ANNUAL REPOR'.

1898 to 1903 INCLUSIVE.

CARIBOO-AMELIA MINERAL CLAIMS. (1898).

These two claims formerly owned by the Cariboo Gold Mining and Milling Company, of Spokane, have now passed into the possession of the Cariboo Consolidated Gold Mining and Milling Company, of Toronto, Robert Jaffery, President; Geo. B. McAuley, Mining Director, with head offices at Camp McKinney. Capital stock, \$1,250,000.00, in 1,250,000 shares of \$1.00 each, now quoted at \$1.25. In addition to the Cariboo and Amelia, the present company own the Alice, Emma, and Maple Leaf claims to the west, and the Saw Tooth Fraction, and the controlling interest in the Okanagan claim to the east. The work of the company is at present confined to the Cariboo and Amelia claims, and Superintendent Keane gives the following as the result of the year's work; 7,530 tons of ore crushed, 11,000 ounces of bullion produced; value \$12.00 per oz., \$132,000. Two hundred and sixty tons of concentrates produced, value, \$80 per ton, \$20,800. The mine development consisted of 950 feet of drifting in the fourth level, and two upraises, of 85 feet each, to the third level. The fourth level is 250 feet below the surface at shaft. The shaft is now being sunk to the fifth level, which will be 350 feet below the surface when completed. Up to October 1st, 10 stamps were in operation, since then 20 stamps. The mine is equipped with steam pump and hoist and compressor drills, and the mill with a Gates rock drusher and Wilfley and Johnson concentrators. There-are between 50 and 60 men on the pay-roll

THE CARIBOO. (1899).

The Cariboo-McKinney Gold Mining and Milling Co. Ltd. owns the Cariboo and other claims. R. Jaffray is president, and G.B.McAulay managing director. The year's work consists of drifting on the second level for 210 feet, on the third level for 540 feet, and on the fourth level for 700 feet, a total of 1,450 feet. Raises have been made from the second level 155 feet, third level 170 feet, and from the fourth level 200 feet, a total of 525 feet.

Output:-

Number of stamps working, 20; number of men employed, 50.

CARIBOO-MCKINNEY. (-1900).

The Cariboo-McKinney Mining and Milling Company, of Toronto, Ontario, continues to be the only company operating on a comparatively large scale in this camp. It owns the Cariboo, Amelia, Okanagan, Saw Tooth, Alice, Emma, and Maple Leaf mineral claims, all of which adjoin. From official reports submitted to the annual general meeting of shareholders held recently in Toronto, the following information is taken:-

During the past year there were mined and milled 15, 238 tons of ore, which yielded 11,469 ozs. of gold bullion and 557 tons of concentrates. This ore was taken for the most part from the Saw Tooth and Okanagan claims. The mining of ore was largely in conjunction with the further exploration of the mine, consequently a considerable portion of the year's output was of ore extracted from drifts and raises opened up in the course of the development, which was carried on, to the east, on the Okanagan and, to the west, on the Cariboo. Development of the property included 4 shafts, the main shaft being 370 feet in depth. Owing to extended breaks in the continuity of the vein, both east and west of the various levels, the contemplated increase in the capacity of the Company's stamp mill was not made. To reduce the cost of exploration of ground beyond where the ledge was broken, boring with a diamond drill was resorted to, and this was in progress on the date of the shareholders' meeting. The erection of a cyanide plant for the treatment of the tailings, systematic tests of which showed them to contain values of from \$2.20 to \$4.80 per ton, is favoured by the the Managing Director, who is of opinion that it would considerably increase the quantity of gold saved. Receipts from bullion for the year were \$160,831.85, and the balance of net profit was \$53,148.02 of which the sum of \$50,000 was paid to shareholders as dividends. The total amount this mine has paid in dividends to date is \$459,337. The payment of dividends has, however, been temporarily suspended, and the profits derived from the mine are being applied to more extensive development of the property, with the object of eventually increasing its earning power. The receipts from bullion up to the 31st. December, 1899, amounted to the sum of \$676,680.36,

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and to the 31st. December, 1900, the total sum of \$837,512.21.

