ANNUAL REPORT

OF THE

MINISTER OF MINES,

FOR THE

YEAR ENDING 31ST DECEMBER,

1885,

BEING AN ACCOUNT OF

MINING OPERATIONS FOR GOLD, COAL, &C.,

IN THE

Province of British Columbia.

VICTORIA: Printed by RICHARD WOLFENDEN, Government Printer,
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1886.

PROVINCE OF BRITISH COLUMBIA.

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TABLE

Showing the actually known and estimated yield of gold; the number of miners employed; and their average earnings per man, per year, from 1858 to 1885.

Year.	Amount actually known to have been exported by Banks, &c.	Add one-third more, estimate of gold carried away in private hands.	Total.	Number of Miners employed.	Average yearly earnings per man.
1858 (6 months)	$ 390,265	$ 130,088	$ 520,353	3,000	$ 173
1859	1,211,304	403,768	1,615,072	4,000	403
1860	1,671,410	557,133	2,228,543	4,400	506
1861	1,999,589	666,529	2,666,118	4,200	634
1862	3,184,700	1,061,566	4,246,266	4,100	517
1863				4,400	482
1864	2,801,888	933,962	3,735,850	4,400	849
1865	2,618,404	872,801	3,491,205	4,294	813
1866	1,996,580	665,526	2,662,106	2,982	893
1867	1,860,651	620,217	2,480,868	3,044	814
1868	1,779,729	593,243	2,372,972	2,390	992
1869	1,331,234	443,744	1,774,978	2,369	749
1870	1,002,717	334,239	1,336,956	2,348	569
1871	1,349,580	449,860	1,799,440	2,450	734
1872	1,208,229	402,743	1,610,972	2,400	671
1873	979,312	326,437	1,305,749	2,300	567
1874	1,383,464	461,154	1,844,618	2,868	643
1875	1,856,178	618,726	2,474,904	2,024	1,222
1876	1,339,986	446,662	1,786,648	2,282	783
1877	1,206,136	402,045	1,608,182	1,960	820
1878	1,062,670	1-5th 212,534	1,275,204	1,883	677
1879	1,075,049	,, 215,009	1,290,058	2,124	607
1880	844,856	,, 168,971	1,013,827	1,955	518
1881	872,281	,, 174,456	1,046,737	1,898	551
1882	795,071	,, 159,014	954,085	1,738	548
1883	661,877	,, 132,375	794,252	1,965	404
1884	613,304	,, 122,861	736,165	1,858	396
1885	594,782	,, 118,956	713,738	2,902	246
			$ 49,385,866		

REPORT

OF THE

MINISTER OF MINES

FOR THE

YEAR 1885.

To the Honourable CLEMENT FRANCIS CORNWALL,

Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

The Annual Report of the Mining Industries of the Province for the year 1885, is herewith respectfully submitted.

JNO. ROBSON,

Provincial Secretary and Minister of Mines.

Provincial Secretary's Office,
1st March, 1886.

REPORT.

GOLD.

The value of the gold exported by the Banks at Victoria, during the year 1885, is as follows:—

Bank of British Columbia	$ 244,442
Bank of British North America	43,135
Garesche, Green & Co	307,205
	$ 594,782

The statistics show a large increase in the number of miners, and decrease in the average yearly earnings per man. Both these results are accounted for by the rush to Granite Creek towards the end of the mining season, and by an increased number of Chinamen rocking during the autumn months on the bars of the Fraser (already worked and re-worked) with but little return for their labours.

CARIBOO.

MR. BOWRON'S REPORT.

"RICHFIELD, 30th November, 1885.

"SIR.—I have the honour to submit my annual report upon the mining industry of this district, accompanied by the customary 'statistics,' which will be found to show a further falling off in the annual product of the mines, as also a decrease in mining population—the late discoveries in the Similkameen country having attracted quite a number from the district.

"The summer was unusually dry until about 1st October, which caused a suspension of work in nearly all the hydraulic claims for some considerable time; at which date, however, rain set in, and a plentiful supply of water for most claims was obtainable until cold weather closed them out (about 1st November).

"On Williams Creek the old claims are showing signs of exhaustion, and but few new ones are being opened up.

"The Black Bull, Victoria, and other claims, on Lowhee Creek, paid very well while the water lasted.

"On Mosquito Creek and Red Gulch the claims, owing to the scarcity of water, were idle a great portion of the summer, but paid fairly for the amount of work accomplished. The Alabama Company, of Mosquito Creek, having obtained a grant of water from Coulter Creek, will, in the spring, commence the construction of a ditch to convey the water a distance of some ten miles.

"Grouse Creek has up to the present contributed about the same as last year to the output of the district. The Waverly Hydraulic Company, from a scarcity of water, made but little headway in the development of their mine. No attempt at a 'wash-up' was made. The Sims Company paid very well, and the Jarvis Company have now their claim in good shape for next season's work, which promises well.

"The benches on Lower Antler Creek show a decrease in their annual product, fewer men (Chinese) being here employed.

"The Nason Company, on Upper Antler, I much regret to say, have not as yet succeeded in getting into the deep channel, news of which is daily looked for with much anxiety. The unfortunately fatal accident which occurred in this claim last spring, whereby James Blair lost his life by the bursting in of the water and gravel from the channel into the bed-rock "drive," shows the necessity of exercising caution in "tapping" the channel, which necessarily retards the progress of the work.

"Although quite a large amount of gold has been taken out on Slough Creek this summer by the Chinese, no new discoveries have been made. Lightning Creek and its tributaries have produced about the same as in 1884.

"Sugar and Hardscrabble Creeks have not realized expectations. The rumoured discovery of rich bench diggings on Sugar Creek in October caused some excitement here, and a rush in that direction was made; but so far no one has, apparently, sufficient faith in the ground to make a record of it, although some are of opinion that if water was brought on the ground fair pay would be obtained.

"It will be observed that the 'statistics' show a material decrease in the number of Chinese engaged in mining as compared with last year. This, in a measure, may be accounted for by the coming in force of the 'Chinese Regulation Act, 1884,' to circumvent the operation of which recourse was had to every subterfuge, especially to avoid the payment of the fifteen dollars for miner's certificates. Latterly, however, many have yielded to the inevitable, and are taking out certificates rather than lose their claims or relinquish their favourite occupation.

"The inauguration by Government of a geological survey of the district, under the supervision of Mr. Bowman (of the Dominion Geological Staff) is regarded as of the most vital importance to the district, as well as to the Province and Dominion, and although the season was far advanced before the party arrived upon the scenes of their labour, yet by the industry and perseverance displayed no doubt much valuable information was obtained, which will prove serviceable in proceeding with a more detailed survey, as, of course, the few weeks at Mr. Bowman's disposal was necessarily devoted to obtaining a general outline of the country. While on this subject it will not, perhaps, be out of place to notice a paragraph which recently appeared in one of our Provincial newspapers (taken from an eastern paper) purporting to give Mr. Valigny's (Mr. Bowman's draughtsman) views respecting our quartz ledges. Mr. Valigny is reported to have said:—'In the quartz ledges examined in the neighbourhood of Barkerville, no free gold was found, and doubtful prospects were entertained if they could be worked profitably,' etc. Such a statement coming (if so) from a member of the Geological Survey Party is calculated to do serious harm if not corrected, as the same might naturally be taken as Mr Bowman's views. The facts are: Mr. Bowman (who was the only person in the party professing any knowledge of geology) visited but one or two ledges in the vicinity of Barkerville, and these certainly not with a view of passing upon their value, his time being too much taken up in making a 'superficial survey' of the country to devote any portion of it to an examination of the ledges (which he proposed doing had he the time left before cold weather set in). Many persons were most anxious to have Mr. Bowman go with them and examine ledges quite near Barkerville, but his answer was invariably to the effect that he must first get through with the work he had in hand, viz., a superficial survey of the country. It is, therefore, quite impossible that Mr. Valigny, speaking either from his own knowledge or that of Mr. Bowman, could have made use of the expressions ascribed to him.

"Very little prospecting for new gold-bearing creeks has been undertaken this summer, and that little without apparent results.

"In making representations in support of an application for Government assistance in procuring a prospecting outfit, a Mr. Dupre, of Quesnelle, corroborates the reports of Messrs. Stewart, McGuire and party made two years ago (which will be found in the mining reports of that year) to the effect that there is to the N. E. of Barkerville (from 75 to 100 miles) a very promising gold-bearing section of country as yet but little explored. Mr. Dupre says that in 1883 he panned out from a hole he had sunk on a small creek, about 75 or 80 miles down Fraser River from Tête Juane Cache, three dollars in gold dust in a few hours; being without provisions he came down for supplies and assistance, which up to the time he made application for Government assistance he had been unsuccessful in obtaining.

"I believe this section of country well worthy the attention of prospectors.

Quartz.

"Another year has passed without any material development of our quartz ledges, and if I except the efforts now being put forth by the Quesnelle Quartz Mining Company, nothing has been attempted.

"The Quesnelle Company are, however, at the present time making a most laudable attempt to prove the value of their mine at Hixon Creek, having purchased engine and machinery in San Francisco and engaged the services of experienced California quartz miners. The Company are at present cutting a road from Fraser River to their mine, a distance of ten miles, over which they will take their heavy machinery as soon as completed. Some eighteen men are employed by the Company, and as soon as the machinery is placed in position work on the ledge will be started and crushing carried on during the winter.

Gold Yield for 1885.

"I estimate the total output of the district for the year as follows:—

Barkerville Polling Division	$ 120,700
Lightning Creek ,,	76,500
Quesnellemouth ,,	62,400
Keithley Creek ,,	68,100
Estimated product from date to 31st December	20,000
	$ 347,700

"Cariboo has not as yet received any benefit from railway construction. Freights are still high, and Cariboo prices have undergone but little change since my last annual report.

"I have, etc.,

(Signed) "JNO. BOWRON,
"*Gold Commissioner.*

"*To the Honourable the Minister of Mines.*"

MR. STEPHENSON'S REPORT.

"FORKS QUESNELLE, 9th Nov., 1885.

"SIR,—I have the honour to forward herewith the estimated yield of gold for Keithley Division of Cariboo District, for the year 1885:—

"The returns show a falling off from last year, but there has been a considerable decrease in our mining population for the last year; and also it is impossible to get at a true estimate, as the greater part of the gold in this section is mined and goes away through the hands of the Chinese, and there is no satisfactory information to be obtained from them; then a great deal of the mining of this section is desultory, the Chinese miners being scattered all over this section of country. They generally work in pairs, and carry their whole mining out-fit with them. When their grub gives out, they make for the nearest trader, lay in a new stock, and away again; thus they go for the whole season, until the cold weather drives them into winter quarters. Of course there are a few organized companies, but the larger portion of the Chinese mine as above.

"During the last summer, two men, S. Kyse and E. Hilton, have been out in the mountains about the head of Quesnelle Lake. They returned about the 10th of October, after a four months' prospecting trip. They say they did not find anything to excite them, but they found some gold, and intend to go back next summer to further satisfy themselves on what they found, as owing to the fall freshets coming on they could not finish their prospecting this season.

"There has not been much done at Horsefly this last season, only one company of Chinese working there; they admit they are taking out good pay. The ground all round the China Company's claim is held under a lease by Mr. T. Harper, which prevents considerable prospecting being done there this winter There has not been any work done upon the ground by Mr. Harper since the lease was obtained.

