

GEOLOGICAL SURVEY OF WYOMING

June 19th, 1902.

Mr. J. T. Meals,

Oil City, Pa.

Dear Sir:-

Complying with your request at Encampment, I hand you the following brief report on the Big Chief Group of Mining Claims, near Battle, Wyo.

This property is owned by Mr. J. T. McCarthy, of Battle, Wyo. and consists of five claims, namely "The Big Chief, Little Chief" Claims and the "Franklin" Fraction at Silver Lake in Section 12, T. 14 N. R. 85 W. and the "Park and Hawkeye" Claims in Sections 13 and 24, T. 14 N. R. 86 W., comprising about 90 acres in the Battle Lake Mining District, Carbon County, Wyoming. and held by location and discovery.

The Park and Hawkeye claims are situated on the south-west slope of Bridger Mountain, above Battle Creek and about three and one half miles from the town of Battle. The formation here is schist and some diorite with veins of quartz more or less stained with copper carbonates. These claims show only a ten foot hole in the schist having a heavy body of quartz on the south side but not enough development to admit of any opinion being formed of the merits of the claims.

The Big Chief, Little Chief and Franklin claims lie two and one-half miles from Battle, at the north-west end of Silver Lake on the north-east slope of Bridger Mountain, above Cow Creek and about one mile in an air-line from the Park and Hawkeye Claims.

The formation in the Silver Lake vicinity consists of bands of schists, varying in width and composition, and an occasional band or dyke of diorite. This formation has a general easterly and westerly trend or direction, with a southerly dip that varies from a vertical position to forty-five degrees.

Mr. J.T.H. 2.

Associated with these schist bands are quartz ledges having the same strike and dip as the schist and sometimes showing iron oxides and copper stains, with occasional bunches of iron and copper sulphides.

The principal showing of the group is found on the Big Chief Claim and the values are contained in a quartz ledge included in the schists, with the above east and west strike and a dip of about 60 degrees to the south.

This ledge consists of stringers of quartz with the included schist ledge matter much altered and very silicious in appearance. The mineralization is in the form of iron and copper sulphides in small streaks and bunches in the quartz and iron pyrites in the schist ledge matter.

The workings consist of one shaft about 28 feet deep but at present caved in and inaccessible, and three small cuts on the ledge, below and east of the shaft. The middle cut shows the ledge to be about 15 feet wide, having a white quartz streak on either side with the included matter showing as above.

On the south wall is found a streak 4" to 6" wide of soft gouge matter heavily impregnated with iron oxides. Following this is a white quartz streak or band carrying iron and copper ~~pyrites~~ <sup>sulphides in bunches and</sup> varying in width, the heaviest mineralization occurring in a streak about a foot wide next the gouge, this followed by about two feet of quartz less heavily mineralized.

On the north side of the ledge the quartz is about two to three feet wide and shows some mineral, mostly iron pyrites and some iron oxides usually fine grained and scattered throughout the mass.



Mr J. T.H. 5

The work already done has developed little of the value of this property and it must be considered on a prospect basis.

To develop this claim, it is suggested that shaft be sunk at a point on the ledge at or near the present main cuts and following the dip or direction of the ore. This shaft should be equipped with a proper hoist for handling the material for a considerable depth and a pump capable of handling the water at all seasons of the year.

In this connection it may be stated that the owners of the Merrill Claim, adjoining the Big Chief on the west, are running a tunnel to cut this ledge at a depth given at 400 feet on their own property, which would give a depth of about 250 feet on the Big Chief shaft. This would afford an opportunity for showing the value of the ledge before permanent work is decided upon. This Company has a smaller tunnel through the ledge above the Big Chief workings which shows a width of 15 feet on the ledge and a similar condition and ore.

The above described ledge cuts across at the southern end of the Little Chief Claim, near the northern end of Silver Lake but no work has been done to demonstrate its extent or value at this point, and this claim is at present most valuable for the surface advantages it conveys should permanent work be established, as the outlet from Silver Lake flows directly through it.

This stream flows steadily all the year round, has about 150 feet fall to Cow Creek and it may be stated that Silver Lake is a mountain lake about 1300 feet by 1000 feet in size and fed by the springs of a considerable mountain area. While no attempt was made to measure the volume of water flowing from the lake, it may be safely stated that

Mr. J.T.M. 4.

ample water power can be developed here for all purposes. Regarding the water laws in this State, will say the taking up of this claim does not convey the water right, which must be taken up separately and under the direction of the State Engineer as per the enclosed instructions and blanks and the water must be used or the right lapses.

The Franklin fraction is not a full claim and undeveloped but affords excellent sites for the necessary buildings etc and may be valuable later for other purposes.

As no map of the claims has been furnished, I have made the accompanying sketch to assist in the better understanding of this report and the property and its relation to the Boston-Framingham Tramway route, with which you are familiar.

Very Truly Yours,

*Henry C. Beeler.*

State Geologist.