

present opened by five cuts, not following up the grade of the old channel, but cutting through the outer rim rock. As the old channel is 85 ft. above the modern stream at the junction of Berry Creek with Thibert Creek, where the work has been carried on, and the valley of the latter creek is between 300 and 600 ft. wide, it gives a splendid grade for the cuts and ample room for the tailings. The sluices in the cuts are 5 ft. wide, lined with 8-in. wooden blocks, are set on a grade of 9 in. to 12 ft., and vary in length from 100 to 225 ft. The giants and water gates are so placed that the water can in a few minutes be turned from one cut to another.

"Buildings.—The following buildings have been erected at the mine: General storehouse, frame, 20 by 16 ft.; boarding house, frame, 20 by 16 ft.; kitchen, frame, 10 by 10 ft.; office, frame, 12 by 14 ft.; house, log, 16 by 12 ft.; house, log, 16 by 14 ft.; two frames for men's sleeping tents, 20 by 16 ft.; blacksmith shop, and cellar. These accommodations are sufficient for the present working crew of 25 to 30 men.

"Sawmill.—On Dease Lake, 8 miles from the mine, the company owns a sawmill site of 40 acres, with about 50,000 ft. of standing timber. Beside this, there is plenty of timber around the lake which can be cheaply put into the water and towed to the sawmill. There are also: Sawmill; capacity from 4,000 to 5,000 ft. per day, 20-h.p. pipe boiler, 15-h.p. engine, with all necessary tools and fittings, and all properly housed.

"Labour.—The scale of wages at the mine is as follows: Foreman, \$5; pipers, \$4.50; blacksmith, \$4; carpenter, \$3.50; labourers, \$3; to which must be added \$1.25 per day for each man's board. Men brought from Victoria receive 50 cents per day less than this scale, as the company has to pay the cost of their transportation. The price of ordinary labour can probably be cheapened by hiring Japanese, or men from Eastern Canada.

"Freight.—The Hudson's Bay Company has had the handling of the company's freight for the last three years at 11 1-2 cents per lb. from Wrangel to the mine. This can probably be cheapened from 2 to 3 cents per lb. by the Berry Creek Company being prepared early in the season to enter into a fairly large contract.

"Working Season.—Preparatory work on the mine is commenced some time in April, and washing can usually be begun on May 10, and be continued until about October 20. If everything is in readiness for the spring work so that no time is lost, this will give from 150 to 160 days, 24 hr. per day, for washing gravel.

"Former Mining Operations.—The total output of gold has been \$41,500, or about 9 3-4 cents per cu. yd., but it must be remembered that so far a larger proportion of top to bottom gravel has been washed, and if an equal amount of the two had been worked the result per cu. yd. would fully have come up to 13 cents. It may be of interest to note that former miners, who worked with a canvas hose, washed out certainly not more than 100,000 cu. yd. of gravel which yielded over \$80,000. Only during 1903 has

it been possible to arrive at a correct estimate of working costs for washing gravel, for during the other years the washing has been too intermittent, and mixed up with other work. In that year the mine was, as shown before, operated 98 days with 475 in. of water per 24 hr., and the total working expenses for the whole year were \$17,400 in which was included a certain amount of new development work and all salaries, government fees, etc."

The report of the mine manager, D. R. Irvine, for the 1906 season has just been received. From this it is learned that during last winter the foreman, who was left in charge of the property, cut and hauled 3,000 rifle blocks for sluice boxes, and that 30,000 ft. of lumber was hauled from the sawmill on Dease Lake to the mine and sites of new ditches. With four men the foreman had all preliminary work requisite for the season's operations completed early in May, on the 9th of which month piping was commenced, working one shift with five men. Warburton Pike arrived from Victoria with three men on May 22, and on June 17 others came in with the manager, the latter party having been unavoidably detained *en route*. The report continues:

"The first work done after water was turned on in May was to wash down the ridge of gravel between pits 1 and 2. It was decided to abandon No. 1 pit at once. There was no dump left and the rock cut was continually being undermined and falling in, endangering the main pipe line, which crosses it. By the beginning of June the ridge between the two pits had been cut down to bedrock and No. 1 machine moved forward into No. 2 pit. A very large amount of dirt was moved in cutting down this ridge, the greater part of which was top soil and gravel. The best of the bottom paystreak line was found to have been worked out by the early placer miners some 20 years ago.

"The total number of 24 hr. days run during the season was 109. This was divided between the different pits as follows: No. 2 pit, 50 days; No. 3, 21 days, 19 hr.; No. 4, 17 days; No. 5, 20 days, 5 hr.

"The total value of gold recovered was \$21,750. This gives an average of about \$200 for each day run.

"There were three clean-ups from No. 2 pit. The first was on July 8, after running for 23 days, 7 hr. This included 15 days in May and early June, when the top gravels and partly worked-out bottom gravel and cement between pits 1 and 2 were removed, and when there were no men available to handle boulders, so that only the lighter gravel and mud reached the boxes, leaving only 8 days, 7 hr. run with a full crew of men.

"The value of the gold saved from this clean-up was \$4,000, giving a return per day's run of \$170. A large amount of top gravel which came down in the big cave last autumn had to be moved before the lower gravel and bottom cement was reached, and out of the 23 days' run there were not more than five days in which this bottom ground was moved.

"The next clean-up in this pit was on August 14, after 12 days' run, when \$5,400 was recovered, giving a daily average of \$450. Very little top gravel was