

SUPERINTENDENT TATE'S REPORT.

The following official correspondence reporting upon the condition and prosperity of the Deseret Gold and Silver Mining and Milling company is published for the reason that some of the News readers are heavy stockholders in the concern, and that it has been requested by some of the officers of the company:

MARYSVALE, Dec. 14, 1892.

To the Board of Directors of the Deseret Gold and Silver Mining and Milling company:

Gentlemen—I beg to submit the following statement of facts of the work done by the company under my supervision, and the present condition of the company's properties:

The company own eleven mining claims, one good mill site and a town site. The Branch, Elsie, Dalton, Mary, Hill Side and Big Fraction form a group of claims on the north slope of the mountain, and on the south side of Pine creek and near the county road. The Calico, Galena and Lucy Morrish lay to the southeast of the Branch and on the same slope.

The Branch mine is a large fissure which shows at places where it has been crosscut, to be fully forty feet wide, between well defined walls. The strike or course of the ledge is nearly north and south, with a strong, bold outcrop traceable for more than a mile. The inclination or dip of the ledge is to the east about eight degrees. The formation is quartzite, porphyry and trachyte. Ore veins show along the surface in this outcrop of the ledge which assays from \$10 to \$100 in gold and silver per ton. The Elsie, Branch and Mary are on this same ledge, making about 4000 feet of ground on this valuable lode belonging to the company.

My work for the company, for the year ending with this month, has been in developing the Branch mine, one of the many promising mining claims owned by the Deseret company. Mainly the work of opening the mine has been done by adit levels. The position of the hill being favorable, adit levels driven in on the ore was the most economical way to do the work. Five tunnels have been driven on the ledge, including the main or working tunnel at the foot of the hill. The main tunnel, or tunnel No. 1, has been driven in 490 feet. Tunnel No. 2, ninety feet above No. 1, is in 150 feet and connected with No. 1 by shaft and also connected by shaft with tunnel No. 3. Tunnel No. 3 is in 50 feet; tunnel No. 4 is in 90 feet; tunnel No. 5 is in 87 feet. All of the tunnels have been driven in on ore. In the upper tunnels, Nos. 3, 4 and 5, the ore vein is regular and is from twelve to twenty-five inches in width, and is good quality, assaying from 10 to 300 ounces in silver and from \$5 to \$100 in gold to the ton. In addition to this vein of ore partially opened by the tunnels 3, 4 and 5, there are three other veins of ore in the outcrop of the ledge. One of them nearest the west wall of the ledge is 12 inches in width, which shows an average assay value of \$50 in gold and silver per ton. Between this vein and the one opened by the tunnels 3, 4 and 5 there are two strong veins of ore, each two feet in width.

