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Fairbanks, Alaska
March 5th, 1930

Mr. B. D. Stewart,
Supervising Mining Engineer,
Juneau, Alaska.

Dear Mr. Stewart:

I am mailing you under separate cover a report on the coal and lode prospecting of Seward Peninsula. Also herewith enclosed are vouchers for my salary for February. Would you please tell me if you have received vouchers for my salary for December, 1929 and January, 1930. I figured that they should have been here at the latest on last mail, but it may be that the Auditor's office has held them up for some reason, if they have not been lost in the mail.

The Ruby strike is developing very slowly. There are about 70 men at the strike. One other hole is down to bedrock on Beaver Creek. It is said there is pay in the hole, but how much, I have not been able to find out. No other new developments have come about as the weather has been holding the prospectors back from sinking holes. As soon as there are any interesting new developments, I will let you know immediately by telegram.

I am in receipt of your letter of February 25th and I am going ahead gathering such data as I am able at the present time on the various creeks.

Very truly yours,

Irving Reed

NOTED
MAR 12 1930
B. D. STEWART

REPORT ON THE STATUS OF THE COAL AND LODE PROSPECTS OF SEWARD PENINSULA IN THE SUMMER OF 1929

Altho coal has been reported from many localities in Seward Peninsula, it has been mined in only two places, both on the Kugruk River. U.S.G.S. bulletins mentioning or describing this area are No.s 247, 379, 442 and 692. The place where the most mining has been done is on Chicago Creek, a medium-sized right limit tributary of the Kugruk River, about 1 1/4 mile north of Coffin Brothers placer mine on Discovery Claim on Kugruk River. Mining was started here in 1902-1903 and continued more or less sporadically to the winter of 1915-1916, the coal being mostly hauled to Candle for use in the drift mines. At the present time the incline is caved and it is impossible to enter the workings. Coffin Brothers haul small amounts from the old dump for heating and cooking in their camp.

About 4 miles south of Coffin Brothers' camp and between Reindeer and Montana Creeks on the right limit of Kugruk River, is the other locality where there has been some development work done on a coal mine. There is a bluff at this place which rises about 50 ft. above the flood plain of the Kugruk River. The coal outcrops in this bluff, dipping at an almost vertical angle. The beds are divided by shale partings and aggregate about 70 ft. It was impossible to enter the mine as the entrance is boarded and sodded up inorder to keep out water. A description of the workings was obtained from the owner, Mr. Veline of Candle, Alaska.

An adit and incline was run in parallel to the coal beds for approximately 450 ft. At this place the beds were crosscut, and it was found that the shale partings had disappeared. The

Report on status of coal and lode prospects Seward Pen. summer 1929
(Continued)

The total thickness of the bed was, however, still 70 ft. The total depth below the surface at the top of the bluff is about 180 ft., and the depth below the water level of Kugruk River is about 130 ft. Veline claims that he is below the frost line and that the coal is unfrozen and will not slack. He also claims that the coal is bituminous or semi-bituminous, and of much higher grade than that of Chicago Creek.

If what is said is true of this coal, it holds great possibilities as potential electric power for the dredging on Candle Creek and other possible dredging propositions within a radius of 50 miles.

LODE PROSPECTING ON SEWARD PENINSULA IN THE SUMMER OF 1929

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Lode mining and prospecting on Seward Peninsula was, in the summer of 1929, at its lowest ebb. Most of the properties that showed any promise have been patented by the owners and allowed to be idle with the expectation that more advantageous future mining conditions would permit them to be sold or developed at a large profit. At the present time the most hopeful prospect is a cinnabar prospect at Bluff. The property is owned by the Alaska Mercury Corporation, composed of J. J. Keenan, Grant R. Jackson and E. J. Matthews, and is situated at the mouth of Swede Creek, a short distance east of the town of Bluff. Bering Sea At this place is bordered by a narrow beach, rising from which are cliffs of hard grey dolomitic limestone (~~carboniferous~~) from 80 feet to 125 ft. high. Swede Creek, emptying into the sea over the limestone cliff, has caused a slight indentation extending about 550 ft. along the Bering Sea, Shore about and 100 ft. wide. It is in this indentation and about 150 ft. east of the mouth of Swede Creek, that the greatest cinnabar

mineralization occurs. This mineralization consists of a kidney-shaped outcrop about 13 ft. long and 3 ft. wide. The longer axis of the outcrop is tilted about 45% to the horizontal with the shorter side upward. The ore material is ~~a~~ brecciated limestone cemented with white calcite and impregnated with cinnabar. Surrounding this outcrop and extending in a roughly triangular shape for about 80 ft. west is an area of pink colored limestone. One corner of this pink limestone area extends to the top of the cliff where it joins an 8-foot strip of soft, pinkish-grey limestone which extends under the surface soil mantle from this point for about 130 ft. to the east. A ~~6 to 12 inch~~ seam of grayish talc, from 6 inches to 12 inches wide extends for atleast 40 ft. from the outcrop along the lower edge of the pink area.