"There is a company of white men prospecting on Black Creek, a tributary of Horsefly. They intended to winter there, and it is to be hoped they will find diggings that will pay them for their labour and enterprise.

"In the face of all the cry about hard times and no money, the traders seem to ship as heavy as usual, and the money must come out to pay for the goods, as I do not believe the traders give all their goods away. A few years ago the traders made an outcry about high freights and a toll bridge at this place. Well, that bridge has been free for the last season; freights also have been moderate to this place, but the price of goods are quite up to former years, as the following retail prices at the Forks Quesnelle and Keithley Creek will show:—

"Flour, 10 to 12 cts. per pound; butter, 62½ to 70 cts.; beef, 12½ to 15 cts.; bacon, 35 to 40 cts.; dried apples, 40 cts.; rice, 16 to 18 cts.; beans, 15 cts.; potatoes at Forks Quesnelle, 3 cts., at Keithley, 5 to 6 cts.; tea, $1.25 per pound; tobacco, $1.25 per pound; candles, 45 cts. by the box; gum boots, $12 per pair. These things are the bare necessaries. If we want to go for any of the luxuries, such as there is to be had, then the trader wants to make a little profit, and—well he makes it—as they claim they can't keep even on staples at the prices they are selling at, and they try to get square on the other articles.

"The construction of the Canadian Pacific Railway has made a boom in the lower country, but so far has acted adversely to the mining industry of Cariboo, as by it employment of teams and pack trains up to the last season, it has kept freights high to Cariboo; also when men that were mining became discouraged, or doubtful of their claims, they had railroad work to fall back upon, and away they went; but now that the Canadian Pacific Railway is about finished, we may look for low freight, so that living will be much cheaper than heretofore; also Cariboo may get a share of the influx of people which the Canadian Pacific Railway is bound to bring into the Province, and probably see better times than the present.

"I have, &c.,

(Signed) "W. STEPHENSON,

"*Government Agent.*

"*To the Hon. Minister of Mines,*

"*Victoria.*"

CASSIAR.

MR. CRIMP'S REPORT.

"LAKETON, CASSIAR,

"10th October, 1885.

"SIR,—I have the honour herewith to forward the mining statistics for 1885, as well as my report upon the district.

There is a considerable falling off in the yield of gold this year from last, from two reasons; the first is, there has not been so many miners in the district as there was last year; and, secondly, the Chinese have done very poorly in consequence of all the beds of the several creeks having been thoroughly worked out—some of them three times over. The past season the Chinese have recorded but few claims. They have worked from point to point all over the several creeks, wherever they could make a few dollars. They do not, as a rule, care about prospecting in the hills. Most of the gold taken out this year has been from high benches and in the hills.

"The yield for the past season, as far as I can ascertain, is as follows:—

Dease Creek	$12,350
Thibert Creek	12,600
Defot Creek	3,650
McDame Creek and its tributaries	19,000
Desultory mining	3,000
Total	$50,600

"There is considerable prospecting being done in the hills, and from present indications look very encouraging. A few days since the Arctic Rose Company, situated about 4½ miles up Dease Creek, found, after running through rock, a hill channel which prospects well. They got as high as $14 to the pan, and it is thought that there is a hill channel running the south side of this creek nearly its length, and in consequence many claims have been taken up, and I think this creek will give a good return next season.

"On Thibert Creek there will be some prospecting done this winter—running tunnels into the hills,—and it is confidently expected that good claims will be found. And also on McDame Creek miners are turning their attention to the hills and benches.

"There has not been any new creeks found the past season. There were five miners built a boat and got a supply of provisions, and went up the Liard River to San Francisco River and prospected most of the summer, but did not find gold in paying quantities.

"Very few miners are leaving here this winter. There will be more winter here than ever before; and most of them are confident that they will have a better return for their labours next year than the past one.

The market is well supplied with everything. Vegetables are abundant and reasonable in price.

"There will be about 90 men winter on the several creeks—about equally divided—whites and Chinese. It has been a very healthy season; no sickness among the miners.

"The crops on the banks of Stickeen River have been abundant and of excellent quality, and on the whole the outlook for this district for the coming season is rather encouraging.

"I have, &c.,
(Signed) "J. L. CRIMP,
"*Gold Commissioner, Cassiar.*

"*To the Hon. the Minister of Mines,*
"*Victoria.*"

LILLOOET.

MR. SOUES' REPORT.

"CLINTON, B. C., Dec. 21st, 1885.

"SIR,—I have the honour to enclose herewith the mining statistics, and my annual report for the District of Lillooet for 1885:—

"The total ascertained yield of gold for the district this year, is $94,774. With the exception of 1884, this is largely in excess of former years. The figures given are perfectly reliable. Mr. Smith, Lillooet, reports his purchases of gold for the year at $51,236; Mr. Foster, Clinton, $20,752, and Mr. Bell, Clinton, $11,000. The balance ($11,786) is the amount acknowledged to have been purchased by Chinese and other traders throughout the district, and I have no doubt is very much under-estimated.

"On account of long continued high water, the mines on Bridge River and its tributaries, did not turn out as favourably this year as was expected. With a favourable stage of water next year, I have every reason to believe, from good authority, the returns from that quarter will be much larger next season. Many of the white miners intend returning there in the spring. The gold found there is of a coarse nature, with nuggets varying from $10 to $22, and sells in Lillooet at $16.50 per ounce.

"A large number of nomadic Chinese have been mining during the past year on various parts of Bridge River, and also along the line of Fraser River, on both banks. The result of their labour, and how disposed of, it is impossible to ascertain.

"I regret to have again to report no work done on the Big Slide Lode.

"In minerals other than gold, I have to report work has been prosecuted on Mica Discovery Claim, on Clearwater, during the short season of that quarter. I have also to report that four other claims of the same mineral have been discovered and located in that neighbourhood this year.

"From information received, I have good reason to believe that this portion of the district will give good returns in next season's report.

"I have, &c.,
(Signed) "F. SOUES,
"*Gold Commissioner.*

"*To the Hon. the Minister of Mines,*
"*Victoria.*"

YALE.

Similkameen Division.

MR. ELWYN'S REPORT.

"VICTORIA, B. C., 23rd Nov., 1885.

"SIR,—In accordance with your instructions, I left here on the 23rd ultimo and proceeded, *via* Nicola, to Granite Creek, which I reached on the morning of the 29th ultimo.

"This stream is a tributary of the Tulameen, or North Fork of the Similkameen, and falls into that river, on its right bank, about 12 miles above its junction with the South Similkameen at Princeton,—perhaps better known as the Vermillion Forks, or still better as "Allison's."

"About five miles from its mouth, Granite Creek is joined by a small tributary from the south-west, and the point of junction is called by the miners "The Forks." Not being a true fork, it is a misnomer, but, for convenience, I shall retain the name when speaking of the locality in this report.

"Looking up the valley of the creek from high land just below the forks, the bearing is *from* the south-east, and, in the distance, from east of south-east. Looking down stream from the same point its general course to the Tulameen is about N. 30 E. (mag.)

"With the exception of a few hundred yards at its mouth, Granite Creek runs from the forks downwards in a deep V shaped gorge, through which the yearly freshet, evidently of great volume, has washed everything except the gold and some gravel,—in fact this portion of the creek has been ground-sluiced by nature.

"From near the mouth of the creek to a point something over half a mile below the forks, a distance of about four miles, no claim which has been tested on both sides of the bed of the stream has failed to yield good returns, and it may safely be said that the ground for that distance will average over an ounce a day to the hand. From the point indicated upwards, continuous pay has not been discovered, but there is every indication that this wonderfully persistent lead of heavy gold will there be found in the hill on the proper left bank of the creek It afterwards appears to cross the creek to the right bank, and possibly continues in that bank to beyond the short canyon through which Granite Creek runs, just before its junction with the tributary from the south-west at the forks. I have not myself been above the last-named point, but am told the bed of the stream is there considerably wider, the valley not so distinctively V shaped, and the ground much deeper. For these reasons the time has been too short for a proper test to have been made of this portion of the creek, but for a distance of five miles men are at work, at intervals, and I heard of a prospect being obtained by some Frenchmen, during the time I was on the creek, over which they were much excited. Some experienced miners have a very high opinion of the upper creek—called erroneously, perhaps for recording purposes, the South Fork,—but it is right to point out that, although there is every probability of the run of gold extending above the forks, it has not yet been proved to do so.

"The creek is a long one, from twenty-five to thirty miles, and, in addition to the annual freshet, is subject to floods from rainfall during the autumn months. On this account many miners contend that the early spring, before the snow on the mountains begins to melt, will be the best time for work. In judging as to the feasibility of this it should not be forgotten that the mouth of Granite Creek has only about half the altitude of Barkerville, and three and a half degrees advantage in latitude.

"On the 31st October, on lower Granite Creek, there were 62 companies owning creek claims, averaging probably 300 feet to the company, who were working. Of these 34 were taking out gold and 28 either preparing to do so or prospecting. The gold admitted to have been taken out by the several white and Chinese companies, from 5th July to 31st October, amounts to the large sum of $90,000, which, considering the great loss of time caused by the freshet, and also the difficulty of obtaining lumber for sluice-boxes, is a creditable showing. It is almost certain that the actual total is more, but that yield can be given without any possible fear of exaggeration.

"Chinese have for years been mining on the banks of the Tulameen many miles *above* the mouth of Granite Creek, and it is, therefore, probable that other gold-bearing tributaries of that river, issuing from the same slate range, will be found.

"The wonderful richness of the developments in Cariboo during the autumn of 1861 attracted thither, in the following spring, the miners who had been working on the bars of the Similkameen, and who would doubtless, under other circumstances, have followed the gold to its source in the same way as their brother miners working in 1858–59 on the bars of the Fraser had done. This appears to me to be a sufficiently satisfactory explanation of the delay which has occurred in the discovery of this new gold field, so far as miners are concerned; Chinese, however, have been passing the mouth of Granite Creek for years, and their failure to find out its value goes far to prove the assertion, often made, that they *never* prospect in any true sense of that word. It is indeed most fortunate that such has been the case in this instance, for had the Chinese working on the Tulameen come to know of the easily worked and rich ground on Granite Creek, it would have been quietly gutted, without our knowledge and without any appreciable benefit accruing to a single white person.

"I was particularly impressed with the fact that those who were warmest in praise of these new diggings were among the most experienced miners there; and certainly I have not, so far, seen any report in the newspapers which has gone beyond the truth. The statements made as to the yield of the claim owned by Messrs. Sherburne & Rashdell, near the mouth of the creek, are quite correct, and it may be added that as they are not working on bed-rock the possibilities for this claim are very great. Other reports—such for example as Messrs. Briggs & Bromley taking out $400 in an afternoon with a rocker—might also be verified, but it seems unnecessary, and I shall confine myself to giving one instance of good pay being obtained which I have not seen reported. On Sunday morning, the 1st instant, the Point Company, situated about two miles above Capt. Sherburne's ground, washed up 45 ounces, or over $750, as the result of the labour of eight men for thirty hours. This claim is owned by Messrs. Pearce and Harvey, the former of whom is one of the pioneers of Cariboo, and well known throughout that district.

