathering and has crept down the surrounding hillsides because of frost heaving and has finally been washed to its present resting place by rivulets formed from melting snow waters and summer thunder storms. The lighter and less resistant minerals have weathered and been carried away, causing the volume of rock to be greatly reduced with the resulting concentration of gold values. This type of placer constitutes the placer of the hillsides contiguous to the stream valley.

2. Stream placers, that is, placers formed by the reworking of the material finally washed to the creek bed and sorted by the action of running water. In this instance, two or more periods of erosion have resorted the gravels and heavy minerals resulting in a comparatively high degree of concentration of the heavy minerals.

The particles of gold found in these placers originally came from veins and other mineralized zones in the surrounding country bed rock. Most of the gold is sharp indicating that it has not traveled far.

Study of the ground leads to the opinion that the upper reaches of the stream will probably carry the richest and coarest gold values and that the lower reaches of the stream will carry lower values and finer gold.

Because of the reconcentration effect of running water it is most probable that the stream placer will be found to be consistantly richer than the eluvial placer particularly near and on the bedrock. The dip and strike of the bedrock can also be important in acting as a natural riffle in cases where the stream channel cuts across the strike with the dip downstream.

There is a distinct possibility than an older stream channel than the present one exists in the area and if it does, it is quite possible that it will carry even better values.

VALUE OF SAMPLES

Sample 1

A general sample taken at several points in the open cut on the side hill south of the stream and just below the present camp. This area is a side hill wash and should represent an additional concentration over the average for the whole side hill. It is understood that several hundred yards yielded nearly $1000. And that considerable coarse gold was found.

292 pounds of gravel was rocked in a washer and the recovery was 39.4 milligrams of gold, or an average of 45.3 cents a yard of 3000 lbs. No coarse colors or nuggets were found in the sample so it is quite possible that the average value of a larger sample might have been more.

Sample 2

A general sample taken from a pit on the flat about 100 yards west of the post box about one and one-half miles downstream from the present camp. The rocker returned 1.28 milligrams of gold from 57 pounds of gravel, or an average value of 11.6 cents a yard of 3000 lbs.

Sample 3.

A general sample taken about 400 yards up stream from Sample 2 and near the brow of the hill on the south side of the stream. The rocker returned 6.88 milligrams of gold from 90 pounds of gravel, or an average value of 25 cents a yard of 3000 lbs.

Sample 4

A general sample taken about 300 yards upstream from Sample 3 and again on the brow of the hill on the south side of the stream. The rocker returned 5.68 milligrams of gold from 75 pounds of gravel, or an average of 27.3 cents a yard of 3000 lbs.

Sample 5

Lost in assay by the assay office. An 87 lb. sample from the creek bed which concentrated what looked to be about 20 milligrams of gold or about 70 cents a yard of 3000 lbs. Sample was cut from a pit about one-half a mile below the present camp.

Sample 6

A sample taken from material thrown out to the side of an old pit dug in the creek bottom. It is doubtful if the pit was dug to bed rock as no large boulders were on the dump. This pit was in the stream bed about one mile below the present camp. The rocker returned 17.39 milligrams of gold from and 80 pound sample taken from what appeared to be the deepest material thrown out from the pit. The average value per yard of 3000 lbs. is 73 cents.

Eleven pannings of material from various points in the creek bottm were panned and the number of colors noted and the approximate values per yard computed. The values of these pannings in the writer's estimation would range between 30¢ and 80¢ a yard of 3000 pounds.

OPINION

It is the writer's opinion:

1. That the upper reaches of Gold Creek is placer ground of commercial value both in the eluvial and stream placer areas. The stream placer will be found to be of greater value per yard than the eluvial placer. This ground under a well managed program of operations will yield a good profit.

2. That the lower reaches of Gold Creek may also be of commercial value, but that careful testing of this ground should precede an operating program.

3. That an ample water supply can be made available.

4. That most of the gold is relatively coarse and heavy and that this gold can be readily saved with the proper gold saving equipment.

5. That operations costs will be considerably higher than average due to the distance the property is from rail facilities, fuel and general supplies. Allowance should be made for this factor.

6. That all of the ground will not be found to be commercial. A diligent and careful program of test work must be followed to locate and exploit the pay streaks in this property.

7. That the operation is a large scale operation and the once the program is under way it must function efficiently right from the start. Otherwise much valuable time as well as money will be lost.

Respectfully submitted,

(sgd) FRANK L. LUCAS

June 23, 1936.

January 16, 1937.

Mr. J. J. Week,
Hotel Ben Lomond,
Ogden, Utah.

Dear Mr. Week:

You asked me to write you a letter giving my experience the past few years in placer mining operations at different places where I have operated.

My first experience was at Kirtley Creek, Salmon, Idaho, in 1929. We operated there three months which was a small hydraulic operation. It was not a success due to the heavy over-burden.

We went prospecting on the Fourth of July Creek and Bohanz Creek in Idaho and found about the same condition as at Kirtley Creek.

I want to tell you about your property at Gold Creek, Nevada. My first visit there was in June in 1933. I prospected most of the summer and the contract I had with F. D. McGregor and associates was to dig test pits with the understanding I was to have the gold recovery for making a true report as to the location of the gold recovery also the size of the test pits.

The first work I did was to develop test pits. About 200 in number at Duryee, 480 acres at Gold Creek, these being small pits averaged 75¢ per yard. This was a test to bed-rock at an average depth of four feet. The gold recovery was coarse and averaged 936 in fines. The pits were thoroughly panned by hand. In May, 1934, we made tests all over the 5000 acre tract at a distance of about 300 yards apart. The number of tests were approximately 700 pits from 1 to 14 feet in depth and the average amount of gold per yard was 30¢. The gold in the 700 tests had the average fines of 936 to 943. In each ounce of gold we found 3¢ of silver, the balance of the recovery being vegetation stain and iron, also some little traces of black sand. In 1935 I visited Gold Creek in August and operated a small Denver Gold Pan powered by a gasoline engine and continued our tests on the Duryee property. We made

yard tests amounting to a total of 360 yards and found an average of 75¢. This covered 300 tests and practically proved all of the Duryee 480 acres.

In 1936 I visited Gold Creek about the 1st of May. We worked on the canal, ditches and reservoir which was necessary and for the purpose of catching the spring run-off water from the melting snow for the intended future placer operation of 1937. About August 15th the large catapillar gold washing screening plant arrived at the property and the rest of my time was occupied by the operation of this plant for the purpose of testing the machine and ground. We operated same about 10 days and recovered 19 ounces of gold, amounting to $665.00, an average of 30 per cubic yard. This was all the time we had for the operation of the machine, as the work on the canals and ditches was very necessary and no further time could be lost.

Trusting this information will be of some value to you.

Very truly yours,

(sgd) CHAS. W. McGREGOR
361 28th Street
Ogden, Utah.

CWM/hfs