

FROM OFFICE.

REPORT ON

GEOLOGICAL SURVEY OF WYOMING
MINE.

THE . GERTRUDE

Owned by The Eagle Copper Company.

Principal office, 1608 Wazee Street, Denver, Colo.

Officers:

President, Geo. A. Nash, 1608 Wazee St., Denver, Colo.

Vice President, Virginia A. Nash, " "

Secretary, O.S. Ludwig, Battle, Wyo.

Treasurer, Geo. A. Nash.

Location, one mile east of Battle, Wyo. on the Encampment road in the
Battle Lake Mining District, Carbon County, Wyoming.

Name and address of Superintendent, O.S. Ludwig, Battle, Wyo.

Number of lode Claims, Two claims, containing forty acres.

Names of lode Claims, Gertrude and Ihex,

Placer Claims, None located. acres.

Mill Sites, None located. acres.

Total number of acres in group, Forty. acres.

Title, Patent applied for and receivers receipt for same now held.

Lien or encumbrance, None.

Title guaranteed by Not insured.

Nearest railroad station Walcott, on U.P.R.R. Distance, 65 miles,
in a north easterly direction. direction.

Reached by stage from Walcott via Encampment and Saratoga, Wyo.

Altitude at railroad station, about 7500 feet above sea level.

Altitude at main workings, " 9800 " " " "

Character of country rock is a schist of varying composition, sometimes much
altered and silicious with lime occasionally replacing the quartz.

Character of wall, foot wall is silicious altered schist, Hanging wall was
not accessible.

Character of veinThe vein matter as far as accessible showed a quartzose ledge matter strongly impregnated with iron oxides, hematite predominating both in the specular and hard silicious varieties. Some of this ore showed specks and stains of copper .

The vein dips south at a varying anglebut averages about 45degrees and strikes nearly east and west with the formation of the country as nearly as can be determined at the present time.

The loose surface wash on the claims is very heavy and renders surface prospecting difficult and little has been done.

The work on the group has been done in three shafts situated within a short distance of each other on the Gertrude claim. The first of these was sunk on the out crop of the ledge and followed the pitch of the vein to a depth of about 80 feet . This was abandoned and a vertical shaft sunk which cut the vein matter at a depth of about 90 feet and from which some drifting was done.

An unfortunate fire destroyed the shafthouse and shaft timbering at this point and the present working shaft was sunk to a depth of 50 feet but has not yet reached the vein matter.

Development, 3 Shafts ,	230	feet, size, 4' x 8'
Tunnel ,	_____	feet, size,
Cut ,	_____	feet, size,
1 Drift ,	100	feet, size,
Upraise ,	_____	feet, size,
Winze ,	_____	feet, size,
Stope ,	_____	feet, size,
Total development, _____	330	- lineal feet.

Ventilation, Natural. _____

Exits and fire protection. None employed. _____

Method of Ore Extraction, A bucket has been used for sinking in usual way.

Method of Timbering, The new shaft has been cribbed solid using squared timbers for the purpose; the other shafts have been abandoned.

Character of fuel, power and hoist, Wood fuel for generating steam power in the 10 and 20 H.P. upright boilers is used.

The hoist is a 20 H.P. 6x8 double friction hoist made by Thos. Crowe & Co. Denver, Colo, is new and in good repair.

The shaft house is a new corrugated iron building, size 20 x 40 ft well framed and in good repair. Two log cabins on the property give sufficient accomodation for eight or ten men.

Character of Pumps. A No.6 Jeanesville sinking pump is on the premises to be used in handling the water encountered and is sufficient for the work for some time.

Character of reduction works,

Capacity, tons per day. Average daily run, tons.
Average value, \$ per ton. Average per cent of extraction,
Average cost or smelter charges, \$ per ton.

The claims are very heavily wooded and fuel for some time may be readily and cheaply obtained here.

There are several large springs on the property and water for steam purposes may be had with little difficulty.

The cost of sinking is placed at \$12.00 per foot and five men are usually employed in the work.

The condition of the workings at the time of the examination did not permit a thorough study of the property as the main shaft was filled with water and the others unsafe owing to the water soaked condition of the ground usual in this country at this time of the year but a study of the surface conditions and other sources available indicate the mineralized condition of the vein matter similar to that found in the successful mines of this district.

This condition usually consists of a heavy cap or covering of iron oxides with some traces of copper which give place to iron sulphides as a depth is attained and finally give place to the copper ores of the region.

The fact that this condition is shown on this property and that copper ores have been found here indicate profitable returns from the work here.

It is unfortunate that the work done was not done in one place as it would have demonstrated the value of the property at once; the present plant however is of sufficient capacity to accomplish considerable development and with fair chances of success.

No assay samples were taken as the ore in place was not accessible and returns would therefore be misleading.

Henry C. Beecher

State Geologist.

Examined.

July-15-1901