The average assays from these two veins of ore run 20 ounces silver and \$5 in gold. These ore veins are well defined and separated by quartz, more or less impregnated with manganese of iron. It has been demonstrated by the work in the main tunnel, or tunnel No. 1, that these four ore veins have concentrated into one large ore vein. This verifies Prof. Clayton's opinion, who made a very good report on this property. To further quote his report, he said the ore was split or stratified on top; that in depth the ore would concentrate in one ore body and when water level is reached high grade ore would be encountered, and I believe this is Mr. Harkness' opinion also. On Dec. 20, 1891, the tunnel at the foot of the hill known as tunnel No. 1, was started. The first 100 feet was driven through debris, then 90 feet through trachyte, then through porphyry casing, and broke into the ledge. A small vein of low grade ore was encountered when into the ledge a short distance. At a distance of 250 feet from the mouth of the tunnel we encountered ore that sampled from \$8 to \$20 in gold and silver per ton. At a distance of 300 feet it, the ore had increased in width, and was considerably wider than the face of the tunnel. At 360 feet in, I ran a crosscut towards the east wall to ascertain the width of the ore, which proved to be seventeen feet wide. An average sample of the ore showed thirty-two ounces silver and \$1 in gold per ton. At a point 300 feet from mouth of tunnel an uprise was run through to tunnel No. 2, 90 feet; this uprise was driven through ore from two to three feet in width, all the way from No. 1 to No. 2 tunnel. This ore vein will average 40 ounces silver and \$5 in gold per ton. The main tunnel was driven 130 feet from the point where we crosscut to the east wall, and at that point, near the face of the tunnel, I ran a crosscut to the east wall. We cut through six feet of ore, lying next to the hanging wall. A sample taken across the ore assayed 42 ounces silver and 20 per cent. lead. At a point 360 feet in, where the crosscut was made to the east wall, I have had a shaft sunk on ore to a depth of 60 feet. This ore carries a good percentage of copper. We are now crosscutting to the west wall from the bottom of this shaft, and yesterday broke into hard gray ore similar to some of the ore in tunnels 3, 4 and 5. I cannot as yet tell the extent of this new strike; I think you will agree with my opinion that it is an important strike, as we have a strong body of ore going down, and we are more than 400 feet from the surface croppings, with ore continuous throughout the workings. Several old practical miners who have seen this property say that it is the best mill proposition they ever saw. There is such a large quantity of ore in sight, and the facilities for working the mine could not be better. An average of four or five tons a day to the man can be taken out in stopping, and the ore can be dropped through chutes to the main tunnel and moved at a very small cost. Few mines have such advantages with a good mill site right at the mine. A mill could be built where the ore can be dumped into the mill from the mine, saving the expense of hauling the ore. There is an abundance of good mining timber on the mining claims owned by the company near by, and there is a

good stream of water the year round within 300 feet of the Branch mine.

I estimate there is 150,000 tons of ore in sight in the Branch mine, which will average \$40 in gold and silver per ton. A good plant for the working of this ore is a fair proposition, and with proper management the property would soon be paying dividends. In addition to the Branch, the Elsie, Dalton and Mary, adjoining the Branch, would yield considerable ore from developments already made, and the Calico, when opened a little more, will prove to be a valuable mine, and greater producer, and the Lucy Morrish in the near future will prove to be a very valuable claim, as there has been found recently some of the richest gold quartz that has been discovered in this country, near the Lucy Morrish side line. After examining the ground thoroughly, I am convinced the gold vein, although covered with debris, will be found crossing through the Lucy Morrish claim. I will call your attention to the fact, that the Bully Boy & Webster mines, with the same quality of ore as that in the Branch, Elsie and Mary, has been paying for the past three years because they had a mill to work their ores here. The superintendent, Mr. Ferguson, told me he could not run the mine without the mill, and the cost of mining and handling the Bully Boy & Webster ores, was much greater than it is with us in working the Branch. With such a large amount of ore already in sight, and which, as the work of exploration and development advances, will prove to be immense in the extensive properties owned by the company, it should not be difficult to raise ample funds to prosecute the work and to erect a large plant, capable of working fifty or sixty tons a day, with which, in a few months' run after starting, a dividend of two or three cents a month on every share of stock could be declared. I have had twenty-seven years practical experience in mining, and am known by a number of mining men in Salt Lake City, Park City and Bingham, and I stake my reputation as a miner on the correctness of this statement, every item of which I stand ready to verify to the satisfaction of any expert the company may choose to send down to examine the properties. In conclusion I would recommend that the company, by all means drive the main tunnel ahead, and if it is in their power, to erect a plant for the working of the ores.

Very respectfully yours,

D. C. TATE,

Mining Supt. of the Deseret G. & S. M. & M. Co.

After reading the above report from Supt. Tate, I cheerfully endorse his conclusion as to the great value of the Deseret company's properties, and as a mill proposition it is one of the very best I have ever seen in my mining experience covering more than twenty years. Last June, as a mining expert, I made a thorough examination of all the claims, lodes, veins, outcroppings, tunnels, shafts, ore bodies, mill site, dumping grounds, mining timber, water power, mining supplies, etc., belonging to said company, and must say I never before saw as fine and promising group of properties surrounded with so many and such great natural