

DIVISION OF MINES AND GEOLOGY

CONFIDENTIAL

PROPERTY EXAMINATION REPORT

#74-2

GEOLOGICAL OBSERVATIONS AND COMMENTS

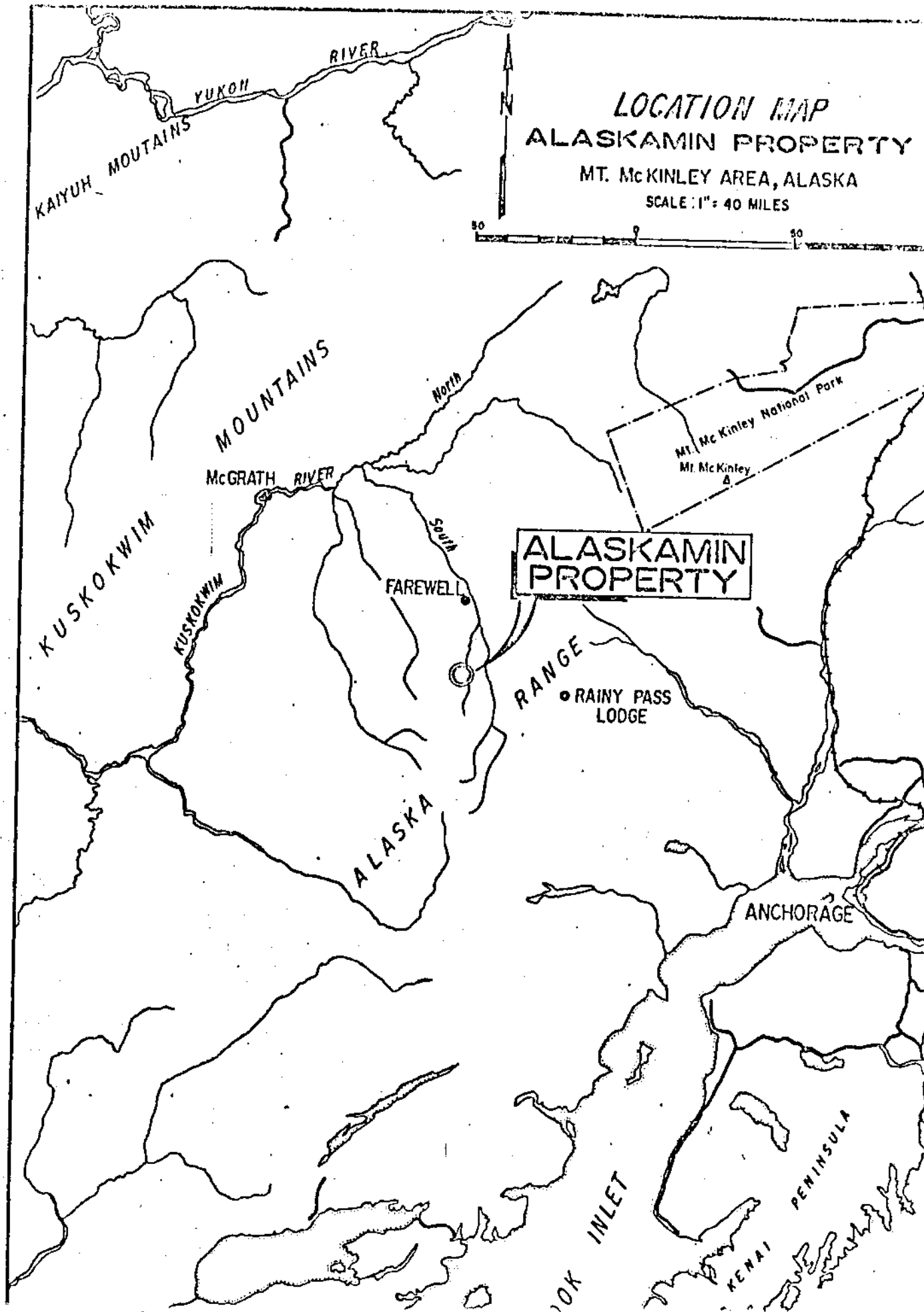
ALASKAMIN BOWSER CREEK PROSPECT

MCGRATH A-2 QUADRANGLE

by

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MINING ENGINEER

September 4, 1968



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Introduction

Early in 1968 the U.S.G.S. released Circular 559, "Lead, Zinc and Silver Deposits at Bowser Creek, McGrath A-2 Quadrangle, Alaska." As soon as this circular reached the public, Alaskamin, an Oregon corporation, had a man flown into the area to begin staking claims.

The notes and sketches regarding the claims are not to be considered completely accurate in dimension or scope. They are the results of a cursory appraisal of observations made August 21 through 23, 1968, when I visited the exploration camp of Alaskamin.

While this organization had over 417 claims, they were, at the time of this visit, concentrating their principal efforts in the Bowser Creek area as covered by U.S.G.S. Circular 559.