"There is associated with the gold on Granite Creek a very hard, heavy, and whitish metal, which is probably platinum or iridium, perhaps a mixture of both. I brought away with me about half an ounce as a sample. There are no means of thoroughly testing it here, but Dr. G. M. Dawson, Assistant Director of the Geological Survey of Canada, has kindly offered to take it to Ottawa for examination in the laboratory there, after which it will be forwarded to London for exhibition at the Colonial and Indian Exposition to be held next year.

"I believe that the discoveries on Granite Creek will lead to the opening up of an extensive gold-field—a gold-field in fact which, from its accessibility and close proximity to farming districts, producing beef, flour, vegetables, oats, and hay, will be of more benefit to the Province than any, with the exception of Cariboo, hitherto discovered. In this opinion I may, of course, be wrong, but I venture to submit that even so, the finding, at the close of railway construction, of a lead of heavy gold, having a steady run for so great a distance as four miles, is a matter of the greatest importance, and an event on which the Province may be most heartily congratulated.

"On the left bank, at the mouth of the creek, a level bench offers a good site for a town, and is being rapidly covered with log houses. At the time of my visit there were seven general stores (three of which were kept by Chinese), two restaurants, two licensed houses for the sale of liquors, and a butcher's shop. In addition, there were about fifteen houses in course of construction, and more or less building will probably be carried on during the winter. I estimated that there were between 400 and 500 white men, and from 150 to 200 Chinese, on and in the neighbourhood of Granite Creek. It is extremly difficult to do more than guess at the number of men who will winter in a mining camp the first season. I think, however, that there will be not less than two hundred white people, unless a scarcity and consequent high price of staple articles should drive them away.

"It is probable that a very short summer route to Granite Creek can be obtained by taking, at the end of the waggon road from Hope, the left or Canyon trail, instead of the right or Grant trail, which is usually followed. The head waters of Granite Creek cannot be many miles from the Canyon trail; it is possible that some of them cross it; and if a practicable route could be found in this direction it would save a long detour to Allison's, and twelve miles of very bad trail from there up the Tulameen to the mouth of Granite Creek. In the event of the upper portion of the creek turning out well, the saving in distance would be still greater.

"For a waggon road the valley of the Coldwater, which falls into the Nicola at Coutlie's, will probably, eventually, be found to be the easiest line. It is a matter, however, which must be determined by explorations.

"I intended to have appended a list of prices to this report, but there has already been a sharp rise in flour, and as the same thing is likely, in my opinion, to occur in other articles, such a list would only be misleading, and is, perhaps, better omitted. I may say, however, as giving a general indication of prices, that fairly good meals are obtainable at the low rate, for a mining camp, of fifty cents.

"I have, &c.,
(Signed) "T. ELWYN,
"*Deputy Provincial Secretary.*

"*To the Hon. the Minister of Mines,*
"*Victoria.*"

MR. ALLISON'S REPORT.

"PRINCETON, November, 21st, 1885.

"SIR,—I have the honour to forward the mining statistics, with my report of the mining industries of Similkameen District, for 1885.

"The following returns are from personal knowledge:—

Granite Creek	$ 49,000
Tulameen River	60,000
Similkameen River	3,500
	$112,500

"The above estimate, I think, is far below the actual amount taken out the past season. In the present state of excitement and exaggeration I cannot get reliable information. The most successful miners have been the Chinese, but owing to their aversion to give information it is impossible to estimate the amount taken by them. The Chinese traders are doing the greater part of the business, and statements I get from them, I am convinced, are far below the actual amount received. I have myself handled 1,000 ounces of gold dust.

"The past season has been one more of exploration and prospecting than of actual mining. As the season closed a number of new discoveries have been made. New developments on the South Fork of Granite Creek promise well. Discovery claims have been granted on Collins Gulch, Slate Creek, Hines Creek, and Eagle Creek, but the season is too far advanced to test the value of these new creeks. They are tributaries of the Tulameen; the last named is about 35 miles above the Forks of the Similkameen.

"The weather proving mild and favourable the miners at this date are paying more attention to the upper waters of the Tulameen, and a number of records have already been made. Also, records on two quartz lodes, one situated near the mouth of Granite Creek, and the other near Hines Creek, on the Upper Tulameen.

"I estimate the number of white miners at 450. Chinese are so scattered that I cannot form an estimate of their number. About 100 Free Miners' Licences have been issued to Chinese.

"I have &c.,
(Signed) "J. F. ALLISON,
"*Assistant Gold Commissioner.*

"*To the Hon. the Minister of Mines,*
"*Victoria.*"

MR. NICHOLSON'S REPORT.

"GRANITE CREEK, B. C.,
December 8th, 1885.

"SIR,—I have the honour to inform you that I left Granite Creek in the early part of November in order to complete the Assessment Roll of the district.

"During my absence some fresh discoveries were made, more particularly in what is known as the South Fork of Granite Creek, besides some small creeks. I have now to report the discovery of another large creek, called 'Champion Creek.' This creek empties itself into the Tulameen River some twenty miles above the mouth of Granite Creek; though twelve

miles up it, it is within two or three miles of the North Fork of Granite Creek. I am informed that it is a wider creek than Granite, though not carrying so much water, and the discoverers, as well as others who have located claims, appear well satisfied with their prospects; the advanced stage of the season precluding, however, any very thorough work being done.

"Some very pretty gold was brought into Granite City yesterday from a small creek about ten miles above here, and these prospects were considered so good that in face of a heavy snow-storm a large number of men started the same night for the scene of the new discovery.

"The mildness of the winter is permitting of considerable work being done on some of the bars of the Tulameen River, and the results so far are so satisfactory that many of the old miners consider that the river may be worked with profit for miles, and, consequently, cause to be developed one of the most extensive mining camps in British Columbia.

"Granite City is rapidly increasing, buildings of one kind or another now probably number two hundred. Provisions are fairly plentiful, pack-trains coming in continually from the Nicola Valley. Potatoes are possibly scarcer and dearer in proportion to anything else, being seven cents per pound; flour varies from $9 to $10 per 100 pounds; beef, ten cents per pound, and groceries at fall prices. Board, $8 per week. There are at the present time between 500 and 600 white men, besides some 300 Chinese, in the camp, and with few exceptions this number will winter here.

"I have, &c.,

(Signed) "HENRY NICHOLSON,

"*Recorder.*

"*To the Hon. the Minister of Mines,*

"*Victoria.*"

MR. TUNSTALL'S REPORT.

"KAMLOOPS, January 20th, 1886.

"SIR,—I have the honour to inform you that after the Deputy Provincial Secretary's exhaustive report on the Granite Creek and other mines in the Similkameen District, little remains for me to add to the information already made public by that gentleman.

"The more recent discoveries are situated north of Granite Creek, head in the same range of mountains, and empty into the Tulameen River. They are respectively named Hines, Slate, and Champion Creeks. Although very little work had been done on them to determine the extent of their richness, sufficient evidence was obtained to prove that they contain gold in paying quantities. Recently prospects have been found on Slate Creek which lead me to consider it the richest gold-bearing stream at present known in the Province. The gravel, from the surface to bed-rock, averages, I am told, from two to six bits to the pan. The depth is from six to eight feet, which increases towards the mouth, and claims remote from its source will, probably, have to be drifted. This creek is twelve (12) miles long, and it has been staked off throughout its whole length.

"In addition to the foregoing, the prospects obtained on the Similkameen and Tulameen Rivers, and other localities upon which little or no work has been accomplished, leave no doubt as to the extent and permanent character of the mines in this district. Taking into consideration the fact that Champion Creek is about twenty miles distant from Granite Creek, and that the latter is apparently in the centre of a large scope of mining country, as yet untouched by pick or shovel, it is difficult to predict what discoveries will be made during the coming summer, when every creek and gulch within a radius of many miles will be actively explored for its concealed wealth.

"The climate is mild, and work can be prosecuted for a much longer period during the year than in the northern mining camps of the Province. Snow falls to a depth of three or four feet and supplies an abundance of water for all purposes during the summer.

"In regard to the yield of gold for the past season, I may add that Granite Creek, notwithstanding many drawbacks from dams being swept away by freshets, and with a comparatively small number of men, is credited with having produced $90,000. In the absence of any reliable data it would be impossible to state what amount—which must be considerable—was procured by whites and Chinese in other localities. The gold is coarse, and readily commands $17 per ounce. The largest nugget was found by a Chinaman on the Similkameen River, and weighed $87.50.

"The Government has reserved 160 acres of land on the Tulameen River, at Six-Mile Flat, in the vicinity of Otter Lake, for a townsite, which will be an important centre should the mines in the neighbourhood turn out as expected.

"The town of Granite Creek has about forty houses, to which a large addition will be made before spring, in anticipation of the large influx of miners, who will flock thither from different portions of British Columbia, and from the adjoining American territories and Pacific States. There are at present six saloons and hotels, and seven or eight stores well supplied with dry goods and groceries, which are disposed off at very moderate prices.

"The cost of lumber—$80 per 1,000 feet—has greatly interfered with building, but a saw-mill will be erected this winter which will suppy the demand at a reasonable rate.

"I may mention that two quartz ledges have been found, which exhibit gold to the naked eye, and promise to become remunerative investments. The assays from the famous Stevenson silver mine, situated 25 miles from Granite, exhibit wonderful richness.

"The Granite Creek mines are reached by three different routes—one *via* Hope, on the Fraser, a distance of 75 miles, and by the C. P. R. from Kamloops and Spence's Bridge, a distance of 50 miles, to Quilchanna and Coutlie's by the waggon road running through the Nicola Valley, thence 60 miles by trail to the mines. The route from the last two points to Richardson's passes through a lovely country, covered with grass, and sparsely dotted with fir and pine trees. Further on it becomes more densely timbered and mountainous, but affords no obstacle to the cheap construction of a waggon road which, for a distance of thirty-five miles, can be built with, comparatively speaking, little expense.

"I have, &c.,

(Signed) "G. C. TUNSTALL,

"*Gold Commissioner.*

"*To the Hon. the Minister of Mines,*

"*Victoria.*"

Kamloops Division.

MR. DODD'S REPORT.

"KAMLOOPS, January 23rd, 1886.

"SIR,—I have the honour to inform you that the mining interests in the Kamloops division of Yale District are looking brighter than for many years past. Two companies working on Scotch Creek, which empties into Big Shuswap Lake, at a point about 52 miles east of Kamloops, have averaged about wages during the past summer on a bar about ten miles from its mouth. The gold is in coarse pellets and nuggets, and is found in spots in the bars and creek. But there seems to be no continuous lead, and the opinion is now expressed that the gold comes from a channel situated at a higher level in the hill. This theory seems very probable. Advantage will be taken to test this in the spring, and if found to be correct, a new mining district of importance will be developed. About twenty white men will winter on the creek, and between fifty and sixty Chinese.

"The Zeran Mining Company has run a tunnel for a considerable distance on a quartz lode, located about eight miles from the mouth of the creek, from which satisfactory assays have been obtained. It is the intention of this company to actively prosecute operations next summer.

"The Nicola Milling-Mining Company, at Stump Lake, have driven their tunnel about 70 feet, with a working force of eighteen men. Some of the assays from the ore attained as high as several hundred dollars to the ton, and great interest is felt in the development of what will probably prove a valuable mining property.

