MR-056-01



### A NOTE ON

THE FUTURE OF MINING BETWEEN RUBY AND THE KUSKOKWIM RIVER, ALASKA

Mining in the district that liew between Ruby and Takotna has been confined to the placer operations in the Ruby-Long-Poorman District and the Innoko District. There has been no interest shown, due to the lack of transportation facilities, in prospecting for lode deposits. There are many unexplored placer creeks in the area a distance of over 1000 miles between Poorman and Ophir; this area being inaccessible to river transportation. The Alaska Road Commission have kept up a trail but France by this rante difficult nevery to march made between Poorman and Ophir. The government road has been extended from Ruby to Greenstone, a distance of 35 miles. This year the road has been completed between Ophir and Takotna; Takotna is accessible to the Kuskokwim River by the Takotna River. The eventual completion of the road from Greenstone to Ophir should stimulate interest in prospecting along the route. The time is perhaps far distant, but it is of interest to study some of the aspects of the district for fature mining activity.



Scene along Long-Ophir trail.

This area lies south of Ruby, on the Yukon River, to Takotna, on the Takotna River, along the government road and the trail, connecting the government roads, between Greenstone and Ophir.

Bulletin 754, U. S. Geological Survey, "The Ruby Kuskokwim Region Alaska," by J. B. Mertie, Jr. and G. L. Harrington, discusses the general geology of the district. A geologic map accompanies the report.

Interest in placer mining in the vicinity of Ruby is waning.

There are future dredging possibilities on Long Creek and its tributaries. According to local opinion, interest in dredging is prevented by some of the owners on Long Creek holding out for a large cash advance for options on their claims.

It is reported that the dredge on Candle Creek has ceased operations. The Guinan and Ames dredge on Ganes Creek may close down at the end of this season. It is natural to assume that these operators will investigate other dredging possibilities in this district.

There are many unprospected creeks that will be made accessible with the completion of the proposed road. Prospecting for lode mines will be stimulated as the districts become available to transportation.

The areas adjacent to the granitic intrusions should receive the primary attention of the prospector.

Cripple Mountain offers possibilities for prospecting. Veins of stibnite with some cinnabar, and arsenopyrite were observed. Large

pieces of magnetite are found in the placer operations around Cripple Mountain. Feridotite dikes, consisting mainly of olivene and biotite occur at the head of Little Eldorado Creek. Mr. William Senanatkos has discovered a 3-inch vein of quartz containing arsenopyrite on his placer ground. As there is no development work the extent or relationships are not known. A sample of this occurrence was taken. The assay showed: Gold...O.72 oz. per ton. Silver...

O.10 oz. per ton.

The area is thinly populated at the present time. There is no active prospecting activity. The occurrence of basic dikes in a region of acid intrusives may be good evidence of ore deposition.

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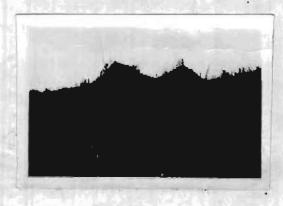
BY MINING DISTRICT, ALASKA TO TO

MISCELLANEOUS GEOLOGIC NOTES ON THE RUBY MINING DISTRICT, ALASKA

by Frank Holyheunes.

SPRING DEPOSIT

Twelve miles from Ruby, on the east side of the Ruby-Long road, is a mound that stands out prominently in the topography. The mound is known locally, because of its nature, as a small crater. The surrounding country is covered with vegetation and gravel so that the structural relationships cannot be observed.



Mound on Ruby-Long Road.

There are no outcrops of igneous rocks discernible. It is believed that the mound represents an old spring deposit. The mound is approximately twenty five feet high and one hundred feet long. The top is in the form of an oval depression. From a fox hole the character of the interior of the mound resembled silt. The occurrence of similar mounds has been mentioned in Bulletin 754, U.S.G.S., pages 9 and 40.

QUARTZ PROSPECT, YUKON RIVER



Quartz outcrop near Ruby.

