so that the run was only 53 days and the gold recovery $44,944. The 1904 season is reported to have resulted in a recovery of about $90,000. The run was 83 days, so that an average of more than $1,000 per day was obtained. One of the directors of the company visited the mine last season, and before his return to Toronto he was reported to have told an interviewer that in his opinion the company will have to spend $200,000 or $250,000 more to secure an additional water supply needed, and thought it probable this outlay would be provided for.

There are other hydraulic enterprises in the Quesnel section, but no information has been received concerning them. It is reported that dredging is to be tried on Horsefly river. Reports were published last autumn of new placer diggings having been found on one of the upper branches of the Horsefly, but there could not have been much gold obtained there or by this time more would have been heard about it.

MINERAL PRODUCTION IN 1904.

(By E. Jacobs.)

THERE does not seem to be any room for doubt that the mineral production of British Columbia in the year 1904 reached the highest total value of any year in the history of mining in the province. In 1901 the total was $20,086,780, but in both 1902 and 1903 it was a little short of $17,500,000. A carefully prepared estimate of the year just closed gives a total of about $21,000,000.

The value of the several minerals produced, calculated at New York average prices for the year less the usual deductions, is, approximately, as under. The corresponding figures for 1903 are shown for purposes of comparison:

	1903.	1904.
Gold—Placer	$1,060,420	$1,141,000
Gold—Lode	4,812,616	5,123,000
Total Gold	$5,873,036	$6,264,000
Silver	1,521,472	1,898,000
Copper	4,547,535	4,540,000
Lead	689,744	1,415,000
Zinc and Iron	.....	100,000
Total Metallic	$12,631,787	$14,217,000
Coal	3,504,582	5,004,000
Coke	827,715	1,362,000
Building materials	531,870	550,000
Totals	$17,495,954	$21,133,000

(Note.—Zinc and iron, if any, in 1903 were included in total of building materials, etc.)

Production by districts was as follows:—

	1903.	1904.
Cariboo	$ 475,200	$ 500,000
Cassiar	480,368	520,000
East Kootenay	1,951,128	4,813,800
West Kootenay	6,489,981	6,266,600
Lillooet	31,283	25,000
Yale	3,707,552	4,025,900
Coast (Mainland, Vancouver Island, etc.)	3,819,572	4,431,700
Miscellaneous	531,870	550,000
Totals	$17,495,954	$21,133,000

Quantities of minerals produced are shown in the following table:—

	1903.	1904.
	ozs.	ozs.
Gold—Placer	53,021	57,050
Gold—Lode	232,831	256,135
Total Gold	285,852	313,185
	lbs.	lbs.
Silver	2,996,204	3,505,805
Copper	34,359,921	36,088,580
Lead	18,089,283	37,000,000
	Tons.	Tons.
Coal	1,168,194	1,668,000
Coke	165,543	272,400

An examination of the figures in the first of the foregoing tables shows that gold increased $390,000 (placer $80,000 and lode $310,000), silver $377,000, lead $725,000, coal $1,500,000, coke $534,000 and miscellaneous minerals $118,000, while copper lost $7,000. In view of the fact that more than $2,000,000 of this gain of $3,600,000 was made by coal and coke, it is plain that much of the improvement is largely attributable to increased production of coal, and not solely to the adventitious aid given by the granting of the lead bounty, though that certainly has contributed to an important extent by increasing the output of silver-lead ores to the advanced position now occupied by mineral production.

In lode gold, copper, coal and coke, the quantity produced in 1904 was not reached in the province any previous year, but in placer gold and silver some years have seen a much larger quantity, while in 1900 and 1901 lead largely exceeded the output of last year.

Gold.—The increase in placer gold came from the Cariboo and Quesnel divisions of Cariboo district, and from the Atlin division of Cassiar. At Quesnel, the Consolidated Hydraulic Company recovered about $90,000 as against less than $45,000 in 1903, while the estimate for Atlin shows an increase of $60,000, which is much below some estimates made by mining men down from that field for the winter. Much of the increase in lode gold is credited to the Similkameen, where the owners of the Nickel Plate mine and mill joined the producers last year.

Silver.—The increase in silver came from East Kootenay, the St. Eugene mine, after three years' idleness, having resumed operations, consequent on the granting of the lead bounty. Its silver output was about 540,000 ounces. A larger production of this metal by the Slocan mines was looked for, but various reasons prevented this expectation being realized. The Silver Cup Mines, Ltd., started its silver mill late in the spring, and produced an appreciably large quantity of silver from dump ores, which took the place of production from ores of higher grade shipped the previous year to the smelters.

Copper.—There was an enlarged output of copper both in the Boundary and on Vancouver Island. The increase in the former district was not proportionate to the larger tonnage of ore smelted, showing that the low costs of mining and smelting there are admitting of ores of even lower grade than heretofore being mined and smelted. On Vancouver Island the Tyee Copper Company's works at Ladysmith were kept going nearly all the year, but those at Crofton were shut down early in the spring for lack of ore to treat. The Island smelters feel keenly the effect of the competition of the smelter at Tacoma, Washington, which has for some time past had contracts with British Columbia coast mines that take away from the local works a tonnage of ore that, had they it, would do much to keep them running the year through. The average price of electrolytic copper in 1904 was about 12¾ cents, as against nearly 13¼ in 1903.

Lead.—The tonnage of metallic lead—about 18,500 tons—falls far short of that anticipated as a result of the granting of the bounty of $15 per ton on lead mined and smelted in Canada, up to an annual output of 33,000 tons. This, however, is chiefly attributable to the unusually dry season and the consequent shortage of water, which prevented the concentrating mills from being operated more than about half time. The output of the St. Eugene mine alone would, under ordinary conditions in this respect, have made up more than half this deficiency, which is not expected to occur in 1905.

Zinc.—The mining of zinc is at last becoming practicable at a profit. It occurs in the Slocan mines in large quantities, freely intermixed with lead, so that the mining of these two