

The light gold output may be laid to the short water supply, the working time lost in removing large masses of slide rock, encountered while carrying the workings up stream, and excavating cuts for advancement of sluice branches.

SUMMARY OF THE SEASON'S MINING OPERATIONS.

Total time occupied in washing in Pit No. 1.....	53 days, 7 hours
Total quantity of water used.....	127,083 miner's inches
Quantity of gravel, clay and rock washed :	
Gravel from Third Bench.....	248,000 cubic yards.
Gravel from Main Bank.....	44,000 " "
Slides from rims of old workings and Indurated Volcanic Mud.....	68,000 " "
Bed Rock Slide.....	12,000 " "
Total quantity washed.....	372,000
Average duty of water per miner's inch.....	2.8% cubic yards
Gold product for season.....	2,639.09 Troy ounces
Value of Gold.....	\$44,943.70

The receipts and expenditures attending the operation of the company's mines for the season will be found distributed in detail in the following statements :—

MINE OPERATING EXPENSES, 1903.

EXPENDITURE.

Mining Account :—

Mining.....	\$18,330 22
Excavation for Sluices	8,703 00
	<u>\$27,033 22</u>

Explosives :—

Mining.....	\$7,418 15
Excavation for Sluices	7,120 00
	<u>\$14,538 15</u>

Sluice Maintenance and extension.....	9,449 80
Portable Hydraulic Plant Maintenance.....	37 33
South Fork Ditch Maintenance.....	2,870 28
Morehead Ditch Maintenance.....	2,815 84
Camp Maintenance.....	1,189 59
Mine and Camp Light Maintenance.....	398 46
Wagons and Harness Maintenance.....	144 07
Telephone Maintenance.....	77 57
Prospecting Account.....	729 22
Stationery and Printing.....	283 47
Postage and Telegraph.....	134 34
Incidental Expenses.....	11 40
Lands and Leases, (Lease Purchases, Rentals, etc.).....	5,267 30
License Account (Free Miner's Certificates).....	110 00
Fire Insurance.....	803 00
Travelling Expenses (Transportation of Miners, etc.).....	6,039 87
Mine Office Expenses.....	1,307 00
Bullion Expenses (Royalty, Insurance, Transportation, etc.).....	1,633 24
Management.....	5,228 18
Stable Expenses.....	628 85
Tools and Implements—Loss for Season.....	288 70
Horses Account " ".....	190 00
Quicksilver Account " ".....	242 69

Total Operating Expenses for season.....\$81,451 57

RECEIPTS FOR SEASON 1903.

Gold Product for Season.....	\$44,943 70
Profit on Stores sold.....	2,123 19
Total Receipts for season.....	<u>\$47,066 89</u>

INVENTORY.

There is on hand at the Company's Stores and Mines, as per Inventory made August 5th, 1903 :—

Miscellaneous Provision Stores, Mining Supplies, Hydraulic Plant, etc.....	\$42,783 81
Explosives.....	20,764 59
Blacksmith Stores.....	1,724 63
Quicksilver.....	2,644 60
	<u>\$67,917 63</u>
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
	<u>26,803 06</u>
Total as per Inventories.....	<u>\$94,720 69</u>

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
" " 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 26.1% inches short of that reported for 1902. The spring and summer rains turned out also below the usual average and fell 1.1% inches short of the precipitation reported for season of 1902.

The snow went off during the months of April and May under the most unfavorable 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 unfavorable weather conditions under which the snow went off, accounts for the shortage in the season's water supply.

SUMMARY 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 Yds. Gravel Washed.	Product.
1899	28-65/100	353,056	144 days, 8 hrs.	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	17-48/100	127,083	53 " 7 "	373 000	44,943 70

By reference to Report for 1899 it will be noted that the season's operations were confined, mainly, to cleaning out the deposit 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 30.1% 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.

WATERSHEDS				RESERVOIRS				CONTENTS.	
LOCALITY	AREA			DEPTH	TOP AREA		BOTTOM A SQUARE FT.	Mil-lion Cu ft.	24 Hr Min. In.
	Sq. Mi.	Acres.	Sq. Mile		Sq. Feet.	Acres			
Polly's Lake.....	337	7,736	12.09	8 ft.	40,660,000	933	35,400,000	304	140,741
Boothack Lake.....	174	3,995	6.24	6 ft.	27,500,000	631	26,500,000	162	75,000
Main Ditch below Hazeltime.....	352	8,081	12.63						
Main Ditch above Hazeltime.....	155	3,558	5.56	33 ft.	27,000,000	620	8,000,000	550	254,620
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 that 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