"I have, &c.,

(Signed) "WM. DODD,

"*Government Agent.*

"*To the Hon. the Minister of Mines,*

"*Victoria.*"

Hope, Yale and Lytton Divisions.

MR. HUSSEY'S REPORT.

"GOVERNMENT OFFICE, SPENCE'S BRIDGE,
"30th November, 1885.

"SIR,—I have the honour to forward the mining statistics for 1885, and beg leave to submit the following information in reference to the past season at the Hope, Yale and Lytton Polling Divisions of Yale District. Mining matters in the Hope Division have been principally confined to Chinese working on the banks of the Fraser River, and from enquiries I find that but few have earned beyond a living.

"Messrs. Lansing and Beebee have taken up bar claims opposite the town of Yale, and have put up flumes, but have not yet commenced to wash the dirt.

"Mr. William Teague has resumed operations in the Queen Silver Mine, and has engaged the services of four experienced miners. Operations are progressing favourably, and the lode, as seen from the winze sunk about fifteen feet from the surface, presents congenial indications, carrying quartz of a fine character. The general geological formation is mica slate. The following encouraging report has been received by Mr. Teague respecting some rock recently sent to J. H. Collier, Esq., F. G. S., London, England, for assay. In the course of his remarks Mr. Collier says:—'The mineral sent by you for assay, taken as a whole, contains 14 ounces, '17 dwts. of silver per ton, with traces of gold, and no less than 52 per cent. silicious gangue. 'The sample was too small to allow of my determining in which mineral the silver was present, 'probably it might be found in all the sulphides. If these could be concentrated without the 'use of water a valuable argentiferous product would be the result. I should advise further 'exploration on so promising a vein.'

"Between Yale and Lytton there is considerable mining along the banks of the Fraser River, and there are several claims recorded by Chinese, but it is difficult to ascertain the amount of gold obtained. I should judge that the daily earnings of each man so employed would vary from 75 cents to $3 per diem. At Lytton and vicinity there has been this year more than the usual number of Chinese engaged in gold mining, and from reliable sources I have learned that the amount of gold exchanged at Lytton is about $15,000. The returns, as closely as can, with any accuracy, be obtained, are as follows:—

Yale and Hope	$ 4,000 00
Boston Bar	2,000 00
Lytton	15,000 00
Unaccounted for	8,000 00
Total estimated yield for 1885	$29,000 00

"I have, &c.,
(Signed) "FREDERICK HUSSEY,
"*Government Agent.*

"*The Hon. the Minister of Mines,*
"*Victoria.*"

KOOTENAY.

MR. VOWELL'S REPORT.

"DONALD, KOOTENAY, B. C.,
"December 31st, 1885.

"SIR.—I have the honour to forward the general annual report upon my district for the year ending 31st December, 1885, as well as the mining statistics, which I enclose herewith, for the same period.

"That the latter should be accurate in every detail, no effort was spared that could lead to such a result.

"There has been a slight increase in the general output for this year over that of 1884, which is in itself encouraging, and promises favourably for the future as regards the placer mines in this district.

"The returns are as follows, viz.:—

Wild Horse Creek	$30,050 00
Bull River	5,100 00
Moyea River	6,900 00
Palmer's Bar	4,700 00
Weaver, Nigger and Perry Creeks	8,500 00
Findlay Creek	3,600 00
Dutch, Toby and Cañon Creeks	7,800 00
Desultory	10,000 00
Total	$76,650 00

"Owing to an excitement arising last spring a great many of the Chinese, hitherto engaged in mining on Wild Horse Creek, decamped to Findlay Creek. That departure lessened the output from Wild Horse Creek, and unfavourably affected the general returns, owing to the utter failure of Findlay Creek, as regards shallow diggings.

"Those Chinamen who went to the latter creek found promising prospects upon the rim-rock in several places, and during high water, which lasted nearly all through the season, erected substantial buildings, intended for permanent occupation, and busied themselves in sawing lumber and getting out timbers for wing-dams and machinery, etc., at a considerable amount of expense and labour. Several wing-dams were subsequently washed away by fall freshets, which followed immediately upon the cessation of those of spring and summer, and when the miners, late in the fall, were enabled to thoroughly test the creek they found that the bed-rock was hard and smooth, sure indications of the absence of gold, which proved too generally to be the case. Among other unfavourable results, the Chinamen who placed their faith in Findlay Creek were reduced to beggary, in many cases being without the barest necessaries of existence, or the means of paying for the supplies they had procured during the season.

"There is, however, a prospect of the upper portion of that creek, which is some 30 miles in length, proving of importance as a field for extensive mining operations. The benches have been found to contain gold in small quantities, and it is believed that with hydraulic power they can be worked to advantage and profitably. A large amount of capital will first have to be expended, which is at present ready if the company wishing to carry on that enterprise can obtain sufficient ground to justify the necessary outlay. The ground in question is of no value to the individual 'Free Miner,' and cannot, I consider, be better disposed of than by granting a portion of it to some such company as the above.

"Findlay creek is situated about 40 miles north of Wild Horse Creek, and empties into the Kootenay River on the west side, about half a mile below the upper crossing.

"Mining has been carried on upon the Moyea River for many years with varied results, but never extensively. A company of miners discovered late last fall good prospects in the hills (composed of gravel) which, it is hoped, may lead to something extensive and of importance.

"Palmer's Bar has also been the scene of much hopeful labour in pursuit of the precious metal during the past, but never with very favourable results. There are a few of the old hands who yet expect rich discoveries in that locality.

"The same may be said of Weaver, Nigger and Perry Creeks.

"Of Dutch, Toby and Cañon Creeks the only one deserving particular mention is Toby Creek. Gold was discovered in it some time last August, and before the approaching winter froze them out there were some twenty men mining upon it. As far as is known it promises from $3 to $6 per day to the hand. Bed-rock has not yet been struck by any of the companies; ten feet being the lowest depth arrived at up to close of season. The creek is about 28 miles long, flowing from west to east, and emptying into Columbia River a short distance below the Lower Columbia Lake, in the vicinity of Windermere.

"The returns as above will be found to be from that portion of the district lying east and south of the Selkirk Mountains.

"Quartz mining throughout the district has advanced but little materially since 1884. For the most part the claims are merely held by the observance of those provisions in the Mineral Act bearing upon representation.

"The Pioneer Mining Co., Otter Tail Creek, situated about 28 miles east of Golden City, and close to the C. P. R. track, is a pleasing exception to the above. That company has erected a saw-mill, has the plant for a ten-stamp quartz mill upon the ground to be placed in

position next spring, when it is also intended to have a smelter constructed. They have about 35 men engaged this winter in getting out ore and timbers. About April next operations on a large scale will have fully commenced with fair prospects of success. The ore is argentiferous galena; there is a large body of it, assaying from 10 to 180 ounces of silver to the ton.

"On the Spallumcheen there is also one company, the Homestake, sinking during the winter.

"As has been stated in a previous report, there is a great abundance of galena ore in that locality, but of low grade. The company now at work expect that as they get into the mountain the rock will improve. They have had indications favourable to such a supposition.

"Kootenay Lake developments have been insignificant, a result that has caused much disappointment in consequence of its having been publicly stated last year by members of some of the large and moneyed companies that in 1885 operations would be commenced with vigour and extensively.

"The mines referred to have been held by large companies having a command of capital, and by impecunious miners. The former, for reasons best known to themselves, have done but little more than the law imposes upon those not wishing to forfeit their claims. The latter, not having the means to continue their representation, have in many cases abandoned their locations.

"The following are the only companies that have attempted to do anything more than mere representation, viz.:—

"The Tenderfoot and New Jerusalem have each sunk 30 feet, exhibiting a fine body of ore. The Blue Bell Mine sunk about 25 feet—ore taken out considered of inferior quality.

"The Ella, Emma and Munster, in about 20 feet, with encouraging prospects. The Bray's also looks well. There is little doubt, however, in reference to the ultimate success of these mines when properly taken in hand by men earnest in their desire, and of means sufficient to develop that wealth of which indications have already been discovered.

"I may mention that the Kootenay Milling and Smelting Company have placed two steamers upon the Kootenay River and Lake, one of them being about fifty feet in length, having powerful machinery, which the company intend to use as a tug-boat for the transportation of ore, in scows made for that purpose, from the different mines. Last fall that company also engaged the services of a mining engineer and assayer who has had three years' experience in the working of galena mines in Germany. He was to spend some three months at the mines, and to report fully upon them. The result I have not yet learned.

"In the Big Bend section of this district there have been during the year, as I have been informed by the Acting Recorder, Mr. Barratt, when visiting McCulloch's Creek last October, about 60 prospectors from time to time ranging through the mountains and creeks.

"About 20 ledges have been recorded, those from which assays have been made showing good returns.

"The Grew Mine gives $1,000 in gold and $30 in silver to the ton. The Amazon, the largest ledge yet discovered, being about 10 feet wide, contains gold-bearing quartz, free milling, and gives good returns from specimens crushed in a crude state by the miners.

"At the time of my visit no returns had been received from the rock from the Barratt Mine sent for assay.

"Three tunnel claims have been taken up on McCulloch's Creek, above the falls. They are in ground which has never been bottomed in early days, although attempts have been made to do so, which, however, were discontinued on account of the great expense then attending the undertaking, everything in the way of mining supplies being at that time at famine prices.

"One of the tunnel companies, the Bald Head, is running a tunnel this winter, having six men employed. They expect to strike bed-rock in April next. Should the prospects be favourable other claims will be immediately taken up and work commenced upon them, there being nearly a mile of new ground yet vacant. There is also a company organized for the construction of a bed-rock flume.

"French Creek has attracted some little attention; several companies have been formed and mining ground in different places taken up upon it; a Bed-Rock Flume charter has also been applied for on that creek.

"From 12 to 20 men are wintering in that section.

* * * * * *

"That no arrangement has as yet been arrived at in reference to the misunderstanding existing between the two Governments relative to precious metals within the Railway Belt, has

retarded the development of that portion of the district. The miners dread nothing more than a law-suit; and consequently many of our best men hang back till the final adjustment of that very vexatious dispute.

* * * * * *

"About 22 land pre-emptions have been taken up in the Upper Kootenay and Columbia River Valley, and one in the Big Bend country.

"I have been informed on good authority that several families propose leaving the North-West Territories next spring for the purpose of taking up homesteads in this district.

"Several applications have been made in reference to the purchase of land within the Railway Belt, none of which could be entertained in consequence of no arrangement having been made by which these lands become open to settlement.

"Provisions are neither plentiful, of superior quality, nor at any fixed price, owing to the uncertainty prevailing as regards the transportation of supplies, which is entirely governed by the caprice of the C. P. R. Co., who operate without any fixed schedule as to rates, etc. Prices prevailing are consequently higher than the people expected, with every prospect of an upward tendency as the new year advances.

"The crops and cattle throughout the district have given very encouraging returns.

"The weather for the last 12 months has been remarkably fine, and the condition of the men employed along the C. P. R. line unusually healthy.

"There were about seven thousand men employed upon railway works, and, including Chinese, about four hundred and fifty engaged in mining and prospecting, etc.