An incline has been started on the outcrop, roughly paralleling its strike and dip. The floor of this incline is directed 17° downward from the horizontal and the threshold of the portal is 58 ft. above sea level. Two men were employed on this prospect in the summer of 1929 and four during the winter of 1929-1930. The pink limestone is said to yield an average assay of 0.10 percent quicksilver and the outcrop in the incline ~~averages~~ 2 percent quicksilver. Select samples from the incline run as high as 30 percent. The occurence of this prospect is very interesting as having a probable direct bearing on the mineralization of the Bluff region. According to Waldemar Lindgren, the origin of quicksilver deposits is connected with volcanism and hotsprings action. According to Alfred H. Brooks in U.S.G.S. Bulletin No. 328, page 286, "The heavy limestone (and imbedded schists) has been uplifted into a low dome, whose longer axis stretches approximately N.70°E."------"but locally there has been intense deformation." It would seem from the above that

the dome represents a laccolity of intrusive rock imbedded in or underneath the limestone, but which has not yet been exposed on the surface by erosion. The pink limestone is probably an area of local movement and crushing. The largest opening was at the present ore outcrop, this being the place where the hot solutions rose from the depths, gradually penetrating thru the crushed limestone (present pink limestone) and ending or fading away in the present pinkish grey limestone which at that time was probably at some considerable depth below the surface. The talc seam is probably due to subsequent cold silica solutions rising along the same path opened up by some later movement. It would look as tho the whole mineralization of the Bluff regions, the placers ~~being~~ are derived from quartz stringers in schist included in the limestone and in shear zones between the limestone and schist, is due to solutions rising from this laccolith. This would bring the origin of the mineralization of the Bluff region into conformity with other gold bearing areas of Alaska. It is probable that all placer deposits of Alaska will in time be shown to have some relation to adjacent or underlying intrusive masses.

The occurence of cinnabar in the gravels of Daniels and Koyana Creeks may mean that the quicksilver possibilities of this region are rather extensive.

The only other lode development work of any promise is on Cassiterite Creek in the York District (Port Clarence Recording District). The property here was originally owned by Grimm, Randt and O'Brien. It was taken over in 1916 by the Lost River Tin Mining Co., and then again by the Alaska Investment Corporation. The present holder of the property and the one who has carried on the latest

development work, is the National Tin Co. (superintendent, A.F. McIntosh; foreman, G. A. Patterson). This latest development work has been done on the "Three Prospectors" Lode Claim, U. S. Mineral Survey No 1234, U. S. Patent No. 873035. A full description of the lode with maps of the creek and development work done up to the year 1919, is given in U.S.G.S. Bulletin No. 733, by Edward Steidtmann and S. H. Cathcart, pagest 63 to 67. Referring to the sketch map on page 64 of the above bulletin, adits No. 1 and No. 2 have both been continued on to a total length of 250 ft. apiece. Adit No. 3 has been driven to a total distance of 840 ft. or 190 ft. farther than it was in 1919. The dimensions of this adit are 6 x 6 ft. in the clear. 560 ft. from the portal of adit No. 3, an 8 x 10-foot winze has been sunk for 440 ft. A moderate flow of water was encountered in a cross-cut at the bottom of the winze, flodding the lower levels of the same with water. It is said that the dike (high-grade ore) at the bottom of the winze, is 30 ft. wide, and that the total width of mineralization (dike plus altered limestone) is 100 ft. The country rock is limestone as far down as any sinking has been done. No assays had been made of the ore from the bottom of the shaft and nothing could be found out about values. Twelve men were employed besides the superintendent and foreman, during the winter of 1928-1929. In the spring of 1929, the company experienced financial difficulties, so that further development work was abandoned. During the summer of 1929, two men only were kept on the property as watchmen.

The present type of development work on this property has gone far enough. The high cost of labor and supplies should stop more non-productive drifting and sinking as too slow in producing results. Enough tonnage has been demonstrated to diamond drill the

property for a much larger tonnage which would warrant building a light tram from Teller and opening up, if the values are sufficent, on a large scale. Heretofore the property has been mostly used for stock market manipulation and promotion schemes.

The Strand and Head Mining Co. was doing a little development work in 1929 on its 2 claims. These are situated on Dahl Creek, a small tributary of Lost Creek, a tributary of Stewart River, to the northeast of the head of Nome River. This property comprises the Grand and Royal Lode Claims, U.S. Mineral Survey No. 1256, U. S. Patent No. 890767. A description of the development work is given by J.B. Mertie, Jr., in U.S.G.S. Bulletin No. 662, pages 437 and 438. The nature of the ore is described by S. H. Cathcart in U.S.G.S. Bulletin No. 722, pages 227 and 228. Very little additional work has been done since 1919, and no shipments of ore made. In the summer of1929, only one man (Gus Head) was working at the mine.

J. E. Nelson in the spring of 1929 was prospecting for quartz about 4 miles up Big Hurrah Creek in the Solomon District (Cape Nome Recording Precinct). He claims to have found a 12-foot (on the surface) ledge on the contact between the slate and schist about 1/2 mile N.E. of Big Hurrah quartz mine. The strike of the ledge is approximately N.W.-S.E. The ledge has been traced for about 3/4 of a mile by trenching. No sinking has been done. Nelson was working for Quigley in the summer of 1929, but intended to further prospect the ledge after the placer season was finished.

John Haldorsen ("Strawberry John") was prospecting for quartz near American River (Port Clarence Recording District) in the summer of 1929.

Lode Prospecting on Seward Peninsula in summer of 1929

John Roosevelt was prospecting for quartz near the head of the Kougarok River during part of the summer of 1929. He also has been running an adit into Copper Mountain near the head of Nome River for several years past. The portal of this is blocked so that it cannot be examined, tho it is understood that no results have come from his work.

No other prospecting for quartz or development of lode prospects was going on in the summer of 1929, so far as could be ascertained.