| | | |
|---|---|---|
| Miscellaneous provision stores, mining supplies, hydraulic Plant, etc | $42,783 81 | |
| Explosives | 20,764 59 | |
| Blacksmith stores | 1,724 63 | |
| Quicksilver | 2,644 60 | |
| | | $67,917 63 |
| Horses | $ 1,192 00 | |
| Wagons, sleighs and harness | 2,109 92 | |
| Saw logs, lumber, flats, fuel, sluice blocks, etc. | 7,943 74 | |
| Tools and implements | 15,557 40 | |
| | | 26,803 06 |
| Total as per inventories | | $94,720 69 |

*Water Supply.*—The quantity of water available for use during season of 1903 was 52,437 miner's inches less than the quantity of water used during season of 1902, 131,167 miner's inches less than the quantity of water used during season of 1901, and 333,795 miner's inches less than the quantity of water used during the season of 1900.

**Precipitation for season 1902**.....23-40/100 inches
**Precipitation for season 1903**.....17-48/100 "
**Less than precipitation for season 1902**..... 5-92/100 "
**Quantity of water available and used during season of 1902**.....179,520 miner's inches
**Quantity of water available and used during season of 1903**.....127,083 " "

The winter snowfall turned out again below the average for the district and fell 26 67-100 inches short of that reported for 1902. The spring and summer rains turned out also below the usual averages and fell 1 41-100 inches short of the precipitation reported for season of 1902.

The snow went off during the months of April and May under the most unfavourable weather conditions, *i.e.*, moderately warm days, cold nights accompanied with northerly winds and contributed but a small percentage of its water to the reservoir lakes. The unusual shortage in precipitation, together with the unfavourable weather conditions under which the snow went off, accounts for the shortage in the season's water supply.

SUMMARAY OF MINING OPERATIONS FROM THE TIME OF COMPLETION OF WATER SUPPLY SYSTEM IN 1898.

| YEAR. | Precipitation in inches. | Water used in Miner's inches. | Time Run. | Cubic Yards Gravel Washed | Product |
|---|---|---|---|---|---|
| 1899 | 28-65/100 | 353,056 | 144 days, 8 hours | 1,952,535 | $92,678 93 |
| 1900 | 30-67/100 | 460,878 | 171 " 13 " | 1,843,938 | 350,085 77 |
| 1901 | 20-30/100 | 258,250 | 104 " 13 " | 2,420,288 | 142,273 41 |
| 1902 | 23-40/100 | 179,520 | 65 " 15 " | 690,442 | 61,395 19 |
| 1903 | 14-48/100 | 127,083 | 53 " 7 " | 373,000 | 44,943 70 |

By reference to reports for 1899 it will be noted that the season's operations were confined, mainly, to cleaning out the deposits of boulders and debris left in bottom of old Chinese workings, and the low grade deposits of gravel and volcanic mud lying on the rims north and west of said old workings, which accounts for the light product, in proportion to the quantity of water used.

The precipitation for season 1900 was 30 67-100 inches, and made, with the 100,000 inches carried over from 1900, 480,878 miner's inches of water available for use, a quantity exceeding the estimated holding capacity of the reservoirs, aggregating 470,370 miner's inches, as shown by the following table that accompanied the Hydrographic Map prepared in 1897.

TABLE OF WATER SUPPLY.

| WATER SHEDS | | | | RESERVOIRS. | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | AREA. | | | DEPTH | TOP AREA | | BOTTOM A. | CONTENTS. | |
| LOCALITY. | Sq. Ft. Mil'as | Acres | Sq. Mile | | Square Feet | Acres. | SQUARE FT. | Million Cu. Ft. | 24 Hr. Min. Inch |
| Polley's Lake | 337 | 7,736 | 12 09 | 8 ft. | 40,660,000 | 933 | 35,400,000 | 304 | 140,741 |
| Bootjack Lake | 174 | 3,995 | 6. 24 | 6 ft. | 27,500,000 | 631 | 26,500,000 | 162 | 75,000 |
| Main ditch below Hazeltine | 352 | 8,081 | 12 63 | | | | | | |
| Main ditch above Hazeltine | 155 | 3,558 | 5. 56 | 33 ft. | 27,000,000 | 620 | 8,000,000 | 550 | 254,629 |
| Dancing Bill | 79 | 1,814 | 2.83 | | | | | | |
| Morehead Lake | 460 | 10,560 | 16. 50 | | | | | | |
| Little Lake above Morehead Ditch | 99 | 2,273 | 3. 55 | | | | | | |
| TOTALS | 1,656 | 38,017 | 59. 40 | | | 2,184 | | 1,016 | 470,370 |
| Little Lake below Morehead Ditch | 95 | 2,180 | 3 41 | | | | | | |

By reference to Annual Report for 1901, and Section No. 4 on the longitudinal section accompanying this report, it will be noted that the intrusion of an immense deposit of slide rock replaced a large area of high-grade gravel and reduced the average yield of the ground. This condition, together with the light precipitation and short water supply, accounts for the reduced product for the season.

The short water supply and inclusion of large deposits of slide rock in the lower bench accounts for the light product for the seasons of 1902 and 1903.

The tables indicate that the gold product is dependent mainly, upon copious precipitation and a water supply ample to operate the mine full time with at least 2,500 miner's inches of water during the open season, including a period of about six months, commencing on or before May 1st and ending on or about November 1st.

It is, therefore, evident that the precipitation must return to what it was prior to 1894, as reported by government agents and old settlers, varying each season, with few exceptions, from 30 to 40 inches annually, or the company's catchment canals must be extended to control a much larger area of watershed, or to some stream affording an abundant and permanent flow of water throughout the open season. Surveys are now under way to determine the possibility and probable cost of extending the company's system to a source that will insure an abundant and permanent water supply that will be ample to carry operations over seasons of light precipitation.

The heavy precipitation recorded for September ultimo,