"The number of men wintering west of the Selkirks aggregate about 500; those east, about 350.

"It is expected that about two thousand men will be employed by the C. P. C. Co. next year.

* * * * * *

"Up to the present time there has been no violation of the law nor breaches of the peace east of the Selkirk summit this winter.

"About April next an engine and train is expected to arrive from the east, at which time operations will regularly commence for the season.

"Mails we have none, and the express, carried by dog-train, is a failure. Those attempting to run it being, I understand, about to give it up.

"In attending to the various duties devolving upon me as Gold Commissioner and Stipendiary Magistrate in charge of this district, everything that could be done was done to the best of my ability. I was kept, with great discomfort to myself, constantly travelling through a country where camping out was unavoidable; also being greatly pressed for time I was forced to travel in all kinds of weather, the exposure undergone (happily at the end of the season) resulting in my now being an invalid and confined to my room, which has been the case for the last three weeks.

"The returns of revenue collected, I hope, will prove satisfactory, the vigilance maintained upon all points affecting its collection being never for a moment permitted to relax.

"Mr. Redgrave was most assiduous, and did everything that was possible in fulfilling the duties allotted to him.

"There being no doctor nearer than Farwell in the west, and Calgary in the east, makes the inhabitants feel rather uneasy, as amongst so many people the services of a medical adviser may at any time become of the most vital importance.

"I have, etc.,

(Signed) "A. W. VOWELL,

"*Gold Commissioner and Stipendiary Magistrate.*

"*To the Hon. the Minister of Mines,*

"*Victoria.*"

MR. SPROAT'S REPORT.

"FARWELL, 8th February, 1886.

"SIR,—There being rumours here of excellent assay returns of Big Bend ore, I have inquired and find the *facts*, so far, to be as follow:—

"*Big Bend.*

"*One ton* sample showing no visible gold —New York assay—telegram to say: 'Result good. The particulars will be sent.' These have not yet arrived, but as the telegrapher had high hopes, his friends believe the result certainly must be over $100, or he would not call it good.

"The particulars of another *ton* sample sent by others to New York have not yet come.

"A *small* sample yielded the large quantity of 43¾ *ounces* gold, at that rate per ton, Am.

"A small sample yielded a fraction under $80 per ton, of silver.

"*Illecillewaut—North Fork.*

"A small sample from the Moberly mine assayed $86 to the ton, Am.

"It has been remarked as strange that the railway has not cut through any likely ore anywhere in this district, but a prospector the other day showed me an assay from Colville of $49 to the ton, of a small portion of blackish decomposed rock, found to contain silver. He says that on the road-bed of the railway there is an immense mass of this rock blasted to form an embankment, and ready for shipment. He has gone to stake it for a mining company, and must believe in it to come from Colville and ascend the Selkirks at this season; but I know no more about it than is above stated.

"If the Dominion contention as to the minerals be sustained, the road-bed minerals will belong to the C. P. R. Co.

"The hopefulness of the people here in the mining region has not diminished, and I notice some improvements in town.

"I am, &c.,
(Signed) "G. M. SPROAT.

"*The Honourable the Minister of Mines,*
"*Victoria.*"

NORTH-WEST COAST.

MAJOR DOWNIE'S REPORT.

"VICTORIA, B. C., 8th October, 1885.

"SIR,—I have the honour to submit to you the result of my last prospecting trip on the mainland coast of British Columbia.

"I shipped per steamer from Victoria to Bella Bella, and at that place took on board two Indians and canoe for Kitamaht. Left the steamer at mouth of Pender Channel, and proceeded by canoe to the head of the inlet, where the formation changes east of the Granite Range to slate trap and porphyry. Camped at the head of the inlet, and afterwards went to the old ledge which I have located and re-located for the last twenty-five years. This ledge is a true fissure vein, with well-defined walls of porphyry on the east and slate on the west. The vein is about six feet wide and consists of free milling ore, assaying by fire process $29 in silver and $9 in gold to the ton. There is a large stream of water in close proximity to the ledge, suitable for milling purposes and reducing works, with abundance of timber on the ground. This ledge is situate half a mile from the water, in a fine sheltered cove, and can be worked all seasons of the year to advantage.

"This part of the country has the appearance of being a valuable mineral region, and differs completely from the hard granite range south of this location. Lorne Creek, on the Skeena, lies about fifty miles north-west of this formation; and although the result of this season's work has not been very satisfactory in the Skeena, still, from the fact that gold is found in paying quantities in this slate belt, there is every reason for supposing it to be a valuable mineral country, when further prospected and developed. Prospecting will also be carried on north-west of this, towards the head of Observatory Inlet, east of the coast range to the head-waters of the Stickeen.

"Several creeks have been discovered lately by prospecting parties from Stickeen, and favourable results may be looked for shortly.

"I have done considerable prospecting in an inlet named Killdalla, near the head of Kitamaht, and found silver and copper.

"The presence of large mica boulders along the base of the mountains denotes that mica may be found in abundance. Graphite and molybdenum also exist in this inlet.

"In a bay about sixteen or seventeen miles south of the entrance to Pender Channel I found galena ore, but was prevented by stormy weather from going up the mountain and examining the location more minutely.

"I explored High Hite for several days, in the hope of discovering something valuable, as I had previously found rosam tin float up this inlet some fourteen years ago, but found nothing of any value on this occasion.

"I left for Dean's Inlet and went up the Ihtite Inlet, where I, with others, took out 70 tons of graphite in 1860, and shipped it to England in the 'Princess Royal;' but nothing came of that venture.

"It is twenty-seven years since I first made a report to Sir James Douglas, and although I still like to explore, I regret to say that old age will not let me climb the mountains any longer.

"In conclusion, I wish to state that twenty miles below the head of Kitamaht a river comes in from the north side. Black sand and quartz gravel at the mouth indicate mineral.

"I herewith present you with specimens of gold and silver ore, graphite, molybdenum, and mica.

"I have, &c.,

"*To the Hon. John Robson,* (Signed) "WILLIAM DOWNIE.
"*Minister of Mines, &c.*"

COAL.

The following table shows the output of each year from 1874 to 1885, inclusive:—

Year.	No. of Tons.
1874	81,000
1875	110,000
1876	139,000
1877	154,000
1878	171,000
1879	241,000
1880	268,000
1881	228,000
1882	282,000
1883	213,000
1884	394,070
1885	365,000

REPORT OF THE INSPECTOR OF MINES.

"NANAIMO, B. C.,
"27th January, 1886.

"SIR,—I have the honour, in pursuance of the 'Coal Mines Regulation Act, 1877,' to respectfully submit for consideration my annual report as Inspector of Mines, for the year closing on the 31st December, 1885.

"The collieries which have been in operation in the year 1885, are as follows:—

'Nanaimo Colliery, of the Vancouver Coal Mining and Land Company, Limited.

"Wellington Colliery, belonging to Messrs. Robert Dunsmuir & Sons.

"East Wellington Colliery, owned by R. D. Chandler, Esq., of San Francisco.

"Alexandra Colliery, of the Esquimalt and Nanaimo Railway Company.

"The output of coal for the year amounted to 365,596 tons, which, added to 2,034 tons in stock at the commencement of the year, formed a total of 367,630 tons of coal for disposal. The exports in 1885 were 237,797 tons shipped to California; Portland, Oregon; Alaska, and the Hawaiian Islands; and supplied to mail steamers and other vessels calling.

"The local consumption in 1885 is returned at 95,227 tons, which is nearly 8,000 tons more than that of 1884.

"In comparing the extent of our coal mining and commerce of 1885, with the results in the year 1884, I regret to have to note a decrease both in output and exports. The output is 28,473 tons less than the output of 1884, and the exports are 68,680 tons less than those of 1884. This falling off, however, has not been caused by any decline of power or resources on the part of our collieries. On the contrary, the collieries of British Columbia have at present an aggregate capacity equal to the production of coal of the best quality, sufficient in quantity to supply the demands of San Francisco and our other usual markets, without those consumers being obliged to have recourse to Great Britain or Australia for supplies; but during the past year larger quantities than ever of Australian and British coal have been poured into San Francisco, which has had the effect of glutting the market and causing a diminution of the demand from our collieries.

"I trust that a measure of reciprocity may be accomplished between Canada and the United States by the Dominion Government, and brought to the aid of our coal industry, so that we may have the advantage, now so much needed, of 75 cents a ton over British and Australian shippers of coal; or at least it is to be hoped that the latter will see that shipping coal to San Francisco regardless, apparently, of the cost of production, freight and handling, will only result in demoralizing the market, without yielding them any profitable return, as our collieries will doubtless retain their old time customers by the keenest competition that may be necessary.

"The following statement, obtained from a reliable commercial source, will show the receipts of coal at San Francisco, and Wilmington in California, for the past three years, and also the places from which the supplies were derived:—

	1883. Tons.	1884. Tons.	1885. Tons.
British Columbia	128,503	291,546	224,298
Australia	174,143	190,497	206,751
England and Wales	131,355	108,808	170,656
Scotland	21,942	21,143	20,228
Eastern States (Anthracite &c.)	43,861	38,124	29,834
Seattle	139,600	125,000	75,112
Carbon Hill	140,135	122,060	157,241
Green River and Mount Diablo	76,162	77,485	71,615
Renton, Newport and South Prairie	43,600	60,413	67,604
	899,301	1,035,076	1,023,339

"It will have been observed that we began the year 1886 with the unusually large stock of 34,210 tons of coal in bin or bunkers at the collieries, or at the wharves ready for shipment.

"NANAIMO COLLIERY.

"DOUGLAS PIT.

"In this mine, which is owned by the Vancouver Coal Mining and Land Company, Limited, there has not been any mining done during the past year, but the Company continue pumping the water from the pit, and also from a slope in connection with it.

"NEW DOUGLAS (OR CHASE RIVER) MINE.

"This mine is also owned by the Vancouver Coal Company. There has been considerable idle time in this mine during the past year, not owing to any accident, but on account of dullness in trade. You will have seen, in a previous report, that the mining lately done here was from a slant or slope. The coal is very good, but of late the Company have been much troubled with water, so much so, that from the beginning of December, the water came in so fast that

they were obliged to take the pumping machinery and rails out from the lower workings. Now the pillars are being taken out from the upper workings, while the water is fast rising.

"Ventilation was good on the intake in the counter-level the last time I was down there; 8,860 cubic feet of air per minute for the use of twenty-two men; part of this escaped when coming along the stalls on the return.

"This mine has been a very difficult one to work, on account of one fault after another, besides being greatly troubled with water.

"No. 1 Shaft, Esplanade, Nanaimo.

"This mine is what is known as the Vancouver Coal Company's No. 1 Pit. Everything about this mine, both on the surface and at the bottom of the shaft into the top of the slope, is of the strongest nature, the roof being supported by caps 15 inches square, with posts of the same dimensions. At the top of the slope (underground) they have now working a pair of 16-inch cylinder engines to hoist the coal, etc., out of the slope; these engines are furnished with steam from the same eight boilers which supply steam to the large hoisting engine on top.

"From the bottom of No. 1 Shaft, there is only one level working, known as No. 1 North level. The face of this place is now 1,100 yards in from the shaft. There has been a large quantity of coal mined from this level, and if the ground which has been gone through had been all good, this of itself would have made an extensive mine, but a great part of it has proved faulty, with wants, soft coal and otherwise.