From an account of the mine by Mr. Donald A. Ross, published last August in the British Columbia Mining Record, it is learned that the mining machinery includes 2 60 horse power horizontal return tubular boilers, a 10-drill Rand air compressor, and a 60 horse power link-motion hoist, and that the mill is equipped with 2 10-stamp batteries, a 60 horse power Corliss engine, 2 Johnstone vanners, a Wilfley table, a Blake rock crusher, and a Gates crusher.

CARIBOO MINE. (1901).

The Cariboo-McKinney Mining and Milling Company Ltd. of Toronto, Secretary, F.W.Thompson, 34 Yonge Street, Toronto; General Superintendent, J.P.Keane, Local Manager and Superintendent, Mr. Betts, is the most important and, in fact, the only successfully working mine in the camp, and it is to it that the place owes its very existence. The company owns the Okanagan, Saw Tooth, Amelia, Cariboo, Alice, Emma and Maple Leaf mineral claims, all adjoining. The actual workings are at present confined to the four first mentioned and extend along the lead for from 1,700 to 2,000 feet, attaining a maximum depth of 560 feet, although the main lead and others are traced beyond the properties each way by numerous open cuts, pits, etc.

The formation of this locality is chiefly composed of highly altered argillaceous and quartzose rocks, alternating with those of a fine-grain and igneous origin, chiefly diabase, the whole having a general north and south trend. There are shown in the various workings to be at least two important veins cutting across the formation about E. and W. and having a dip to the south at an angle varying from 80 to 95 degrees, while a cross-vein running about N.E;.

and S.W. passes through the camp.

The only one of these leads which has, so far, been worked to a profit is that upon which the Cariboo-McKinney mine workings are. This is a quartz vein of rather variable width, sometimes as much as

12 or 14 feet, but averaging about four feet.

The vein is evidently continuous with depth, and is traceable throughout the camp by its outcroppings. The workings have demonstrated that it is also subject to a series of faults, which continue to the lowest levels and almost always throw the lead more or less to the south, accompanied with a crushed zone in which values do not occur. This faulting is also accompanied with two or more lines of breaking or slipping to the east, the whole being extremely complicated, yet having sufficient regularity to enable the management to estimate with much exactness where to find the vein again when it is cut off, as very frequently occurs.

The quartz is usually a bluish white colour and is mineralised with iron sulphides, zinc blende, galena, etc., in small bands, with free gold disseminated throughout and which is frequently visible, more particularly where the quartz is whiter and the mineralisation sparse. The vacues are not uniform throughout, but run in pay chutes, which seem to dip in the lead to the east. This property has been in operation about seven years, during which time a considerable amount has been paid in dividends, amounting to date to \$459,337.52. The old workings were from the outcrop and consisted of shallow shafts and a tunnel; more recent work has, however, been more systematic, and a central, vertical hoisting shaft is now down to the

MINNIE-HA-HA MINERAL CLAIM. (1898).

This claim lies nearly 1,500 feet south of the Cariboo and is owned by the Minnie-ha-ha Gold Mining Company, of Toronto; President, Professor H. Montgomery. Capital stock, \$1,000,000 in 1,000,000 \$1,00 shares, 525,000 of which have been set aside as treasury stock. Present price of shares, 19 cents. The work done on the claim consists of a working shaft 103 feet, with 24 feet of cross-cutting and 185 feet of drifting. The mine is furnished with a double cylinder hoist, steam pump and drills. There are good bank houses, a boarding house, and an assay office, etc., on the properties. The character of the ore is free-milling and concentrating, the vein being white quartz, carrying iron pyrites and galena, with a little blende and chalcopyrite. The mine is under the superintendence of Major Ainsley Megraw.

South of the Minnie-ha-ha is the Big Bug, upon which is a

30 foot shaft.

THE MINNIE-HA-HA GROUP. (1899).

