

The State of Wyoming.
Office of State Geologist,
Cheyenne.

1905
MR. ~~XXXX~~ - 66

GEOLOGICAL SURVEY OF WYOMING

October 31, 1905.

Mr. Lewis A. Pease,

Calca, Ill.

My dear Mr. Pease:-

Herewith I hand you brief report on the showings of the Pease properties, on the headwaters of Snake River, in southern Carbon County, this State, and trust it will aid you in opening up the group.

For the present I would suggest that you confine the work to the Three Forks Group, as it has a fine showing, and develop the other showings on the various other of the as occasion offered or it seemed desirable to do so.

Very truly yours,

Henry C. Beeler

State Geologist.

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The State of Wyoming.
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Cheyenne.

REPORT ON
THE PEASE PROPERTIES,
NEAR
BATTLE, CARBON COUNTY, WYOMING.

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SITUATION.

The lode and placer claims comprising the Pease group are situated in Sections 11, 12, 13 and 14 Township 18 North, Range 80 West, in south-western Carbon County, Wyoming near the Colorado-Wyoming State line, and about fourteen miles from Battle, Wyoming. The group lies at the headwaters of Snake River on the western slope of the Continental Divide, formed by the Sierra Madre Mountains at this point and have a general altitude of 7500 feet above sea level.

EXTENT.

The lode claims of the group are nine in number, as follows:

- The Battle Ax,
- Three Forks,
- Monarch,
- Independence,
- Homestead,
- Anconda,
- North Fork Extension,
- Parallel and
- Parallel Extension Claims.

The Battle Ax, Three Forks and Monarch Claims are held under United States Patent and the remaining claims by location and discovery under the laws of the United States and the State of Wyoming, and the whole comprising about 175 acres of land.

The placer claims consist of the following:

The North Beach Placer, in Sections 13 & 14, T. 12 N., R. 66 W.

" Battle Street " N.E. of S.E., Section " " " " " "

" Pease Placer S.E. of S.E. " " " " " "

These placers comprise about 460 acres, less the conflicts of the lode claims, as shown on the map of this property.

OWNERSHIP.

These claims, patented and otherwise, are held by Mr. Lewis A. Pease, 1118 Ashland Block, Chicago, Ill., and work carried on under his direction.

GENERAL GEOLOGY.

The general formation of the country lying south of Battle and north of the Colorado-Wyoming State line is principally a reddish granite, though there are a number of islands of metamorphic schists, mostly hornblende schists, lying in the granite, and dykes and bands of diorite and quartz-diorite cutting both the granite and schists at frequent intervals. The diorite dykes are often of considerable extent in this locality and are evidently intimately connected with the ore deposits of this section of the Grand Encampment District; their trend or direction and dip varies in the different portions of this locality and the minerals, etc. exhibited also vary in the different properties.

Briefly it may be stated that the ore deposits of the Grand Encampment District consist of two general types: the first, contact deposits, as the Ferris-Haggarty and Doane-Rambler Mines, and the other, original ores, as the Hinton, Flakeslee and Continental properties, where the ore shows copper-iron sulphides in Diorite and quartz veins, to which latter class the Three Forks property belongs.

THE PEASE LODGE PROPERTIES.

This group consists practically of three sets or groups of claims on various showings of mineral, but which, with fuller development, will likely prove to be more or less connected.

These may be properly classed as follows:

1. The Parallel Group, consisting of the (Parallel, Parallel Extension and North Fork Extension Claims.
2. The Independence Group, consisting of the (Independence, Anconda and Homestake Claims.
3. The Three Forks Group, consisting of the (Three Forks, Battle Ax and Monarch Claims.

Of these three groups, the Three Forks Group is the most developed, the work on the other two groups consisting of prospecting work at various points along the outcrops or claims.

THE PARALLEL GROUP.

This group adjoins the North Fork Group of the Boston-Sierra Madre M. I. Co. and shows a similar formation of dioritic country rock and a quartz vein therein on the Parallel and Parallel Extension Claims. This shows in the discovery shaft on the Parallel and on both sides of the river, (which cuts across the Parallel Extension Claim) there are

copper showings in the various cuts and works on the claim.

The North Fork Extension shows a lead about five feet wide in the discovery shaft north of the river. The trend of these showings is north-westerly and south-easterly and the dip varies.

THE INDEPENDENCE GROUP.

On the Anconda the work shows a low grade copper-gold-silver ore, but has not developed the full extent of the ore showings. It outcrops on the surface showing a trend N. 60°W. and S. 60°E. and dips to the south-west at an angle about 30° from the vertical.

The Independence claim shows a quartz vein at a contact between the dioritic rocks before noted and a gneiss or schist and there is a capping of oxidized iron or "gossan" on the claims, but it has not been developed.