A quartz outcrop, twelve feet in width, occurs five miles above Ruby on the south bank of the Yukon River. The remains of an old prospect drift can be seen. As the drift is caved only an observation of the outcrop is possible. The strike is north south and the walls net well defined. A gently sloping hill rises from the river. The hill is entirely covered with deep moss which is frozen within a foot of the surface. Very little mineralization is seen in the quartz, some specks of pyrite were noted. The quartz is decomposed in the outcrop, showing a yellowish stain. Three samples were taken at the outcrop; namely, two six foot samples across the vein, and a picked sample showing the most pyrite. The samples were assayed by Mr. Paul Hopkins, Bureau of Mines, Fairbanks. Each sample gave an assay return of trace trace for gold and silver. The history of the prospect was not available. (Reputled allemediated as a year and a silver.

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### MENDOZITE

Mr. Harry Boland of Ruby secured a sample of a mineral near the head of the Novikaket River (the Novikaket and the Novikaket are the same stream) which has been identified as mendozite by Mr. Hopkins. It is reported to occur as a capping for a coal vein.

A brief description of the mineral is found in "Non-Metallic Minerals, Occurrence, Preparation, and Utilization," by Raymond B. Ladoo. "Mendozite is a hydrous sulphate of sodium and aluminum, or a natural soda alum, having the formula Na<sub>2</sub>SO<sub>4</sub>.Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>.24H<sub>2</sub>O:-Na<sub>2</sub>SO<sub>4</sub>, 15.5 per cent; Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>, 37.3 per cent; H<sub>2</sub>O, 47.2 per cent. Mendozite is an uncommon mineral, resembling ordinary alum, and is found at Mendoza, Argentina, the type locality."

Brush and Penfield list the physical properties of mendozite as follows: Color, white; Luster, silky-vitreous; Fracture, fibrous; Hardness, 3; Specific Gravity, 1.88. Dana states that the crystallization is Isometric, and that the mineral is soluble in water.

As the mineral is rare in occurrence a sample was forwarded to the Juneau office of the United States Geological Survey. The quantity of the mineral available is not determined. No commercial value is known for the mineral. It is suggested that, were a large deposit available, mendozite might be used in the manufacture of sulphuric acid.

COAL

Coal is reported to occur under the mendozite on the Novikaket River. No specimens or further data were available.

Mr. John Dunn, of Ruby, reports an occurrence of coal on the Melozi River twelve miles distant, overland, from Ruby. It is necessary to make the trip by water due to the swampy nature of the country. The swift water of the upper Melozi is difficult to travel in a poling boat. OIL

Many Alaska newspapers published a report, this spring, of the discovery of oil on the Yukon in the vicinity of the Novikaket River by Harry Boland and Charlie Wolf. The report was based on rumor. Mr. Boland, a prospector of the highest type, discovered a black consolidated sand on the Novikaket River. With a mineralogical outfit he made a few simple tests to try and ascertain the nature of the sand. Sulphuric acid dissolved the black material leaving a siliceous residue. The addition of ammonia gave a white precipitate. The oil rumor started as a result of some one present saying the precipitate resembled paraffin. The black mineral in the sand was probably due to manganese. Mr. Boland or Mr. Wolf knew nothing of the publicity that came from their experiment.