Owned by the Minnie/ha-ha Gold Mining and Milling Company, Ltd. Consists of the Minnie-ha-ha, Cariboo fraction, and Golden Frown Fraction Mineral Claims. The President of the Company is Professor Montgomery, of Toronto. The work done consists of a working shaft 190 feet deep, with cross-cutting and drifting at the 90-ft. and 190 foot levels, and two upraises, being a total of 450 feet of drifting and cross-cutting. The mine is equipped with a five-drill compressor, four air drills, and double cylinder steam hoist.

of from \$2.50 to \$4. per ton, and to average about \$3. being now stored up in this manner. It is proposed to put in a cyanide outfit to save this present loss, a number of experiments having been made which indicate a fair margin of profit for such an auxiliary plant.

CARIBOO GROUP. (1902).

This group consists of the Cariboo, Amelia, Okanagan, Alice, Emma, Maple Leaf, and Saw Tooth Fraction, all adjoining claims, which are owned by the Cariboo-McKinney Mining and Milling Company, Limited, of Toronto. The following comparative statement will be of interest:-

	1900	1901	1902	•
Ore crushed Bullion produced Concentrates produced Value of bullion and concentrates	15,238 tons 11,469 oz. 557 tons.		15,614 tons 8,400 oz. 550 tons	
	\$160,831.35	\$137,024.79	\$131,324.58	0:10

The report published in the press after the Company's last annual meeting quoted the managing director as having stated that, of the 15,614 tons of ore mined and milled in 1902, 11,414 tons were taken / from the Cariboo, 4,100 tons from the Okanagan, and 100 tons from the Saw Tooth Fraction; that the average value of this cre was \$9.96 per ton, of which \$6.95 or 69.8% was extracted as free gold by amalgamation, \$1.74 or 17.4% was obtained in the concentrates and the remaining \$1.27 or 12.8% was lost in the tailings; and that while no unusual development work had been done during the year, yet ore reserves had been kept opened up well in advance of the stopes. The development work done consisted of 1,040 lineal feet of driftingand 190 feet of raising, in all 1,230 feet. The average number of men employed full time was 41, of whom 25 were underground, and 16 on the surfacel Dividend paying was resumed in 1902, after an interval necessitated by a great deal of development having had to be done the previous year to recover the faulted vein. The Company's accounts show the total bullion receipts to the end of 1902 to have been \$1,105,861.58 and the total of dividends paid as \$509,337.52.

(1903).

At Camp McKinney, the Cariboc McKinney Co.mined and milled about 15,000 tons of are, quartz carrying free gold, having a gross assay value of \$5.50 per ton. The development of this property, however, has not of late been such as to give encouragement; consequently, at the last annual meeting of the company, on the report of the superintendent, dated December 21st, 1963, the directors gave instructions to clean up all ore and suspend operations indefinitely.

4th. level, a depth of 357 feet.

From this 4th. level, at a point some 600 feet east of the shaft, a winze has been sunk 200 feet, with a 5th. level 400 feet long at 100 feet, and two small intermediate levels at 50 and 150 feet respectively. The 6th. level had not been started, but preparations for so doing were being made. This winze is operated by a compressed air hoisting plant, the ore being hoisted in buckets and dumped into a bin on the level. The mine plans are kept well up to date and are complete. The following dimensions are taken from copies of such kindly furnished by the management:-

Tunnel level scales 640 feet long.

lst. " " 320 " "

2nd. " " 950 " "

3rd. " " 1,400 " "

4th. " " 1,530 " " 41 " 175 " " 5th. " " 410 " "

In addition to this there are innumerable cross-cuts, winzes, etc., rendered necessary by the complicated character of the vein, and the various raises connecting the levels provide an efficient system of ventilation. The work at present seems to be chiefly on and below the 4th. level, it being understood that above that point most of the first-class ore has been removed, leaving, however, a considerable tonnage of second-class ore, which will be mined when the stamping facilities are increased, as is now contemplated.

