

REPORT
on the
The Albion group of Mines
Ward, Boulder County
by
George B. Holden

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THE ALBION GROUP OF MINES
BOULDER COUNTY, COLORADO, U. S. A.
WARD, BOULDER COUNTY COLORADO.

My examination of this property was made under the special circumstance of obtaining a large mining property, with full assurance of its value for clients in the Eastern United States and Europe. The Albion group of mines is located 32 miles NW of the city of Boulder, Colorado U.S.A. and 60 miles NW of the city of Denver, Colorado. The city of Denver, Colorado is headquarters for mining machinery and is alive to the best and most modern devices for the recovery of values from any kind of metallic ores.

This district is well known to be one of the most productive in point of large tonnage of any district in the Rocky Mountain system. And is destined to become one of the treasure houses of the U. S. A. The Albion group of mines is reached by a fine automobile highway from either Boulder or Denver. This group consists of ten lode mining claims all of which are patented. Containing 46 acres together with the Minie S. Placer of 160 acres and 120 acres of first class timber land. The total area of 326 acres is located in a compact tract, with a large stream of water flowing through one side of the property having a fall of 300 feet and which will furnish plenty of power and electricity for any operation however large for both mining and reduction. This stream is fed by a system of 5 lakes which insure plenty of water summer and winter.

The vein system of the Albion group traverses a deep canon with precipitous mountains on the north and south sides some 2000 feet to 3000 feet above the canon itself.

The formation is Andesite with porphyry and serpentine dykes which cross this group in several directions, together with the true fissures that intersect at various points and have created enormous bodies of paying metallic ores.

A tunnel on the Arapahoe fissure has opened for some 300 feet a large body of pay ore. This claim is about 1000 feet above Lake Albion and is the highest in altitude of any of this group.

A tunnel on the Snowy Range fissure is driven 700 feet to the breast, and being in the center of the group both east and west carries the same fissure vein for 4500 feet from end to end and by open cuts and shafts it shows pay ore at every point. This fissure vein is in width from 4 to 6 feet and is most economical and easily mined of any vein on the entire property.

Paralleling the fissure vein south of the Snowy Range lies the Monarch fissure 60 feet apart, which has been cut by a shaft 100 feet in depth and the mill bins are full of ore from this vein. The vein is the same width as the Snowy Range and on the surface has been opened by three shafts and several open cuts.

The Albion fissure is the eastern extension of the Snowy Range fissure and carries the same vein and width as the Snowy Range.

On the surface of the Albion claims lie the foundations of a 50 ton per day reduction plant with ore bins, steam boilers and various material ready for completion. Just above the mill plant a shaft has been sunk 100 feet in depth with a cross-cut at 100 feet to the Monarch fissure. The shaft is well timbered and in the best shape for production. From these workings which include the Snowy Range fissure and the Monarch fissure 60 feet to the south there are 15,000 tons to 20,000 tons of ore now ready for production which show by assay and mill tests a net profit of \$10.00 per ton.

The Snowy Range ore shoot has been developed by a drift on the vein 700 feet in length. 500 feet on the vein has been stoped about 40 feet in height. This ore was run through a small mill and owing to poor management and machinery the mill saved only 40% of the values. There was shipped 480 tons of concentrates which with silver at 50¢ per ounce and lead at 50¢ per unit the concentrates showed a value of \$35.00 per ton. Even with this poor showing the operator made money and if he had lived was about to increase his production. A modern concentration and flotation plant will save from numerous tests 90% of the values instead of 50% and make a concentrate worth \$100.00 to \$150.00 per ton in value with silver and lead and copper at present prices. Crossing the main fissures of the Snowy Range and the Monarch and intersecting both lie the Eureka fissure - the Maine fissure - the Victoria fissure and the Bonanza fissure, all of which intersect the Snowy Range and Monarch fissures and carry a continuous pay streak of ore in the Snowy Range and Monarch fissures for 4,500 feet in length. The Eureka itself is developed by a cross-cut tunnel 260 feet in length with a drift on the vein of 80 feet in length. This vein has a good body of pay ore and also contains fine asbestos values. The Maine, Comanche, Victoria and Washington fissures all intersect the Snowy Range and Monarch fissures and carry good ore values and fine asbestos.

The Bonanza fissure is a wonderful body of ore. A shaft is sunk 50 feet in depth, all in ore with a width of 6 to 12 feet. Many tons of this ore can be seen at a point near the shaft. 700 feet south of this fissure is located an ore body 12 feet in width with surface values high in gold, silver lead and copper. The Bonanza also carries fine asbestos.

