REPORT ON FRESLAND MINE

by

Chas. A. Smith

May 8, 1933

Report furnished by W. L. Shaffer, Idaho Springs, Colo.

U. S. GOVT. DOCUMENTS

ARThUR LALES LIBRARY
COLORADO SCHOOL OF MINES
GOLDEN, COLORADO

Obtained copy from Colorado Bureau of Mines
REPORT ON THE FREELAND MINE

Mr. Chas. A. Smith,
Denver, Colorado.

Dear Mr. Smith:

Pursuant to your request I have just completed an examination of the Freeland Tunnel and an investigation of the Freeland Mining Property in general. I herewith submit to you my report.

LOCATION AND PROPERTY

The property consists of 111 patented Placer and Lode Mining Claims and mill sites. These claims are grouped in a rather compact area extending from about one-half mile east of the town of Dumont southwesterly for a distance of over two miles to the top of Alps Mountain. The group varies from one-half to one mile in width.

Alps Mountain is the site of many large mines of which the Freeland properties were the largest producers. Among the other large mines are the Stanley, Lamartine, Nattie, Gumtree, Stag, Falcon and Onieda.

TRANSPORTATION FACILITIES

Transportation facilities are most favorable from the property. The ore is trammed from the mines through an 8800 foot transportation tunnel to the mill or bins, both of which are within 200 feet of the Colorado and Southern Railroad track. The fact alone means a saving of thousands of dollars yearly as no long truck or wagon haul is required.

Colorado State Highway number 40 runs along the railroad track, enabling anyone to drive a car right to the property.

DEVELOPMENT

The development mentioned at this point is confined to the lower tunnel level. The development of the properties up on surface will be described under the heading of History.

The lower or transportation tunnel, is a cross-cut tunnel, entering the mountain about one-half mile east of Dumont and about eighty (80) feet above the bed of Clear Creek. The tunnel is about nine (9) feet high and varies from five (5) to nine (9) feet in width. It is in solid country rock practically all of its length and at only one point was timbering necessary. It is 7422 feet in length from portal to main vein, with about 2000 feet of drift on the Anchor and main veins. The drifting on the Anchor was limited to 300 feet west of the tunnel and 200 feet east of the tunnel. Four hundred (400) feet of this drift shows a fair grade of ore. A small amount of stoping was done on the Anchor but the stopes are not accessible at present. The main vein was drifted on for a distance of 1500 feet and some stoping was done. The amount of stoping may be seen from the map, showing vertical view of Freeland vein. The entire drift was driven on ore and from available settlement sheets produced $49,000.00 after freight and treatment charges were deducted.

A raise was driven on the vein for a distance of 200 feet. It was planned to continue this raise up to the lower levels of...
the old Freeland Mine. A distance of 900 feet remains to be
driven.

EQUIPMENT

The property is equipped as follows:

Tunnel equipped throughout with 24 pound rails,
Twenty-five (25) tram cars,
Two (2) hand cars,
One (1) timber trolley,
One (1) 40 ton mill,
Jigs, Tables and Float Machines
One (1) 100 H.P. hydro plant, connected to mill, blower and small compressor.
One (1) 360 cu. ft. Blaisdell compressor
One (1) large Connersville blower, Complete with 16" ventilation pipe throughout tunnel.
One (1) 250 H.P. Steam Plant.
One (1) steam compressor, 400 cu. ft.
One (1) steam compressor, 600 cu. ft.
One (1) small steam engine, about 15 H.P. high speed.
One (1) Stable
Two (2) Change rooms.
One (1) Blacksmith shop
One (1) Steam hoist (6" x 8"").

This equipment is ready for use with the exception of the Hydro plant. The penstock is old and must be replaced. This can be done for less than five hundred dollars ($500.00).

With this Hydro plant the power bill for the mine (using two machines) and mill for a period of two years was $2.50 per month. This cost was for lubrication.

VEINS

The Tunnel cuts several veins that should be prospected but we shall give our attention to those already drifted on. These, the Anchor and Main are true fissure veins both having good wells. The ore is composed chiefly of Quartz, Chalcopyrite and Galena. Some zinc is present but not in quantities great enough to bring a penalty. The Gold and Silver occur in these other minerals. About 75% of the values are Gold with Silver, Lead, Copper and Iron making up the other 25%.

CONDITIONS

The climate is such that all year work is possible. Being so near Idaho Springs (4 miles) the men live in town thus relieving the necessity of a boarding house.
The tunnel strikes the main vein about 2100 feet below the surface or about 1100 feet below the deepest workings in the old shaft. This fact shows that there is enough ore above the tunnel to last many years so that no sinking need be done. In working this ore, no hoisting or pumping of water is necessary. All the ore falls by gravity into the cars and is trammed to the railroad cars or the mill. Any water flows into a ditch in the tunnel and drains away by gravity. The saving on these two facts will amount to thousands of more dollars a year.

Every feature about the property is an advantage. The ore can be produced for less money than in any other mine in Clear Creek or Gilpin Counties.

The history of the properties go back to about 1870 to 1890. The mines were connected to the railroads by a steep, treacherous one-way wagon road. Mining was done by hand. Some concentrating was done but at best only 40% of the values were saved. All power was derived from steam, generated by burning wood. As years went by the wood supply was exhausted and coal had to be hauled up the wagon road. As the mines got deeper the hoisting costs increased and the water handling became a great expense. Finally the costs became so great that no profit could be derived. The mines were then shut down to await new developments for lowering costs.

The properties thus affected and now owned by the Freeland Group are as follows: The Freeland, developed by a 1,000 foot shaft and drifted 2,000 ft. on a continuous ore body. Proving to be one of the largest ore bodies in northern Colorado. Production over $4,000,000. During 1885-1886 the production ran from $20,000 to $50,000 per month.

The Toledo joins the Freeland on the north. It had an ore body 600 feet long and was developed to a depth of 200 feet. Production $130,000.

The Turner had one ore body 300 feet long and another 130 feet long. It was 300 feet deep and produced $300,000.

The Anchor was developed to only 100 feet in depth yet produced between $30,000.00 and $50,000.00

The Falu was developed to a depth of 200 feet and produced between $25,000.00 and $50,000.00.

These five mines now belong to the group and should produce millions in the future. The raise from the transportation tunnel to the Freeland shaft needs only 900 feet of work to connect. This entire distance should produce ore, thus greatly reducing the cost of the development work. At the time ore may be taken out at any of several places on the tunnel level.

CONCLUSION

I am completely satisfied that the Freeland property is one of the greatest in the state. It has every advantage. Most of the
costly development work has been done and now anyone with the financial backing and the nerve should be able to realize on the past investments. The mining, milling, transportation and smelting costs will be so low that a good profit may be realized from a very low grade ore.

It is due only to the fact that the present owners inherited the property and are not interested in mining that it is for sale, otherwise I do not believe it could be purchased for less than ten times this price.

I would not hesitate to recommend this property to anyone seeking a real investment. I believe it to be worth many times the price now asked for it.

Respectfully submitted,

(Signed) Chas. A. Smith, Jr.
Geological Engineer

May 8, 1933