HENRY C. BEELER, E.M.
STATE GEOLOGIST AND
EX-OFFICIO INSPECTOR OF MINES

1906
MR [redacted]-76

The State of Wyoming.

Office of State Geologist,
Cheyenne.

Oct. 22, 1906.

Mr. L. Cavnah;

Pres. Winona G.C.M.& M.Co.,

Denver, Colo.

Dear Sir:-

Complying with your application of Aug. 4th last, I hand you herewith brief report on the properties of your Company in north-western Wyoming.

SITUATION.

This property is situated on Sulphur Creek, on the eastern slope of the Stinking Water Range and Peak, in what is known as the Sunlight Copper Mining District, in the north-western part of Big Horn County, Wyoming and about fifty miles north-west of Cody, the nearest railroad point, where the Cody-Toluca branch of the Burlington Route now terminates.

EXTENT.

At the time of my visit and examination, July 25th and August 4th last, this group was given as containing fourteen lode claims and four mill sites, but owing to incomplete records the exact extent of the group could not be determined at that time, and the officers of the Company engaged surveyors at once, personally known to me as being competent and honorable men, for an exact survey and map of the property and to re-set all stakes of the claims and further perfect the records.

All these claims are held by location and discovery under the laws of the United States and the State of Wyoming.

For names of claims, acreage, position, etc. all are referred to the map above noted, as soon as completed.

GENERAL GEOLOGY.

The formations in the vicinity of Stinking Water Peak consist of Andesites, rhyolite, trachites, porphyry and allied rocks, with some of the lava rocks showing at various points in the outlying portions of the mineralised area, but as far as now shown, all the mineral values are confined to the first named rocks. Some granites are also noted and the sedimentary formations, limestones, etc are shown east and south of the district.

Dykes of many varieties of rocks, and varying in size from a thin stringer to huge intrusions, many hundreds of feet in thickness and veins of quartz and lime material are frequently noted, and many of these are heavily mineralised, copper being the principal mineral with gold and silver.

SULPHUR CREEK.

Sulphur Creek heads at a point south and east of Stinking Water Peak in a great amphitheatre formed by the lesser ranges connected with the main peak and the whole forming a narrow valley with the high mountains rising abruptly on either side to a height of 1500 feet above the creek and with steep slopes showing an angle of 40° in some places.

The Creek runs at a steep angle for its whole length with frequent water falls and cliffs furnishing abundant opportunities for power plants at numerous points.

THE WINONA GROUP.

The territory covered by this group lies on both sides of Sulphur Creek, beginning about two miles above the mouth of the Creek and extending irregularly for about a mile up the creek, as per map previously noted.

This group is undeveloped and, up to the time of the examination, only surface work had been done, but a start had been made towards deeper workings, as noted later.

The formation is principally andesite with dykes and sheets of allied rocks of varying size and extent, and it is further noted that all the mineral showings so far investigated in this locality, appear to be at or near the contact of these intruded dykes or sheets, and the prevailing rocks of their locality.

At a point on the Malachite Claim this condition is noted and at this point an open cut has been made on a showing of copper glance and some very high grade ore taken out, but the vein at this point is very small and believed to be only a stringer, or one of many stringers from the larger bodies of ore that this mountain evidently contains.

Other points on this mountain were visited and the mineral showings carefully noted and in each case the verdict was the same, viz.- a small stringer reaching the surface and evidently one of a series of many similar stringers heading or continuing towards the interior of the mountain where they must be close together or form an ore body.

Practically no prospecting has been done on these veins or showings and all opinions must be based on surface showings only, but these are considered sufficient to fully warrant the expenditure of the necessary money to open them up and prove their extent and value, provided the same be done in an economical and workmanlike manner, with

a small machinery plant and proper housing etc.

DEVELOPMENT.

This consists of two small tunnels, started from convenient points near the Creek level to cut the "Malachite" vein at a considerable depth. At time of examination these were in about 35 feet each but had made no showing of ore, being still in surface wash.

It is recommended that development by tunnel be rigorously pushed during the present winter and that an air drill plant be installed as soon as possible, and that when the vein is cut, that the tunnel be run on the ore and all possible ground shown up by this work.

GENERAL CONDITIONS.

These are favorable for economical mining after the district has been proven to be more than an unknown prospecting territory.

Water power, timber and deep sites for tunnel work all contribute to this end, and the question of roads and transportation will be readily solved, when once the grade and quantity of ore is proven.

Climate is usual climate of the higher mountain altitudes, ranging from about 7200 feet at the mouth of Sulphur Creek to 9000 feet at the Winona Camp and 10000 feet above sea level at the upper Malachite cuts. Work will naturally be confined to the lower tunnels for extensive works and here no difficulty need be experienced in equipping the mine and handling the products.

It is considered that the Winona Group is a good development proposition and properly handled and operated should become a paying property, but it is entirely undeveloped and cannot be proven except by active and continuous development carefully planned and economically executed.

Respectfully Submitted,

Henry G. Beeler.

State Geologist.

Date of Examination,

July 24, Aug. 4, 1906.