"The slope in this mine is now down about 700 yards with a gentle grade. There are two levels working from the slope, one on either side; one is known as No. 2 North. This place is now in about 600 yards, with a long face of good hard coal in sight, varying in thickness from 4 to 8 feet. The level on the other side is known as No. 3 South. In this place for the first 250 yards the coal was poor, when they struck good coal about 7 feet thick, and by what they have seen, they can count upon good thick coal here for a long time. From this level to the bottom of the slope the coal is not good, and what there is is soft, and at the face there is very little coal; but as they have crossed the same want both in the No. 1 and No. 2 North levels, they know about the distance they have to go before they strike good coal, which will be the same body they are now working from No. 2 North level, and they expect to get into this body of coal soon in the slope. This slope, from the start, runs direct under the estuary of Nanaimo Harbour for the whole length of 700 yards, at a vertical depth of near 800 feet below tide water, with all the rock gone through in the shaft intervening, and what other rock or ground that may come on when going to the dip. Nearly all the work done in this mine is under the tide waters of Nanaimo Harbour, yet with all that the mine is very dry; hardly any water comes in, and what does come is free from salt. I think there is not much danger from water from the sea, with the ample cover over-head.

"Ventilation is good; the motive power is a jet of steam discharging in the return air shaft. The engine at the head of the slope also discharges its exhaust into the upcast shaft. When I was down in December, there was 32,000 cubic feet of air travelling per minute for the use of 50 men. The ventilation is upon the separate split system, with the main divisions from the slope, taking the counter-levels for the intake, the main and counter-levels going parallel with each other, only a few yards intevening, and being cut through at stated distances, so that the body of the air is always kept well in, and then returns by way of the stalls. Ventilation being good, there is very little gas found in the mine. Coal, etc., is hoisted from No. 1 Shaft by a pair of powerful engines, made by Oliver & Co., Chesterfield, England (described in a former report). All about the pit-head is housed in to protect the workmen from the weather. During the past year, additional shutes have been erected for greater convenience and expedition in getting away the coal, etc.; in fact all the work about the pit-head is done in good style. Plenty of timber and other things necessary for the works are on hand.

"South Field Mine.

"The mine designated by this name in a previous report was discontinued early in the year, and the New Slope, mentioned in the same report, is now known as the South Field Mine, and is belonging to the Vancouver Coal Company. The slope is now down 600 yards, with the coal varying in thickness from four to ten feet. The coal is of a very good quality. There are three levels working from this slope in an easterly direction, but at the present time

there are none working on the west side. Where the coal is hard and good, here, as in the old South Field Mine, there is much ground gone through that will not be profitable to work. The place where the coal should be is regular, but the coal is not there—only soft black coal matter.

"Ventilation is good, the motive power being a steam jet in the return air shaft. The last time I was in the mine there was 12,400 cubic feet of air per minute for the use of fifty men. The air is well conducted into the face by brattice, which, being so close, often gets broken down during blasting. With all the faults and wants which have been met, this is a good mine. They have very little water to contend with.

"In addition to the large pair of winding engines on the surface, there is another engine in the mine to hoist the coal, &c., from the bottom to the point from which the large engines take it away to the surface. This arrangement furthers the work at the bottom, and prevents any delay that might otherwise have been occasioned to the engines on top.

"WELLINGTON COLLIERY.

"WELLINGTON MINE.

"This is a slope mentioned in a previous report, and belongs to Messrs. Robert Dunsmuir & Sons. In this mine, as in all the other mines in this colliery, there has been considerable idle time for want of ships to take the coal away. The mining here has been confined to the working out the pillars (of coal) during the past year, and that at the lower levels; and as they have got most of the coal out of those places, they have now started on the upper levels to also take the pillars out, and what coal can be got along the crop-out, which will last for quite a time yet. Owing to the taking out of the pillars and the roof coming down, this mine has lost connection with two of their shafts or outlets, but there are yet three connections with the workings and the surface. Ventilation is good, the motive power being a large furnace. The ventilation is on the separate split system, with the main divisions to each side of the slope, the air going in the levels and returning by the way of the pillars or stalls to the up-casts. There is little or no gas now found in this mine, except on some occasions when a cave takes place. The fireman is going round all the time, by night as well as day, to see that no gas collects, and to report to the workmen whether or not the mine is in a safe condition for them to proceed to work.

"In connection with this mine there is the adit level. There has been little or no mining done here for the greater part of the year, as the demand for coal did not justify the owners to work here; but they are about to work again soon, as there is quite a large body of coal to work from in this level.

"Ventilation was good. This place is partly ventilated from the Wellington mine, and partly by a shaft with a large furnace. In any of the above places I never find less than 300 cubic feet of air per minute to each man.

"No. 3 PIT, WELLINGTON COLLIERY.

"This is the only shaft which Messrs. Dunsmuir & Sons have working in the valley of the Millstone River. There has been very little mining done here during the year that is past. In my previous report mention is made of the No. 4 pit being on fire; and as the workings of those pits are connected, forming one body of workings, the fire referred to being of such a large and serious nature, they had to turn in the water from the Millstone River to this mine, it being the lowest, and the water had to flow in here and fill this place before it could be got to the fire in No. 4. Now they have got the water out, but there is considerable damage done to some parts of the workings. They are, however, getting the workings in good order again. When I was down in December there were seventeen men working. Ventilation was very good (motive power, a fan), as there was 45,000 cubic feet of air per minute in circulation.

"No. 4 PIT, WELLINGTON COLLIERY.

"You will see by a former report that this is the shaft owned by Messrs. Dunsmuir & Sons which overlooks the valley. Mining has not been carried on very extensively here during the past year, partly owing to the fire in the mine, which started on the 30th December, 1884, and, as you will have already seen, the mine had to be filled with water for about forty-three feet up the shaft from the coal, so that they would make sure of extinguishing the

fire, the water having to be run into the No. 3 pit. After they had got sufficient water in, it was allowed to stand for some time before pumping was started; then everything went on favourably until the 20th April, when I went down the shaft along with Mr. Bryden, manager, and Mr. Scott, overman, and Mr. Little, engineer. The water was then two feet on the bottom. We went in the north side about thirty yards, when we could see the effects of the fire. Timbers that had been one foot thick were burned out, and the sides of the pillars burned and charred, while the roof was down from the height of about twenty feet above the coal. We also went in the south side, but here there was nothing to show that there had been a fire in the mine; there was, however, a cave from the roof. On the 30th of April Mr. Bryden sent a man to tell me that the upper part of the mine was dry, and that they had seen the bodies of the two men who were lost there on the 30th December, 1884, viz., John Paul and a Chinaman. I went to the mine and went down. As the bodies were on the north side, and that was heavily caved, we had to go in the south side and through the old workings to get to the bodies. They were both lying together, about 100 yards from the face where they had been working. After much work they were got to the surface. (*See* inquest, 30th April, 1885). From that time they commenced to clean up the mine to get it in order. After it was put in order, they started a few miners to put out coal; but as demand was not then, nor has since been, pressing, they have not put on such force as was at work before the fire.

"Ventilation is very good, and on the separate split system, the split being at the bottom of the shaft to the north and south sides of the shaft. There is never less than 400 cubic feet of air to each person per minute. In one month they expect to be connected with the No. 6 pit. Coal is from seven to ten feet thick, and of the usual good quality of the Wellington coal.

"No. 5 Pit, Wellington Colliery.

"This mine is also mentioned in a previous report. In this pit there has also been some idle time; not on account of any accident, but owing to the coal trade being dull. At one time the coal here did not look as well as they would have liked it to do, but after a time it began to improve, and now they have a good mine and a valuable property. Here they have worked on the pillar and stall system, as all the other mines belonging to Messrs. Dunsmuir & Sons are worked.

"Ventilation is good; motive power, a steam jet. This mine is also ventilated on the separate split system, with the main division at the shaft going in the level on either side. The last time I was at this mine there was 17,200 cubic feet of air per minute, for the use of forty-five men. This mine is almost free from gas. They are now sinking a shaft about eighty yards to the south of this pit, and are down about eighty feet. This shaft will be used as an air shaft for this mine.

"No. 6 Pit, Wellington Colliery.

"This pit is the sinking shaft mentioned in a previous report. Messrs. Dunsmuir & Sons have struck the coal at the depth of 260 feet from the surface. The coal was nine feet thick, hard, and of the usual good quality. They drifted into the coal about 100 yards, towards No. 4 pit, when they stopped work; and now, as I have said, they expect to get connected from No. 4 with this place in about a month.

"ALEXANDRA COLLIERY.

"This is what I mentioned in the 1884 report as a new Colliery being started in Cranberry District and owned by the Esquimalt and Nanaimo Railway Company. I am sorry to say that the coal at this place has not proved to be very good, or what it was expected to be. They put a slope down about 600 yards, which showed the coal not to be regular, but what they did get was of good quality; yet there are some places in this slope where the coal is hard and thick. They also did considerable work at some other places, but at present all work is stopped. It is to be hoped that there will yet be much good coal got at this place.

"EAST WELLINGTON COLLIERY.

"In my report of 1883 I stated that they had mined up the valley about 500 yards with side drives, but that the coal was thin. Since that time they have kept vigorously to work, not sparing any expense to find good coal, if there is any in the ground.

"The above level is now 1,100 yards in from the shaft where it now stands. Before this place was stopped there was a fault got crossing the level, which put the coal 34 feet above the level, but they went up after it. Here the thickness of the coal varied from 5 to 6 feet, hard and good. For quite a long distance before this fault was got the coal would average about 2 ft. 6 in. thick. They thought this part would be profitable to work by what is known as the long-wall system, and they have worked at that since September, and it mines as well as could be expected, taking the rock from the roof in the roadway and building it in the waste work, as well as the refuse from the mining of the coal, which fills it well up, not allowing it to settle far. They are also working to get a good roadway up over the above mentioned fault.

"At present they are sending out 100 tons of good coal per day, with the prospect of greatly increasing that soon. It is to be hoped that there will yet be a good mine here.

"Ventilation is good, motive power being a furnace. The last time I was down there was 7,400 cubic feet of air per minute travelling for the use of 24 men; air going in the level, returning by the faces. As there are no pillars (coal), the air has a clear way along the face. There is little or no gas seen in this mine. The fireman examines it regularly; I could see his mark for the day I was down, as it has to be in figures. There is always plenty of timber of all kinds, and of various lengths, to suit the different places.

"GENERALLY.

"All the above mentioned works I have frequently inspected during the past year. I found them generally in good order with plenty of timber, and other things necessary for the use of the workmen provided. In the course of my inspections of several of the mines, I have drawn attention to some things which I thought necessary to be done, and my requests have been attended to at once. Sometimes the brattice was not as close as 9 feet to the face, but then they showed me that it was hardly possible to keep it so close when there is so much heavy blasting as there is in the mines in this district. In places giving off gas, they have got to have it within a few feet of the face; but gas or no gas, the brattice has got to be kept 9 feet or thereabouts from the face. Some of the miners tell me that they do not want it so close, yet the brattice-man puts it up; but it is often broken down, having to be put up three or four times before it can be got to stand, which, of course, the miners cannot help.

