(15.6, 8.3) PE-096-01

Same as PE 96-0

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PRELIMINARY REPORT ON THE LITTLE FISSURE VEIN
AND BLACKSMITH TUNNEL VEIN OF THE McKINLEY
LAKE GOLD MINES, INC., CORDOVA PRECINCT, ALASKA
June 25, 1939

Location and Accessibility:

The McKinley Lake Gold Mines, Inc. holdings are located two and one-eighth miles northwest of Mile 22 on the Copper River-Northwestern Railway. The location of Mile 22 may be reached over the abandoned road bed of the railway from Cordova or via sloughs of the Copper River by boat. Thence a trail two and one-eighth miles part of which has been widened into a caterpillar road, leads to the cabin on the property at the north end of McKinley Lake at an elevation of 100 feet.

Ownership:

Three groups of claims; namely, Pioneer group of seven claims, Uno group of three claims, and the Lucky Strike group of ten claims, comprise a total of twenty claims held by the McKinley Lake Gold Mines, Inc., a four million share stock company with par value at five cents per share. This company has been taken over by the McKinley Gold, Inc., a new organization that has started development on this property.

Only the two showings on the Little Fissure vein, on which the operations were to begin, and the Blacksmith tunnel veins, were examined. A snow cover prevented examining the other numerous showings. For information on the remaining showings and a history of the past operations the following reports are on file:

"Report to the President and Directors of McKinley Lake Gold Mines, Inc.," November 11, 1915 by Jas. H. Henley.

"Report on the Lucky Strike and Pioneer Groups of Mining Claims," June 19, 1934 by W. G. Smith.

Copy of communication on the property of McKinley Lake Gold Mines, Inc. by L. D. Gassaway, V. P., Yuba Gold Fields, Consolidated to L. V. Blankman, Kodiak, Alaska, May 23, 1935.

"The McKinley Lake Gold Mines, Ltd., Inc." by W. H. Chase, Gen. Manager, November 8, 1938.

A short description of the geology of the McKinley Lake district appears in U. S. G. S. bulletin 542-C by J. B. Mertie and an account by A. C. Spencer who visited the district in 1900.

Blacksmith Tunnel Vein:

The Blacksmith Tunnel Vein is located on the Pioneer group 800 feet west of the cabin on the McKinley Lake trail at an elevation of 310 feet on Blacksmith Creek. A tunnel 68 feet in length has been driven above the intersection of two faults, one striking N. 45° W. and the

copy to Howard Rowe Jan 2, '62

other N. 70° E. The tunnel strikes slightly north of west and cuts a fault contact vein at a point 45 feet in from the portal. The tunnel cuts schisted slate to this contact and the remainder is in fractured graywacke. The vein is a breccia vein consisting of fractured graywacke cemented with quartz and the width ranges from three to four feet. It strikes N. 5° E. and dips 70° E. The length of this vein has not been determined, as it is not exposed in the creek beds and the surface shows only a series of small quartz stringers irregularly distributed in graywacke. (Note sketch) The stringers on the surface and the vein underground contain a weak pyrite mineralization. Sample 701 across 43 inches on the contact vein gave results of 0.02 ounces of gold per ton and a trace of silver.

The Little Fissure Vein:

The Little Fissure vein is located along the Forestry trail 200 feet north of the cabin at an elevation of 110 feet. This vein has been exposed over its entire length of surface outcrop, a distance of 160 feet. The strike is N. 60° W. and the dip 61° N. The width ranges from 8 inches to 3 feet, averaging 12 inches. The vein cuts the schisted slates at a low angle both in strike and dip. The schisted slate formation strikes N. 45 to 50° W. and dips 35° N. Near the west end of the long cut (note sketch) an old shaft has been sunk to a reported depth of 20 feet. The quartz vein in the shaft was reported to be four feet wide. Considerable stripping had been done in the past west of the small cut on the sketch, and the vein apparently was not found. Another peculiar feature of this vein shows in the short shaft started near the east end of the cut. Here the vein becomes less in dip, the slates are folded and the vein comes to an abrupt end with no fault showing. A long cut (off sketch) to the east to bedrock reveals no evidence of the vein. Due to the overburden in the valley floor the relation of the structure of this vein to other structures was not observed.