Work in the foot wall dioritic material has shown considerable pyrites, both copper and iron, in the diorite, and this in consonance with the iron cap above noted may be considered as important for the reason that the present producing mines of the Grand Encampment District have all been found under an iron cap, mostly on a contact deposit and it is recommended that this capping be thoroughly prospected and its value determined as soon as possible.

The Homestake claim is located on the cross vein now being developed by the tunnel work on the North Fork Group, above noted, but has not yet been fully developed or prospected on this claim. The dioritic country rock shows the same occurrence of pyrites as on the North Fork Group, and evidently the same conditions pertain here, though the dip is south in this claim.

THE THREE FORKS GROUP.

This group contains the principal showing at the present time, and the group evidently covers a contact between the dioritic country rock, noted on the other groups of this property, and a gneiss or schist body noted in this vicinity. This contact extends across the State line into Colorado and it is without doubt the location of the extensive mineral bodies or deposits that are indicated on these claims by the surface showings.

The surface work has shown a series of quartz veins heavily mineralized, some in the diorite and some in the gneiss or schist hanging wall on the southerly side of the diorite, but all evidently more or less connected.

These veins or streaks vary in width and mineralization, but are usually of amaly white quartz and carry small amounts of copper minerals, some lead and zinc and the principal surface mineral is hematite, a red oxide of iron; this latter mineral carries gold and the quartz is also gold bearing.

The lead is in the form of galena or lead sulphide and carries silver. Some silver chloride ore also noted and remarkably high values in silver have been obtained.

The main development has been done at the end lines of the Fattle Ax and Three Forks Claims, but a great deal of other work has been done at various points on the claims to open up and trace the ore showings of the group, and these latter workings are considered in the nature of prospecting work, the main development being the bor or shaft and tunnel.

This work has been done on the vein at the above described location and shows about 500 feet of development work. No connection has yet been made between the shaft and tunnel and this of course would be first work to be done in developing this showing. It is recommended that the shaft be sunk following the vein and that when sufficient depth has been attained, the ore be opened up by cross cuts for the full width of the showing and drifts be run on the vein to show extent of ore shoots now indicated and cut new ones that may exist in the vein.

It is evident from the showings already made that this contact and contiguous veins are heavily mineralized and carry profitable values in lead, gold, silver and copper and it is considered the above is the best and most economical method to develop these showings on a commercial scale.

The expenditure necessary for this work, hoisting plant, buildings etc. is fully warranted by these showings, and there is every indication that this property would develop into a profitable commercial mine.

ORE VALUES.

No assay samples were taken at the time of this examination, as it is considered that these properties are as yet in a prospect state and present ore values but indicate those to be expected with depth and development.

Samples and trial shipments have been made from these properties from time to time and these show the average assay values better than small samples at the present time. All are referred to the records of the property for such assays.

Questions of treatment of ores, reduction works etc. may be left until the property is fully developed and preliminary tests on the ores then shown will promptly determine these points.

PLASE PLACES.

These consist of the three placer groups previously listed and its contiguous to the lode claims of this property, but have not been opened up or worked. Gold and silver has been washed from the gravels at various points in these claims, but no figures are given to indicate values of these gravels per yard.

MINING FACILITIES.

The physical features of the claims and surrounding territory are all favorable to the economical operation of the property during development and later when permanent plants are required.

Timber for fuel and lumber purposes is abundant in this locality, pines and fir being the varieties common in these mountains and are used for all purposes. Coal exists seven miles away, in unlimited supply and good quality.

Water is abundant and locations of water rights for power and milling purposes may be made under the liberal water law of the State of Wyoming. The headwaters of the Snake River and branches afford all opportunity that may be required in this or other works.

Transportation is now by wagon road from Basins, on the U. P. R. R., via Paggs, Wyo. and Slater, Colo. on Snake River, or from Walcott, on the U. P. R. R. via Encampment and Battle, the former being the best road for all season hauling and distance about 100 miles.

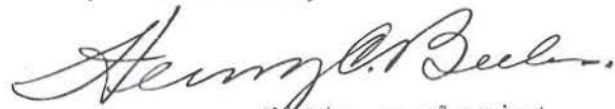
The railroad situation in Wyoming and northern Colorado is rapidly changing and it is only a question of a short time until the property will be within easy reach of railroad transportation, which will speedily solve the now troublesome question of transportation by wagon.

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These properties are first class prospects and present a good opportunity for development along their several lines, as described.

The work already completed has demonstrated the extent of the mineralization, the contained values in many cases and the proper method of future development, the cost of which is fully justified by the showings made, as has been stated.

Respectfully Submitted,


State Geologist.

Date of Examination

July 29th, 1905.