

October 27th, 1902.

GEOLOGICAL SURVEY OF WYOMING

Mr Thomas G. Vent,
Chicago, Ills.

Dear Sir;

Complying with your recent request, I hand you herewith the following brief report on the Lena Shields Group of Mining Claims, situated in Section 12, T.14 N., R.86 W. near the town of Battle, in Carbon County, this State.

The claims are owned by Mr N.C. Bowen et al and are four in number, namely, the Lena Shields, Ruth Anderson, Center Valley and the Unmitigable, comprising about 60 acres (more or less) lying south and east of the Blackfoot Mining Company's property on the south side near the head of the main fork of Cow Creek and about one mile north-west of the Third Power Station of the Boston-Wyoming Tramway line from Encampment to the Ferris-Haggarty Mine.

This property is held by location and discovery under the laws of the United States and the State of Wyoming. It is undeveloped and must be considered entirely on a prospect basis.

The general formation at the head of Cow Creek consists of a series of schists, mostly fine grained and usually micaceous but often altered to various forms; these schists are associated with and often cut by, dykes of varying size and ledges of diorite and allied dyke-rocks, and a huge occurrence of a schistose conglomerate is noted near the present Blackfoot workings.

The whole formation at this point indicates a broken and disturbed condition, causing fractures and fissures in the various rocks, the full extent and influence of which has not yet been determined.

E.G.V. 2. L.S.

The formation in general is highly mineralized and stained with the oxides of iron and some copper carbonates, and in the black coarse grained dyke rocks, pyrites of iron and copper are noted in varying quantity.

The principal showing on this group is in a series of open cuts on a ledge that extends along the crest of the bluffs on the Lena Shields claim, in a general direction taken as about S.70 E and N.70 W..

This ledge is composed mostly of quartz, lying in stringers in a schistose ledge matter and shows a width of from five to fifteen feet in the cuts and other places where accessible.

The mineralization shown in this ledge is mostly brown oxide of iron in varying quantity, often showing in bunches and streaks of considerable size and in intimate connection with both the quartz and schist. The whole appearance of the ledge indicates a strongly leached condition similar to the outcrops noted at some of the successful mines of the district.

Copper is noted as a stain and also in small quantities of pyrites in the quartz and other ledge matter but no permanent body of copper ore shows in the present workings.

This ledge also shows considerable alteration and replacement by secondary^d action of water, as both quartz and lime crystals and masses are noted in the workings, and smaller stringers of quartz, usually mineralized, are noted in the adjacent rock which usually show a general trend towards the main ledge.

Other smaller indications of mineral were noted on the remaining claims of the group but it is considered the above is the principal showing.

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The workings have not opened up the ledge except at the surface and it is suggested that this would be best done by a shaft at a convenient point on the ledge, this shaft to follow the dip and course of the ore.

Owing to the precipitous nature of the ground along the cliffs where the ledge outcrops, it may be ~~xxx~~ desirable to run a tunnel from some convenient point to the ledge and sink from the tunnel level, on the ore. Before this is done, a survey is suggested to determine the length required and the depth so gained and whether it would be more expensive to do this work or sink direct on the ledge.

The location of the property is advantageous for continuing work during all seasons of the year, as the new roads made during the construction of the Tramway has rendered the Cow Creek district easy of access from all directions. A small amount of work will considerably improve these roads by building cutoffs etc around some of the heavy grades.

The claims show considerable good timber for mining purposes and at the saw-mills three miles away, all lumber may be had at reasonable rates. Cow Creek supplies all water necessary for steam and other purposes.

It is considered that this property is a good prospect for development and that the conditions noted herein justify a further continuance of the development work on the vein as above stated.

Very Truly Yours,



State Geologist.

Date of Examination,

October 24th, 1902.