Location

Bowser Creek is an east-flowing tributary of Post River, which in turn flows north into the south fork of Kuskokwim River. The area is located approximately 25 miles south of Farewell, an F.A.A. station.

History

Before the work of B. L. Reed and R. L. Elliott of the U.S.G.S. in their Geological Survey Circulars 559 and 569, very little geologic information was available on this section of Alaska. The only previous work was in 1911 when A. H. Brooks of the G.S. traversed the Alaska Range via the south fork of the Kuskokwim River.

Alaskamin, after staking the area and doing some preliminary work, interested Homestake Mineral Development Company of Vancouver, B. C. in the property. L. G. White, Manager, and J. Buchholz, Geologist, of Homestake visited the property in the middle of June 1968. In Mr. Buchholz's report he stated Homestake's interest when he wrote: "It is concluded that the known silver-lead-zinc showings on Bowser Creek warrant further exploration work."

Subsequently, Homestake made an agreement with Home Oil Company of Canada and Granby Mining Company of Canada in some form of joint venture whereby Granby and Home Oil have taken over further exploration of the property and have an option with Alaskamin to acquire the claims for a stock exchange.

Alaskamin and Granby-Home spent \$100,000 each in the 1968 exploration of Bowser Creek and Post River.

Observations - South side Bowser Creek

Trenching through the talus slopes and highly altered surface exposures in about eight places, mostly in sections 6, 8, and 9, indicates a possible ore body lying in the vicinity of the cross section in section 9 and it probably does not extend laterally beyond the cirque.

At the time of the investigation, it appeared that little attention had been paid to the country rock.

Assuming that mineralization is limited to veins and the area of the contact with the felsite dike, this side of Bowser Creek would not yield sufficient tonnage alone for development. However, it would add "sweetening" if it were developed because of mineral occurrences on the other side of the creek.

Mineralization in this section occurs in veins which are associated with felsite dikes and which lie outside the area of metamorphism caused by the intrusions. The dikes follow the bedding trend of N 15° E and have altered the limestone in contact with the dikes to chert. Chert grades into a cherty limestone within 5 to 10 feet and except in the "bowl" part of the structure the chert is barren of mineralization. Mineralization occurs close to, or in contact with, the cherty limestone, probably on both sides of the felsite dike. As shown in the cross section, the most promising mineralized area of the southwest side of Bowser Creek is the small synclinal structure, forming a "bowl" at lower elevations just above the lower talus slope. The structure changes to a simple monocline within 150 feet above the talus slope.

No attempt has been made yet to expose the dike and related beds downstream on the left side of the "bowl" where beds are covered by talus. I would expect that mineralization there would be similar to that above the "bowl" concentration of sulfide minerals. Sulfide mineral concentrations in the veins vary from 2% sulfides up to nearly solid sulfide concentrations. The changes where observed are very abrupt. Regardless of the concentrations the ratio of sulfide minerals remained in fairly constant relationship.

Approximate ratio of the major sulfide minerals observed were:

Galena	60
Sphalerite	30
Pyrrhotite	10

Roughly the same mineral relationships can be seen in the top trench at about 5000 feet elevation and the bottom trench at about 4200 feet elevation, indicating no major zoning trend with depth in this area.

#### North side Bowser Creek

Work had just begun on this side of the creek. Each of the four trenches on the lower part of the hill exposed veins, all steeply dipping and striking about N 55° E. Between the trenches and the few rock exposures showing through the extensive talus there appears to be at least 8 veins, 75 feet to 250 feet apart, varying in thickness up to about 12 feet. At least two veins can be traced along their strike into the next drainage to the north. Each vein seems to pinch and swell sporadically, and the sulfide mineralization along the vein stops and starts abruptly. The veins where exposed show a dark brown to red brown iron staining, but usually within a foot or two of the surface the sulfide minerals are only slightly altered.

The veins that strike N 55° E are cut off on the west by a felsite dike and associated veinlets which dip steeply and strike roughly N 15° E and which are apparently related to those on the southwest side of the creek. Mineralization of the N 55° E veins is higher in galena and lower in sphalerite than the veins on the southwest side of Bowser Creek. Apparently the felsite dikes and associated

mineralization are younger than the N 55° E veins. It would be interesting to study the contact between the two systems, but no trenching had been done along the dike to expose contacts.