HOISTING PLANT. The plant at the hoisting shaft comprises a 60 horse power double-geared friction hoist of the Union Iron Works pattern; 2 return flue tubular boilers, wood fired and of 50 and 60 horse power respectively, together with heaters, pumps, etc. These same boilers supply steam to a 10-drill Rand air compressor which operates the hoist at the winze and also the air drills. The cage is a Rosdon safety, carrying one car which holds about one ton of ore. The average output of the mine for the last two years has been about 16,000 tons per annum, having a gross recovered value of about \$150,000, or between \$9. and \$10. per ton.

There were about 60 men employed underground, two shifts of 8 hours

being run in the mine generally and three in the winze.

The ore is loaded in a car in the mine from chutes, and is then hoisted to the surface and trammed about 360 feet to an ore receiving hin, into which it is dumped. From here it is again filled into a car and trammed over a covered trestle for 400 feet to the stamp-mill, where it is dumped over a grizzly and broken by a crusher, falling into bins behind the stamps, into which latter it is fed by automatic feeders.

Stamp-mill. The stamp-mill, old and not very well housed or equipped, weems efficient and economical. It consists of four 5-stamp batteries weight of stamps, 850 lbs; 98 drops per minute of from 5½ to 7 inches in the order 1, 5, 2, 4, 3, discharge, 5½ to 6½ inches through a No.6 or 7 diagonal slot screen. Of the values recovered, about 86% are caught on the plates, and 14% recovered in concentrates, of which three tons are saved for each 100 tons of ore stamped. The discharge from the plates pa sses through mercury traps and to settling tanks, from whence it is fed to two Johnstone and one Whifley concentrating tables.

The tailings from the tables run out and are impounded by two dams, some 20,000 tons, which are reported to contain values to the extent

Sailor Thada

ANNIE L. MINERAL CLAIM. (1898).

A fractional claim, adjoining the Sailor on the north. This property has recently been incorporated in Spokane, and is now owned by the Little Cariboo Gold Mining Company; capital stock, \$100,000, in 1,000,000 lo-cent shares. A small shaft, 15 feet, has been sunk in a 4-foot vein of bluish quartz, carrying a small amount of pyrites. this shaft is being sunk 50 feet.

amount of pyrites. this shaft is being sunk 50 feet.

The Dolphin, lying south west of the Annie L. is one of the old locations. A tunnel 75 feet has been run to intersect one of the three veins in the claim. The vein of quartz is about 8 feet wide, showing pyrites and galena, giving a fair assay in gold.

The Eureka, east of the Dolphin, is also one of the old

The Eureka, east of the Dolphin, is also one of the old locations, and is wored by a new York Company. A great deal of work has been done on this property in former years, but nothing lately.

PANDRE AND ALMA MINERAL CLAIMS. (1898).

These two claims to the north of the Eureka, upon which a nice, though small vein of white quartz, carrying gold, has been discovered. On the Pandre a working shaft has been started, now down 12 feet. The vein has also been opened up for 100 feet. On the Alma, two shafts have been sunk on the vein to a depth of 10 feet each, at which depth the vein would appear to be about 18 inches wide.

WATERLOO MINERAL CLAIM. (1898).

This claim is about 2000 feet east of the Cariboo and is supposed to be on the same vein. It is owned by the Waterloo Gold Mining Company, of Spokane, with head offices at Camp McKinney, Capital stock, \$100,000, in 1,000,000 lo-cent shares, now quoted at 9 cents. The quartz is of a bluish colour, similar in character to the Cariboo, and bunches containing free gold have been met with in sinking No. 2 shaft. The vein is well-defined, and averages over 6 feet in width. Two shafts have been sunk on a vein, 390 feet apart, the west or No. 1 shaft is 4½ by 9 feet and is 50 feet deep; the east or No. 2 shaft is 5 by 7 feet, and 70 feet deep.

Adjoining this claim on the west, and between it and the Cariboo, is the Wiarton; title, Crown grant, owned by the Camp McKinney Development Co. Capital stock, \$600,000 in \$1.00 shares.

No work has been done on this claim this year.