The Minnie S. placer is patented and covers all the ground between the various fissures.

The timber tract to the south has never been cut over and carries a large quantity of timber for all purposes. The highway runs through this tract of timber straight to the mines and mill, This is a most valuable asset to the property.

RECOMMENDATIONS:*

Carry the Snowy Range drift 400 feet to the west. Here is a large body of ore showing on the surface. Sink the shaft just above the mill to 300 feet below its present depth, drift on ore both east and west at each 100 feet in depth. Develop the Bonanza fissure by sinking a shaft and drifting on the ore south for 1000 feet. Build a 50 ton per day concentration and flotation mill at once as plenty of ore is now ready for milling and with above development many thousand tons of ore will be added to the ore reserves.

PRECIOUS METALS: GOLD AND SILVER

The present price of gold is \$35.00 per ounce and the prospective price of silver needs at the present time a special review of its value to the Radio Metals corporation on account of the fact that two-thirds of an ounce of gold and 16 ounces of silver can be recovered on an average from any of the veins and fissures on the company's properties. These two metals alone will give the company a net value of \$32.60 per ton.

The immense amount of lead, copper and other metallic values in addition to the above will bring the average value of the crude ore on the company's holdings to \$45.00 to \$50.00 per ton. The enormous tonnage available of this average quality of ore makes a highly profitable, long lived and a wonderful dividend for the fortunate holders of bonds and stock of this corporation.

HISTORY AND PRODUCTION

The Snowy Range Mining district was organized in the early days by miners and prospectors then seeking placer gold and surface bonanzas.

The Albion District has been endowed by Mother Nature with enormous deposits of rich minerals with excellent commercial values. The existence of valuable shipping and milling ores was discovered in the late 90's by a group of Scotchmen, who partially developed the property. It was finally purchased from them by the Cashier Mining Company and a small concentrating mill was erected, although complete production records are not available, reliable sources of information have indicated that a good ore out-put was enjoyed.

We have smelting records which show that during the first ten months of 1909 there were shipped between 400 and 600 tons of ore and concentrates approximately 40% of the ore values. Owing to the sudden death of the operator work was discontinued.

ASBESTOS:

The serpentine dykes intersecting the fissures carry asbestos in both dykes and fissures. 3% to 5% asbestos is available before starting to concentrate metallic values. These values alone will pay all expenses of mining and reduction, leaving metallic values free of expense. By reason of the fine water power for mine and mill use the expense of mining and milling should not be over \$1.00 to \$1.50 per ton. This Group of mines is now ready to start and with the water power developed, a continuous and profitable undertaking is assured for many years. I know of no mining property that will compare with the Albion group if developed with good judgement and management.

RESPECTFULLY SUBMITTED.

(Signed) Geo. B. Holden M. E.

WARD COLORADO. January 30th 1934

Messrs Worth & Howell
Fort Collins, Colorado.

Gentlemen"-

We send you herewith a list of the various carloads of concentrates shipped from the Albion properties. There are a number of other cars of the same values shipped but we are unable to trace the car numbers and tonnage of the same.

Shipped during the year 1909.

<u>Month</u>	<u>Car Number</u>	<u>Tons</u>	<u>Lot No.</u>	<u>Values.</u>
January	5051			\$ 459.04
February	8017			\$ 527.59
March	12089			\$ 382.34
"	5985			\$ 324.89
"	95380			\$ 299.39
April	5093			\$ 397.08
"	12326			\$ 289.77
"	8270			\$1144.78
"	5746			\$ 322.11
"	5065			\$1016.99
"	95130			\$ 295.10
May	13510			\$ 457.53
"	33791			\$ 693.87
"	33433			\$ 306.00
July	21137	11.93	21	No record
August	34111			\$1103.41
"	60361	18.27	22	\$ 790.81
"	13324	18.48	23	\$ 332.45
"	6148	18.39	24	\$ 162.53
"	108640	11.92	25	No record
September	12797	17.90	26	\$1118.46
"	14947	17.87	27	\$ 363.51
"	2896	17.80	28	\$ 771.61
"	13330	16.86	29	\$ 361.70
"	5369	15.72	30	\$1224.68
October	5414	21.20	31	\$ 656.66
"	"		32	\$ 618.81
"	6214	18.64	33	No record
"	30437	18.42	34	\$ 492.51
"		13.86	35	

Respectfully yours

(Signed) Geo. B. Holden
Aaron L. Varney

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