## PLACER OPERATIONS RUBY DISTRICT 1926

Operator		Addres	8	Creek	Type of operation	No. of men
/ L. E. Sta	ırtevant	Long,	Alaska	Bear Pup	G. S. & S. I.	2
Al Burke		Long,	Alaska	Bear Pup	G. S. & S. I.	ı
<i>\$</i>	eacon & Discovery	Long,	Alaska	Bear Pup	G. S. & S. I.	2
Ko ( Max Rigle	er	Long,	Alaska	Trail	Sniping	1
"Old Man"		Long,	Alaska	Trail	G. S. & S. I.	1
Jim Gibso	on & Sherman Douglas	Long,	Alaska	Greenstone	G. S. & S. I.	2
المالية	und Mattson	Long, I	llaska	Duncan	Drifting	3
_	Rasmissen	Long, A	llaska	McKetchum	Drifting	2
Billie Er	Toe ms, and Kennet	Long, A	laska	McKetchum	Drifting	2
ين Pilbach B	iros.	Ruby, I	llaska	Big	Prospecting	2
Tim Scanl	on & Mrs. Kelley	Long, A	laska	Long	Drifting	2-4-5 winter
1' .	er & Hank Rayder	Long, A	laska	Long	Drilling (pros-	2
/Herman Wi	llike & Billie Vick	Poorman	, Alaska	Flat	pecting) Drifting	2
A) Ed Morton	and Bailey	Poorman	, Alaska	Flat	Drifting	2
ym. Midgl	ey	Poorman	, Alaska	Flat	Drifting	3
J. Robins	on	Ruby, A	laska	Ruby	G. S. & S. I.	1
) Billie Vu	iich	Poorman	, Alaska	Flat	Drifting	3
Jensen &	Wicklund	Poorman	, Alaska	Flat	Drifting	2
ANDennis Co		Poorman	, Alaska	Poorman	Drifting	5 .
Martin De	Boris	Poorman	, Alaska.		(Drifting winter (Prospecting (summer	1

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# PLACER OPERATIONS RUBY DISTRICT 1926 (Cont.)

Operator	Address	Creek	Type of operation	No. of men
Tony Cannon	Poorman, Alaska	Solomon	Prospecting	1
Geo. Bittles	Poorman, Alaska	Midnight	Prospecting	1
Grogan & McGintigan	Poorman, Alaska	Timber	G. S.	2
W. D. McCarty	Poorman, Alaska	Spruce	Sniping	2
Collins	Poorman, Alaska	Tamarack	Sniping	1
Jack Wolf	Poorman, Alaska	Granite (70 miles from Poorman upp Little Sula		1
Joe St. Germain	Poorman, Alaska	Granite "	Prospecting	1

NOTES ON PLACER OPERATION, RUBY DISTRICT, 1926.

Placer operation in the Ruby District has been retarded by the dry season and consequent shortage of water. The operations have not been continuous and placer interest seems to be waning. There is a hope locally, however, that attention may be brought to the dredging possibilities in the vicinity of Long Creek. It is reported that some of the owners would require a large advance payment for the privilege of prospecting their ground with this end in view. In the opinion of the other owners this seems to be the only drawback to the active interest in the project. There have been no new discoveries recorded.

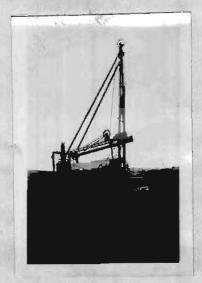
Two samples were taken of the quartz stringers in the schist bedrock at Long. Throughout the Ruby District there are many of these stringers and the samples were taken merely as an indication of the gold content. The first was taken from the Windy Bench Claim owned by Shan Walker, and the second from the claim held by Al Burke on Bear Pup. Both samples gave an assay return of trace trace for gold and silver. These quartz stringers range from a few inches to several feet in width.

Some years ago, on the bank of the Yukon about a mile above Ruby, gold was discovered. About eighty dollars was panned from the beach. Directly above this point are a number of quartz stringers in the schist. They showed a mineralization of pyrite and micaceous hematite. It was not possible to raise a color in the pan around the outcrops. It has been suggested that the gold on the beach may have come from a lost poke of earlier days.

The placer operation on Ruby Creek, in Ruby town, is of minor importance. The only activity at Long is centered on Bear Pup. The Sturtevants have done a good deal of development work preparatory to groundsluicing their property when there is sufficient water. Deacon and Johnson, and Al Burke are carrying on small shoveling in operations. Shan Walker and Hank Rayder are drilling at odd times on Long Creek. The drifting operations listed were progressing well. The remaining operations in the vicinity of Poorman and Long were idle at the time of visit due to the shortage of water.

The road from Ruby town has been extended to Greenstone and excellent progress is being made toward Poorman. The Alaska Road Commission have maintained a crew throughout the summer on the road. It is thought that the ultimate result of the construction of this road will be an aid to placer development between Ruby and Ophir.

# Placer Mining Ruby District



Keystone drill, Windy Bench claim, Long, Alaska.



Sturtevant's placer camp, Bear Pup Creek, Long, Alaska.