Mineralization:

Free gold was noted in several of the dump pieces. Other metallic minerals were pyrite and arsenopyrite. These occurred as medium to fine crystals mainly scattered along the various graphitic bands of the vein. The quartz in the bands varies from milky white to a dark gray. Other gangue minerals consisted of calcite, chlorite and various broken slate pieces.

A total of seven samples taken both from the vein and the three small ore dumps vary from nearly three ounces of gold to one-fourth ounces per ton, with a little silver. The average content of these samples shows over an ounce. The concentrate ratio was given as 165 to 1, which consists mainly of pyrite. This shows that most of the gold is apparently free.

Timber and Water Power:

The present company intends, depending upon the success of this venture, to install a hydroelectric plant from the drainage streams in the valley. The water supply is not large as the creeks are small. Abundant timber, consisting mainly of spruce and hemlock, is located both on the property and in the adjoining vicinity.

Machinery:

The company has purchased only part of the initial equipment which consists of two 30 H. P. Caterpillar tractors, two dump trucks, two Gardner-Denver Leyners, and some steel and pipe. They intend to install a 4x6 foot Kennedy ball mill, 35 ton capacity, with two jigs, table and a flotation unit. Three gasoline engines are to be used for power.

A crew of ten to twelve men is to be employed.

TERRITORY OF ALASKA
DEPARTMENT OF MINES
JUNEAU, ALASKA

MR NOTED
JUL 5 - 1939
B. D. STEWART
Territorial Commissioner of Mines

Fairbanks

June 29,1939

Mr. B. D. Stewart
Territorial Department of Mines
Juneau, Alaska

Dear Mr. Stewart,

Arrived here in due time as we now are waiting favorable weather and it sounds alright for tomarrow. The photographer intends to take a few shots at Mt. Mc Kinley on the way down. We are flying with Pollack,and should have safe flying. I was out to the big dragline this afternoon,and the above dredge. Kazee was in tonight and stated he expected to be down to Nyac in three weeks. Also saw Burns tonight,and he accused me of leaving a large sack of samples on his porch.

In regard to the Mc Kinley Lake properties,another cart before the horse operation. Mr. W. H. Gilkey of Seattle is the capital interested and he is planing on a mill at once on former reports,copies ofwhich I am mailing you under separate cover,plus an examination made by himself last February during which he obtained a few scattered samples. His first unit is a 3x6' ball mill with necessary equipment,which soon will be increased to a hundred tons. This is to be done with limited capital,after which the property will pay for the additional. This of course does not add up;and I advised him first to make another examination,and then upon his return to Seattle in another week,to call at the office and discuss the matter with you.

Due to snow conditions, I was only able to see the lower workings on the Pioneer Group. It was on this group that the old stamp mill was erected around 1910 or 11. Mr. Burdick and Mr. Jacobsen of the Forest Service accompanied me over part of the trail. The McKinley Lake Gold Mines have asked for a caterpillar road to the property in veiw of the present operation. Mr. Jacobsen has four CCC men working,and they are mainly widening the trail to a six foot width,and have completed nearly one half mile.

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JUNEAU, ALASKA

This trail leads to the head of the valley, a distance of six miles; however the amount they want made into road is only two and one quarter miles. The cost of widening this trail the required distance, such as they are doing would not be great, and on the strength of a small fissure vein, I told them that I though it worth while. To build a road would require a summers work and a considerable amount of money. In veiw of the showings, that I saw and the amount of development on the property, the latter would not be warrented. Mr. Heinzleman was on the boat from Cordova to Valdez, and he asked regarding my recomendations concerning this road. I explained the situation to him and mentioned, that in veiw of the facts that the valley is favorable for further prospecting and development, that the little fissure vein does contain minable ore, and that the present operation might lead to some further development, the present widening is warrented, which would enable them to get machinery on the property. Then in case they did develop sufficient ore, the truck road matter could be investigated.