The Fonteney. Title, Crown Grant, adjoins the Wiarton on the east, the side line being 60 feet from the east shaft of that claim. There is an 80 foot shaft showing 5 feet of sulphide ore, also an open trench exposing the easterly and westerly Waterloo vein. Adjoining this property on the south eastare the Vernon, title, Crown grant, and the Islander just surveyed for Crown grant.

(1899).

Is owned by the Waterloo Mining and Milling Company, Ltd. which has put in a stamp mill (5 stamps), with concentrator, a steam hoist, and a pump. The character of the bre is free-milling and concentrating, running about the same value as that of the Cariboo. As the mill has only been running a shorttime, no returns are yet available.

(1901).

The Waterloo Milling and Mining Company's mine was not in operation, and as nothing special could be seen it was not inspected. On the west end of the property there is a shaft down 50 feet on a quartz vein, while 300 feet away there is a second shaft down 80 feet, at the 60-foot level of which some 300 feet of drifting had been done. There is a small hoist with vertical boiler, and the company erected in the Fall of 1899 a 5-stamp mill, with a Blake crusher and Johnstone concentrator, operated by a 40 horse power boiler and engine---a very complete little plant. The mill is reported to have been run for a month in 1899, returning \$2,000. but it has since only been worked spasmodically. The vein is reported to be about 4 feet wide, running east and west consisting of a bluish quartz with bands of sulphides, and said to carry fair values on gold while near the surface free gold is to be seen in the quarts. The property seems to have some merit, and the reason of its abandomment does not appear quite clear.

WATERLOO MINERAL CLAIM (1902)

The Waterloo Consolidated Mining and Milling Company, Ltd., of Spokane, Washington, appears to have settled down to the steady development of the Waterloo Fraction Mineral claim. Late in the year the new management commenced an active policy of development and since then a larger hoisting engine than the one previously in use has been installed at the mine, the shaft has been deepened from the 160-foot level to the 260-foot level, and cross-cutting to cut the vein at the deeper level is in progress. Of the 100 feet of sinking and 150 feet of drifting reported as have comprised the year's development work, it is probable some part of the work must be credited to 1903. However, the fact remains that ore of good grade occurs in the drifts at the 150-foot level, and that the outlook for the property being worked at a profit to the shareholders is brighter now than at any previous time since the company was organized.

WINTEDE (1899).

This class is owned by the Camp McKinney Development Co.Ltd. which has sunk three shafts, respectively 52 feet, 53 feet, and 60 feet, and has done 89 feet of drifting. The vein appears to be about 3 feet wide, and of the same character as the Waterloo and Cariboo, between which claims the property is situated.

The Banner and Granite, owned by the Camp McKinney Mines, have had a good deal of work done on them, and a five-stamp mill and concentrator, which have been running for some time with very satisfactory results, have been erected, but I have not been able to obtain accurate returns.

The Kamloops mineral claim, owned by the McKinney-Kamloops Mining Co. has one working shaft 70 feet deep, 1 shaft 40 feet, on the vein, and two prospecting shafts of 12 and 15 feet respectively. The mine is equipped with steam hoist, pump, two machine this, and a 25 h.p. boiler.

OPS MINING CLAIM. (1901).

kamloops Co. President, T.Mc-Auley, of Montreal, kamloops mining claim, lying between the Sailor and and directly south of the Cariboo. On this a shaft, d with water, has been sunk for 100 feet and from it drifting has been done. The hoisting plant con-boiler, 1 sinking pump and 1 machine drill, air for spiped from the Minniehaha compressor. The property in March, 1900, and has not been worked since.

the Banner and Grantte, owned by the Camp McKinney Mines, have elde 100 100 8 livin × 1500 Trusta estructa alasto es The Kamloops mineral chaim, owned by the McKinney-Samloops Mining Co. has one working share 70 feet deep, I shart do feet, on the voin, and two prospecting shafts of 12 and 16 feet rospective-The mine is equipped with steam hoist, pump, two machines tils, and a Sb h.p. boller. MIAID DRINIM LaeranoM 2d 27,000 pt.
8,230 meter
8,230 meter . in March, 1800, and has not been buried since.