"ACCIDENTS

"IN AND ABOUT THE COAL MINES OF BRITISH COLUMBIA FOR THE YEAR 1885.

"6th January—Ah Ying, labourer in the employment of the Vancouver Coal Company, had his leg broken while shunting cars on the railway by being jammed between the said cars.

"The above Ah Ying died on the evening of 6th instant.

"9th January—Tang, runner in the Wellington Mine, was jammed between a car and the roof while riding on the top of the cars in the said mine.

"5th February—Robert Shipley was injured by a fall of coal and rock while at work in No. 5 Pit, Wellington Colliery.

"15th April—John Lewis, miner, was hurt about the body by a piece of rock falling on him while at work in No. 1 Pit, belonging to Vancouver Coal Company.

"22nd April—Chinaman No. 208, running coal in New Douglas Mine, got his leg broken by being jammed with the boxes while at work.

"5th May—A. Mallony, miner, working in the Vancouver Coal Company's No. 1 Pit, was injured about the body by a piece of coal falling on him when at work, and died 8th May.

"5th May—James Green, miner, was injured about the body by a piece of coal falling upon him while at work in the Wellington Colliery Slope.

"20th May—John Williams, miner, working in the East Wellington Colliery, was killed by a premature shot.

"23rd May—William Bray and Cadwallader Hughes, miners, were injured while at work clearing up a cave from the roof in No. 4 Pit, Wellington Colliery.

"The above Cad. Hughes died on 8th August.

"30th May—William Dunstone, miner, was seriously injured by a fall of coal and rock while at work in the Wellington Mine.

"30th May—Chinaman No. 164, labourer to Vancouver Coal Company, was slightly hurt about the legs by a railway car.

"6th June—John Curry, overman, and Peter Brennen, foreman of Chinese, were severely burned about the face and hands, and two Chinamen were slightly burned by an explosion of fire damp which had collected in a cave in the Wellington Mine.

"10th June—Robert Spence, miner, working in the Vancouver Coal Company's No. 1 Pit, was hurt about the body by a fall of the top while at work in his stall.

"11th June—Chinaman 193, working in the Vancouver Coal Company's No. 1 Pit, had one of his legs hurt between two boxes.

"22nd June—Chinaman No. 326, running coal, got one of his legs broken by being jammed between two boxes while in No. 1 Pit, belonging to the Vancouver Coal Company.

"25th July—Shoo (Chinaman), was seriously injured by being jammed between two railway cars while at work at Wellington on the railway.

"25th July—Sam (Chinaman) was injured by being jammed by a car in the Wellington Mine while at work.

"4th August—Robert Shipley, miner, was injured by a fall from the roof while at work in No. 5 Pit, Wellington Colliery.

"23rd August—E. Jarman, miner, working in Vancouver Coal Company's South Field Mine, was slightly hurt about the face by coals thrown from a shot.

"25th September—James Hunt, timberman, working in No. 1 Pit of the Vancouver Coal Company, was killed by a rock falling on him while making ready for timber.

"14 October—Ah Hem, Bon You, Len Sing, Wah Shung and Ah Lock were killed by a car falling on them while descending the East Wellington shaft to work.

"20th October—Chinaman 204, running coal in the Vancouver Coal Company's South Field Mine, was jammed about the body with a box while at work.

"24th November—Francis McLean, miner, working in No. 3 Pit, Wellington Colliery, was injured by a fall from the roof.

"26th November—Lon (Chinaman), runner in No. 4 Pit, Wellington Colliery, had his leg broken by a box.

"28th November—J. K. Mardis, miner, was slightly burned about the face and arms by powder from a blast in No. 1 Pit of the Vancouver Coal Company.

"25th November—David Moffat, miner, was seriously hurt about the body by a cave from the roof while at work in the Wellington Mine.

"17th December—Sam Hock (Chinaman), runner, had his leg broken by being jammed with a box while at work in the East Wellington Mine.

"29th December—Ah Sing, labourer, got his leg broken by a piece of rock while at work helping two timbermen to put up timber in No. 1 Pit, belonging to the Vancouver Coal Company.

"I am sorry to have to make a list of so many accidents for the year that has closed, both serious and fatal. Some of them were very slight, yet they were of such a nature that they had to be reported.

"Of the accidents in this list, nine were by cars in the mine; two by cars on the railway; six by falls of coal; seven by falls of rock; three by shots and powder; four by an explosion of gas, and five by a car falling down a shaft while the cage was descending with the men on it going to work.

"On looking over the list of accidents, you will observe that there were ten fatal; one was caused by a car in the mine; one by coal; two by rock; one by shot, and five by a car falling down a shaft.

"I have inquired into all the accidents which have happened, and in the fatal cases, inquests have been publicly held, in which all the evidence was taken that it was possible to get; and in the case of the five men who were killed in the shaft, at about 11 p. m. at the change of shift, as negligence on the pitheadman's part was thought to be the cause of the accident, he was put in prison charged with manslaughter. The examination before the Stipendiary Magistrate, which lasted for quite a few days, was held, but as nothing could be proved to cause any suspicion against him he was discharged. As the depositions and proceedings at the inquests held on the fatal accidents are filed in the Attorney-General's Office, I beg leave to refer you to the same. With the exception of that accident in the shaft, all the fatal accidents took place at the workman's regular place of working, which is under the miner's own care, and he is supposed to be able to judge for himself, and to see when there is

danger, subject, however, to the overman; if that officer should see anything which he thinks dangerous when he is going amongst the workmen, and in their working places, pointing it out to them and having it made safe. There are, however, besides the practical miner, a great many men employed in the mines who never were in a coal mine until they came here; some of them are very careful workmen, but others, while working, do not know when they are in danger. This class help to make up the list of casualties.

"You will also observe that there are four reported as having been burned by an explosion of gas, when I might say that there were only two, as two of the four mentioned barely got warmed. This is very gratifying in comparison with the previous year.

"I hope in the year on which we have now entered, we shall enjoy still greater immunity from accidents, and that every one engaged in the hazardous occupation of coal mining will use the greatest caution, so that, if possible, no list will be required for accidents, as they will have ceased to happen.

"And I trust that the present year will be a prosperous year to the mining industry and workmen in common.

"Appended hereto are the Annual Colliery Returns.

"I have, &c.,

(Signed) "ARCHIBALD DICK,

"*To the Hon. the Minister of Mines,* "*Government Inspector of Mines.*

"*Victoria.*"

COLLIERY RETURNS.

NANAIMO COLLIERIES.

Output of coal for 12 months ending December 31st, 1885.	No. of tons sold for home consumption.	No. of tons sold for exportation.	No. of tons on hand 1st January, 1885.	No. of tons unsold, including coal in stock, Jan. 1st, 1886.
138,352 12-20.	26,710 17-20	111,670 7-20	1,048 5-20	1,019 13-20

Number of hands employed.			Wages per day.		
Boys & Indians.	Whites.	Chinese.	Whites.	Chinese.	Boys & Indians.
15	327	208	$2 to $3.50	$1 to $1.25	$1.50

Total hands employed 550	Miners' earnings, per day.....$3 to $4

Name of Seams or Pits—New Douglas or Chase River, South Field, and No. 1 Shaft.

Value of Plant—$350,000.

Descriptions of seams, tunnels, levels, shafts, &c., and number of same.—Chase River, worked by slope, seam averaging 6 feet; South Field, worked by slope, seam 6 to 10 feet; No. 1 Shaft, worked by shaft, seam 7 to 10 feet; Douglas Pit not working.

Description and length of tramway, plant, &c.—Railway, Douglas Pit to wharves with sidings, 1⅓ miles; railway, Chase River to wharves with sidings, 2 miles; railway, South Field to wharves with sidings, 3 miles; railway, No 1 Shaft to wharves with sidings, 1 mile. Rails are of steel, 56 pounds per yard of standard 4 feet 8½ inches gauge; 8 hauling and pumping engines; 10 steam pumps; 4 locomotives; 100 coal cars (6 tons), lumber and ballast cars; fitting shops for machinery with turning lathes, boring, screw-cutting machinery, steam hammer, &c., &c.; diamond boring machinery for exploratory work (bores to 2,000 feet); wharves, 750 feet frontage, at which ships of the largest burthen and draught can load at all stages of the tide.

SAMUEL M. ROBINS,
Superintendent of the Vancouver Coal Mining and Land Company, Limited.

WELLINGTON COLLIERIES.

Output of coal for 12 months ending December 31st, 1885.	No. of tons sold for home consumption.	No. of tons sold for exportation.	No. of tons. on hand 1st January, 1885.	No. of tons unsold, including coal in stock Jan. 1st, 1886.
220,000	68,340 18-20	120,559.10	586 8-20	31,691

Number of hands employed.			Wages per day.		
Boys.	Whites.	Chinese.	Whites.	Chinese.	Boys.
None.	284	131	$2 to $3.75	$1 to $1.25	

Total hands employed ..... 415 | Miners' earnings, per day .....$3 to $4.50

Name of Seams or Pits—Wellington.

Value of Plant—$250,000.

Description of seams, tunnels, levels, shafts, &c., and number of same—6 to 10 feet thick; 3 shafts working; 1 slope working; 1 adit level working; 3 air shafts; 1 of these with large furnace at bottom; the other two ventilating fans driven by 2 pair of engines; 1 shaft being sunk.

Description and length of tramway, plant, etc.—10 miles railway; 4 locomotives, 200 waggons, 7 stationary engines working, 1 engine not used at present; 4 steam pumps; 5 wharves for loading vessels at bunkers.

R. DUNSMUIR & SONS.

EAST WELLINGTON COLLIERY.

Output of coal for 12 months ending December 31st, 1885.	No. of tons sold for home consumption.	No. of tons sold for exportation.	No. of tons on hand 1st January, 1885.	No. of tons unsold, including coal in stock Jan. 1st, 1886.
7,244	176	5,568	400	1,500

Number of hands employed.			Wages per day.		
Boys.	Whites.	Chinese.	Whites.	Chinese.	Boys.
None.	44	40	$2.50 to $3	$1 to $1.50	

Total hands employed 84

Miners' earnings, per day .....$2.50 to $5

Name of Seams or Pits—East Wellington.

Value of Plant—$100,000.

Descriptions of seams, tunnels, levels, shafts, &c., and number of same.—1 seam (irregular); 1 shaft 8x18x240 feet deep; 4 levels, 6x10 feet; 1 slope; 3 slants, 6x12 feet.

Description and length of tramway, plant, &c.—Railroad 3½ feet narrow gauge, 3½ miles long; 2 locomotives, 20 4½-ton coal cars; 1 wharf, 30 feet wide and 725 feet long; 1 steam pile-driver complete; 1 pair hoisting engines; 1 donkey engine; 1 steam saw-mill complete, capacity, 12,000 feet per day.

W. S. CHANDLER.

VICTORIA: Printed by RICHARD WOLFENDEN, Government Printer, at the Government Printing Office, James' Bay.
1886.

PROVINCE OF BRITISH COLUMBIA.

MINING STATISTICS FOR 1885.