During my time on the property, accompanied by Mr. Mc Allister, owner, I made a sketch of the little fissure vein and the Blacksmith tunnel and outcroppings. The latter tunnel shows one of the low grade ore zones mentioned in the reports. Also covered all the tunnel workings on Story Creek above the old mill. All the showing on the Lucky Strike Group were inaccessible. Mc Allister stated that the showings on the Lucky Strike group were much the same nature, other than one narrow cross vein which did contain values.

The little fissure vein is located on the Forestry Trail two and one quarter miles from the railroad at an elevation of 100', and one fourth mile northwest of the head of Mc Kinley Lake on the valley floor. It is exposed for a distance of 160', and averages 12" in width of quartz. It is in slate and follows the schistosity of the slate N.60° W. Its dip could not be accurately determined but varies from 45° to 60° N. E. The workings consist of trenches over its length. Near the west end is an old shaft down 16'. Mc Allister stated that the vein widened to three feet in the bottom. On the east end is a hole down six feet in the bottom of the cut and the quartz measured 14".

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Samples J. C. R. 702 to 708 inclusive represent four channel samples across the vein, two grab samples of ore dumps, and one grab sample from the ore dump of the old shaft. The vein is banded, graphitic bands with a milky white quartz, and shows a little free gold with a pyrite and arsenopyrite mineralization.

Sample J. C. R. 701 represents a channel samples across four feet of silicified graywacke in the Blacksmith tunnel. The quartz here shows a weak mineralization of pyrite. The two low grade zone, one at the Blacksmith tunnel and the one above the mill on Story creek, are nothing more than brecciated graywacke bands with small quartz veinlets and seams cutting mainly at right angles to the strike of the strata. Some of these veinlets carry free gold and some arsenopyrite. To mine these stringers would necessitate mining the whole graywacke band, and this does not appear worth while. The later fact I mentioned to Mr. Gilkey, and advised him to examine these and sample for himself. It is these zones that he is rating his mill capaity. Apparently several of these zones as they were sampled in the old reports were measured along the strike of the beds.

There are apparently many angles concerning the whole McKinley Lake setup. The machinery, two caterpillars and compressor are old secondhand machinery which was purchased from the Puget Sound Dredging Co. The company is capitalized at four million shares. They are very hurried to get this machinery out of town. The railroad will not let them move a hand car over the steel etc.. If necessary I will cover the remaining showings this fall on the return trip. Please advise.

Will complete my mapping and work in the Tuluksak area and cover as many outlying operations as I can in the vicinity. Please advise whether or not I should include Goodnews Bay this season. After I intend to cover the new operations in the Kaiyuh Hills.

Saw Joesting on the boat and had a look at his geoscope, he is staying in Valdez for a couple of days.

Please address all mail to Nyac , care of the Star Airways Anchorage.

Sincerely,

J. C. Roehm

THE McKINLEY LAKE DISTRICT

The present report is based on a hasty examination made by J. B. Mertie and the writer in October, 1912. The claims visited are described in some detail because no other account of them has been published recently by the Survey.

The McKinley Lake properties are situated on the northwest shore of McKinley Lake, a body of water 1½ miles long, which empties into the head of Alaganik Slough, 2 miles from Alaganik and about 20 miles east-southeast of Cordova. They are easily reached by rail from Cordova to Alaganik and thence by a trail 2 miles long. The trail is very swampy but can be traveled by horses in dry weather. The region may also be reached by boat from Alaganik by way of the slough.