Approximate ratio of major sulfide minerals observed were:

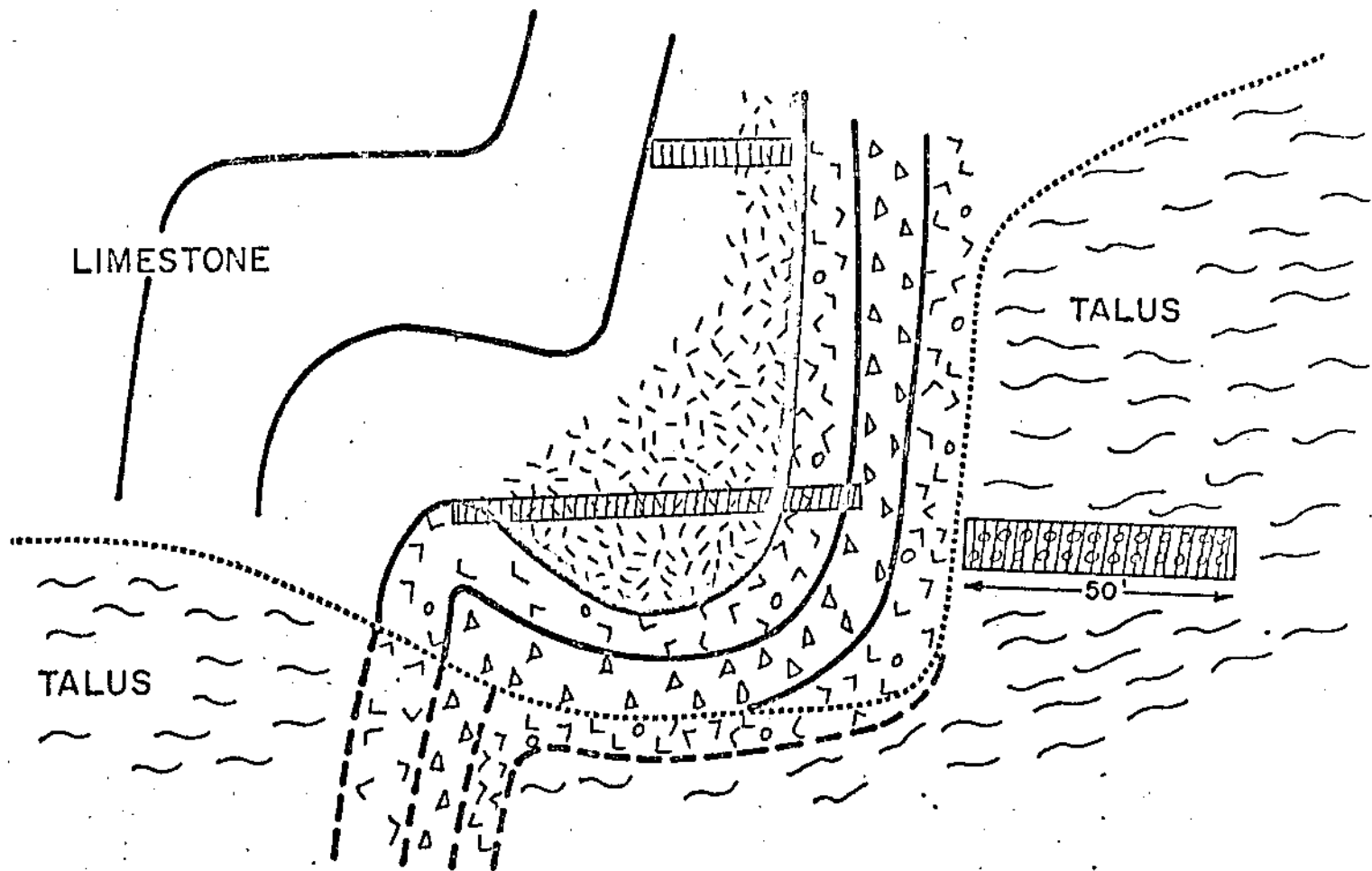
Sphalerite	70
Pyrrhotite	20
Galena	10

Silver assays of the veins range from 2 oz. per ton to as high as 50 oz. per ton. Again, there has been no attention paid to the country rock between veins.

#### North of Bowser Creek Drainage

Daily a crew of two to three prospectors was sent out to investigate claims to the north of Bowser Creek. In talking with them, I found they had come across prominent copper mineralization in the Hippie Creek area. Samples which I observed were principally bornite with minor chalcopyrite. The prospectors indicated that some of the samples came from float, but most were vein occurrences. They did not indicate the size of the veins.

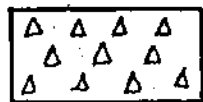
Robert E. Anderson, Mining Engineer  
Division of Mines and Geology  
September 4, 1968



LEGEND



TRENCH



FELSITE DIKE



CHERT TO  
CHERTY LIMESTONE

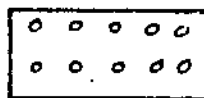


MINERALIZED AREA

AV. = 6 oz. Ag

4% Zn

3% Pb



MINERALIZED AREA  
NO ASSAYS BUT SHOWS  
GOOD POTENTIAL



HIGHLY ALTERED  
SHEAR VEIN 4" THICK  
UP TO 310 oz. SILVER

SOUTH SIDE BOWSER CREEK  
CROSS SECTION