Name of Bar, Gulch, Creek, or River.	No. of Companies working.	No. of Interests.	No. of Companies taking out gold.	No. of Companies Prospecting.	Average number of men employed during season.		Rate of Wages.		Nature of Claims.					How Worked.					Description of Machinery.		Value of Gold per ounce.	Estimated value of yield for the year.	Total Divisions.	Total Districts.
					Whites.	Chinese.	Whites.	Chinese.	Bar.	Creek.	Bench.	Hill.	Quartz.	Rocker.	Sluices.	Hydraulic.	Shaft.	Tunnel.	Water Wheels.	Steam Engines				
CARIBOO.																								
Barkerville Division:																								
Williams Creek	19	.....	16	3	40	55	$4 & 3.50	$2.50	.....	7	.....	12	.....	.....	2	12	4	1	1	1	$16 00	$33,576		
Mosquito and Red Gulch	5	.....	5	.....	11	8	,,	,,	.....	3	2	.....	.....	.....	2	3	.....	.....	.....	.....	17 25	7,674		
Sugar and Hardscrabble Creeks	4	.....	4	.....	10	4	,,	,,	.....	3	1	.....	.....	.....	2	2	.....	.....	.....	.....	16 50	2,650		
Lowhee Creek	5	.....	5	.....	5	24	,,	,,	.....	4	.....	1	.....	.....	3	.....	2	.....	2	1	17 15	18,500		
Grouse and Canadian Creeks	5	.....	4	1	12	20	,,	,,	.....	3	.....	2	.....	.....	1	4	.....	.....	.....	.....	16 75	8,000		
Antler Creek { Lower	12	.....	12	.....	.....	53	,,	,,	.....	.....	12	.....	.....	.....	12	.....	.....	.....	.....	.....	16 50	19,000		
Antler Creek { Upper	3	.....	1	2	18	.....	,,	,,	.....	2	.....	1	.....	.....	.....	.....	2	1	1	.....	16 50	2,500		
Cunningham Creek (Upper)	5	.....	5	.....	1	21	,,	,,	.....	.....	.....	5	.....	.....	3	2	.....	.....	.....	.....	16 50	6,000		
Conklin Gulch	5	.....	2	3	8	4	,,	,,	.....	4	.....	1	.....	.....	.....	1	4	.....	.....	.....	16 00	1,500		
Stouts Gulch	1	.....	1	.....	3	6	,,	,,	.....	1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	17 00	3,000		
Stevens, Beggs, and California Creeks	6	.....	6	.....	.....	33	,,	,,	.....	.....	.....	6	.....	.....	.....	6	.....	.....	.....	.....	17 00	8,300		
Desultory mining	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,000		
																						$120,700		
Lightning Creek Division:																								
Lightning Creek	13	.....	9	4	40	50	3.50	3.00	.....	9	.....	4	.....	.....	1	3	9	.....	9	2	17 00	15,000		
Last Chance Creek	2	.....	2	.....	1	5	,,	,,	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	17 00	500		
Van Winkle Creek	3	.....	2	1	2	6	,,	,,	.....	1	2	.....	.....	1	1	.....	.....	1	.....	.....	17 00	1,000		
Chisholm Creek	4	.....	3	1	6	25	,,	,,	.....	3	.....	1	.....	.....	2	1	1	.....	1	.....	17 00	4,000		
Davis Creek	4	.....	4	.....	.....	20	,,	,,	.....	4	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	17 00	2,000		
Ruchon Creek	5	.....	3	2	5	15	4.00	,,	.....	3	1	1	.....	1	4	.....	.....	.....	.....	.....	17 25	5,000		
Slough Creek and Devil's Canyon	12	.....	10	2	3	94	,,	,,	.....	1	3	8	.....	4	5	3	.....	.....	.....	.....	17 00	29,000		
Nelson Creek	2	.....	2	.....	.....	20	,,	,,	.....	.....	.....	2	.....	.....	.....	2	.....	.....	.....	.....	17 00	3,000		
Burns Creek	3	.....	3	.....	2	20	,,	,,	.....	1	.....	2	.....	.....	1	1	1	.....	.....	.....	17 00	3,000		
Peters and Campbell Creeks	3	.....	1	2	.....	12	,,	,,	.....	1	.....	2	.....	.....	1	1	1	.....	.....	.....	16 75	3,000		
Swift River and Fountain Creek	5	.....	2	3	.....	20	,,	,,	.....	5	.....	.....	.....	5	.....	.....	.....	.....	.....	.....	16 50	1,000		
Deadwood and Barry Creeks	2	.....	2	.....	.....	8	,,	,,	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	17 00	500		
Cottonwood River and Lower Lightning Ck.	4	.....	4	.....	1	10	,,	,,	.....	3	.....	1	.....	.....	4	.....	.....	.....	.....	.....	17 00	2,500		
Perkins Gulch	3	.....	3	.....	2	10	3.50	,,	.....	3	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	17 00	2,000		
Desultory mining	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5,000		
																						76,500		
Quesnellemouth Division:																								
Fraser River (commencing 6 miles below and 20 miles above the town of Quesnelle)	10	.....	10	.....	.....	50	.....	.....	.....	3	7	.....	.....	3	6	1	.....	.....	.....	.....	16 50	37,500		
Cottonwood River (from bridge to Fraser R.)	3	.....	3	.....	.....	12	.....	.....	.....	3	.....	.....	.....	2	1	.....	.....	.....	.....	.....	16 00	7,900		
Quesnelle River (from mouth 20 miles up)	10	.....	10	.....	.....	15	.....	.....	.....	6	4	.....	.....	8	2	.....	.....	.....	.....	.....	16 00	5,000		
Hixon Creek	3	.....	3	.....	6	16	.....	.....	.....	3	.....	.....	.....	.....	3	.....	.....	.....	.....	.....	15 00	12,000		
																						62,400		
Keithley Creek Division:																								
Keithley Creek	8	.....	4	4	11	40	4.00	2.50	.....	4	.....	4	.....	.....	2	1	3	2	3	.....	17 40	10,000		
Snowshoe Creek	6	.....	4	2	11	20	,,	,,	.....	4	.....	2	.....	.....	4	1	.....	1	1	.....	17 00	7,800		
Harvey Creek	4	.....	3	1	13	.....	,,	.....	.....	4	.....	.....	.....	.....	.....	.....	3	1	.....	.....	17 40	4,500		
North Fork Quesnelle River	3	.....	3	.....	.....	20	.....	.....	.....	1	1	1	.....	.....	2	.....	.....	1	.....	.....	16 30	9,300		
South ,, ,,	6	.....	6	.....	.....	30	.....	.....	.....	.....	4	2	.....	.....	4	2	.....	.....	.....	.....	16 30	9,000		
Cedar Creek	3	.....	3	.....	.....	13	.....	.....	.....	1	.....	2	.....	.....	3	.....	.....	.....	.....	.....	16 30	4,500		
Horsefly River	1	.....	1	.....	.....	7	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1	.....	1	.....	16 30	4,000		
Quesnelle River (40 miles below Forks, no organized company, all desultory mining)	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	16 30	8,000		
Fraser River (from 6 miles below Quesnelle down to Williams L., all desultory mining)	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	.....	20	.....	.....	.....	.....	.....	.....	14 50	7,000		
Desultory mining on several small creeks and gulches	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	.....	.....	.....	15	.....	.....	.....	.....	.....	.....	.....	4,000		
																						68,100		
CASSIAR.																							327,700	
Laketon Division:																								
Dease Creek	7	28	6	4	11	12	5.00	3.00	.....	3	.....	9	.....	.....	4	2	.....	4	.....	.....	15 50	12,350		
Thibert Creek	9	33	8	2	17	10	,,	,,	.....	1	.....	7	.....	.....	1	4	.....	3	.....	.....	16 00	12,600		
Defot Creek	4	2	2	2	4	2	,,	,,	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	17 00	3,650		
Desultory mining	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,000		
																						31,600		
McDame Creek Division:																								
McDame Creek	10	40	10	.....	9	25	6.00	4.00	.....	3	.....	7	.....	.....	10	.....	.....	.....	.....	.....	17 50	15,000		
Snow Creek	1	2	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	200		
Quartz Creek	1	8	1	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	.....	1	.....	.....	.....	200		
Rosella Creek	1	1	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	300		
Poor Man's Creek	1	1	1	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....	1	1	.....	.....	.....	.....	.....	600		
Fred. Hart Creek	1	1	1	.....	1	.....	.....	.....	.....	1	.....	.....	.....	.....	1	.....	.....	1	.....	.....	.....	200		
Deloire River	2	7	1	1	7	.....	.....	.....	2	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	500		
Walker Creek	2	7	2	.....	.....	5	.....	.....	.....	2	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	2,000		
																						19,000		
LILLOOET.																							50,600	
Bridge River and its tributaries / Benches and bars of Fraser River	.....	.....	.....	.....	30	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14 50 to 16 50	94,700		
																						94,700		
YALE.																							94,700	
Similkameen Division:																								
Granite Creek	142	390	72	70	400	80	3.50	2.00	.....	142	30	6	4	6	66	.....	1	1	20	.....	16 75	54,000		
Tulameen River	60	218	50	10	103	115	,,	,,	29	31	.....	.....	8	8	52	.....	.....	.....	.....	.....	16 50	60,000		
Similkameen River	5	15	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	.....	.....	.....	.....	.....	.....	.....	16 50	3,500		
																						117,500		
Hope, Yale and Lytton Divisions:																								
Desultory mining on bars and benches of Fraser and Thompson Rivers	.....	.....	.....	.....	.....	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29,000		
																						29,000		
KOOTENAY.																							146,500	
Wild Horse Creek	8	30	8	.....	3	27	4.00	3.00	.....	1	.....	7	.....	.....	1	7	.....	.....	1	.....	18 00	30,050		
Bull River	8	16	8	.....	16	.....	,,	,,	.....	8	.....	.....	.....	.....	8	.....	.....	.....	1	.....	18 00	5,100		
Moyea River	6	17	3	3	11	6	,,	,,	.....	4	2	.....	.....	.....	5	.....	.....	1	.....	.....	18 00	6,900		
Palmer's Bar	4	14	2	2	.....	14	,,	,,	.....	1	3	.....	.....	.....	2	.....	.....	2	.....	.....	18 00	4,700		
Weaver, Nigger and Perry Creeks	4	12	3	1	5	7	,,	,,	.....	1	3	.....	.....	.....	3	.....	.....	1	.....	.....	18 00	8,500		
Findlay Creek	14	40	6	8	.....	60	,,	,,	.....	14	.....	.....	4	10	.....	.....	.....	5	.....	.....	18 00	3,600		
Dutch, Toby, and Canoe Creeks	13	45	9	4	45	.....	,,	,,	.....	13	.....	.....	4	9	.....	.....	.....	3	.....	.....	18 00	7,800		
Desultory	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18 00	10,000		
																						76,650		
OMINECA.																							76,650	
Vitalle Creek	1	4	1	.....		Indians. 6	6.00	Indians. 3.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16 00	5,000		
Germansen Creek	4	10	4	.....	4	6	,,	,,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16 00	6,000		
Manson Creek	3	6	3	.....	6	10	,,	,,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16 00	5,000		
Lost Creek	1	3	1	.....	3	.....	,,	,,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16 00	500		
																						16,500		
SKEENA.																							16,500	
Lorne Creek	.....	.....	.....	.....	160	20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18,000	
					1,056	1,846																		18,000
																								$730,650