McKinley Lake was visited in 1900 by Spencer, who says:

> At this place several veins of quartz have been opened and found to contain gold in varying quantities. A short study of this field was sufficient to show that the principal veins lie parallel to the stratification of the sedimentary rocks and that they usually follow the contact of the beds of different character, as of massive arkose sandstone against shale. In many cases ledges varying in width from a few inches to several feet may be traced for long distances. In one claim the quartz shows a large amount of free gold in small stringers, but this claim has not been sufficiently exploited to determine either the permanency of the vein or its character.
> Besides these veins in the planes of stratification there are others transverse to the bedding which have a width up to 4 feet and are known to be continuous for 100 feet or more. One of these which shows no free gold was sampled and found to contain 0.64 ounce of gold. On the whole the Alaganik region seems worthy of the further attention of mining men.

Interbedded slate and graywacke of the Orca group constitute the country rock of the region adjoining McKinley Lake. The dominant strike of the beds is about east and west, and the dip ranges from nearly 0° to about 45° N. The region is cut by a series of gold-bearing quartz veins ranging in thickness from a few inches to 20 feet. These show a tendency to parallel rather than to cut the beds and occur as tabular bodies between the graywacke and slate. The graywacke has been extensively brecciated and subsequently mineralized by an intricate network of quartz veins and veinlets. In the interbedded slate, however, dynamic action has exposed itself in movement along the cleavage planes rather than in the formation of zones of brecciation, and the argillaceous beds are therefore not extensively mineralized.

Small crystals of pyrite and arsenopyrite occur throughout much of the ledge matter, both in the quartz and in the inclosed sediments. Locally the arsenopyrite is very abundant, forming small bodies several centimeters in length and composing a large proportion of the rock. When struck with the hammer it gives off the characteristic garlic odor of arsenic minerals, and it is offensive to the miners who work it. The gold occurs free in the quartz and inclosed in the sulphides, from which it weathers out into little lumps of brown alteration product.

The Lucky Strike Mining Co. has six claims in this region, on which three tunnels with a reported total length of about 400 feet have been driven. Two of the tunnels are on a ledge 20 feet wide, which consists of a brecciated mass of graywacke healed with quartz and carrying considerable amounts of arsenopyrite together with small specks of gold. No samples were collected by the writer, but assay returns from this ledge are reported by the owners to show from $8 to $10 a ton.

The Stringer tunnel shows a well-defined vein with gouge above and below. Vein matter next to the footwall is said to assay $80 to the ton and to have an average value of $15. A mill test on individual stringers of this ledge is reported to have yielded returns as high as $100 a ton. The country rock adjacent to the ledge also contains considerable pyrite and arsenopyrite, with some free gold, and is said to assay about $1.85 a ton.

On the Tiptop claim an open cut has exposed vein matter about 20 feet in width, which cements large brecciated masses of graywacke and slate.

The ledge matter in the main workings of the McKinley Lake Mining Co. is a mass of quartz veins inclosing some blocks of graywacke. On this ledge are two tunnels with an aggregate length of over 600 feet, besides several open cuts. The entire mass is more or less mineralized with pyrite, arsenopyrite, and free gold. The surface outcrop is said to have assayed $100 a ton, and $10 is reported by the owners as an average for the ledge. A small mill was operated on this property for a number of years but was subsequently removed.

The property of the Bear Creek Mining Co. is situated on Bear Creek, a tributary of Salmon Creek, a few miles above McKinley Lake. It was not visited, but the formation and geologic relations as reported are much the same as those on McKinley Lake. The property comprises several claims on which some development work has been done. Several other properties situated on the lake were not examined but are reported to carry small quantities of gold.

The mining conditions in this area are exceptionally favorable. Excellent timber is abundant and transportation facilities could easily be provided by a railroad branch from Alaganik. The location of the veins on the steep slopes of McKinley Mountain should afford natural dumps and gravity haulage. In 1912 only two men were at

work in this region, but the owners of the claims hope to interest outside capitalists in the near future and to open the properties on a larger scale.