

MININD1903-4

THE PROGRESS OF
THE MINERAL INDUSTRY
OF
TASMANIA,

FOR THE QUARTER ENDING 31ST DECEMBER, 1903.

COMPILED BY

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BY ORDER OF

THE HONOURABLE CARMICHAEL LYNE,

MINISTER OF MINES.



Tasmania:

JOHN VAIL, GOVERNMENT PRINTER, HOBART

1904.



PROGRESS OF THE MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 31st DECEMBER, 1903.

*Launceston,
10th March, 1904.*

The following Table shows, as far as can be ascertained, the quantities and values of Metals and Minerals raised and exported during the quarter ending the 31st December, 1903, compared with the corresponding quarter in 1902, and the previous quarter ending 30th September, 1903:—

	During the Quarter ending 31st Decr., 1903.		During the Quarter ending 31st Decr., 1902.		During the Quarter ending 30th Sept., 1903.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		£		£		£
Gold won	ozs. 16,090 ⁸ / ₇₂₅	68,349	17,599 ⁸ / ₀₅₀	74,756	15,704 ²² / ₂₂	66,723
Auriferous Quartz and Pyrites exported	tons 59	1096	57	1111	252 ¹ / ₄	8314
Gold Quartz exported	tons ...	...	42	62	...	...
Silver Ore exported	tons 3850 ¹ / ₄	41,412	6367	59,925	3319 ¹ / ₁₀	35,858
Silver-lead Bullion exported	tons 1895 ¹ / ₂	58,130	1364	47,729	1302	45,731
Silver exported	ozs. ...	...	44	4	...	...
Galena Ore exported	tons ...	...	...	...	334 ¹ / ₂	4643
Zinc Ore exported	tons 1070	3284	...	...	84	252
Blister Copper exported	tons 1554	92,580 [†]	1102	82,671 [†]	1954 ¹ / ₂	146,610 [†]
Copper Matte exported	tons ...	...	2175	43,612	...	...
Copper exported	tons 150 ¹ / ₂	11,288	201 ¹ / ₂	10,066	...	...
Copper Ore exported	tons ...	...	3 ¹ / ₂	21	6 ¹ / ₂	17
Copper Concentrates ex- ported	tons ...	...	16 ¹ / ₂	330	...	...
Tin Ore exported	tons 98 ² / ₃	2764	57 ¹ / ₂	2601	85	2364
Tin (metallic) exported	tons 668	78,512	617	71,443	594 ² / ₃	75,759
Iron Ore exported	tons 2556 ² / ₃	1597	355	355	972	1104
Ironstone Flux exported	tons ...	...	...	...	50	100
Coal raised	tons 9088	7725	12,076	10,264	14,873	13,014
Kaolin Ore	tons 4 ¹ / ₂	14	...	...	...	...
TOTAL VALUE .....	... £	366,751	... £	404,950	... £	400,489

* Fine gold, including gold contained in blister copper and silver-lead bullion,
† Value of gold contents deducted.

GOLD.

During the past quarter $8189\frac{16}{30}$ ozs. of gold were obtained from quartz, 347 ozs. from alluvial, 1623 ozs. by means of the cyanide and chlorination processes, 4777 ozs. from blister copper from the Mount Lyell Mining and Railway Company, Limited, $10621\frac{6}{30}$ ozs. from the silver-lead bullion from the Tasmanian Smelting Company's Works, Zeehan, and 980 ozs. from the sulphide ores from Mount Read, valued at £68,349.

The following Table shows the quantities obtained from the various sources on the different fields during the period under review, together with the totals for the corresponding period of 1902, and the previous quarter ending 30th September, 1903:—

	Gold obtained during the Quarter ending 31st Dec., 1903.						Totals corresponding Quarter, 1902.	Totals for Quarter ending 30th Sept., 1903.
	From Quartz.	Alluvial.	Cyanide & Chlorination.	From Blister Copper.	From silver-lead Bullion.	From Sulphide Ores.			TOTAL.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield	380	6	892	...	...	...	4698	4371
Mathinna ...	3931	...	611	...	...	...	4542	$4043\frac{2}{30}$
Mt. Victoria	98	...	...	...	...	...	98	54
Warrentinna		...	...	...	...	...	...	...
Lefroy	312	...	120	...	...	...	432	$322\frac{1}{2}$
Lisle .....	...	218	...	...	...	...	218	138
Golconda
Mangana ...	$48\frac{16}{30}$	...	...	...	...	...	$48\frac{16}{30}$	$6\frac{2}{30}$
Bell Mount.	...	8	...	...	...	...	8	14
Middlesex...	...	...	...	...	...	...	...	...
West Coast.	...	115	...	4777	$10621\frac{6}{30}$	980	$6934\frac{1}{30}$	7663
TOTALS	$8189\frac{16}{30}$	347	1623	4777	$10621\frac{6}{30}$	980	$16,979\frac{1}{30}$	...
Totals corresponding Quarter, 1902.....	$9174\frac{9}{30}$	$249\frac{3}{30}$	2412	4954	485	1361	...	$18,635\frac{1}{30}$
Totals for Quarter ending 30th Sept., 1903.....	6834	328	1920	5503	880	1137	...	16,602

Value £68,349; equal to 16,090·725 ozs. fine gold.

BEACONSFIELD.—The district gave employment to 394 men during the quarter, 26 of whom were prospectors and tributors.

The Tasmania Mine is now being worked by the Tasmania Gold Mining Company, Limited, and a new Cornish pumping plant is

being obtained for installation. Hart's shaft is in process of enlargement, for receiving the first unit of pumps, and a new shaft is to be sunk shortly to receive two more units.

During the quarter 4705 tons of quartz were crushed, and 4615 ozs. gold produced (by amalgamation and chlorination), being a total since the starting of the mine of 507,661 tons crushed, and 579,694 ozs. 8 dwts. 17 grs. gold obtained, realising £2,127,962 4s.

Tasman-Ophir Mine.—Some experiments have been made in treating the wash from different parts of the mine. Parcels are to be sent to the Ballarat School of Mines from the 400 and 200-ft. levels. Twelve loads of wash from the 90-ft. shaft were sluiced at the mine for 1 oz. of gold, but there was some difficulty in getting full values from the wash at the 400-ft., where it is stated to be fully 30 feet thick. Work there has been suspended until the tests which have been decided upon shall have disclosed the actual value of the wash; but the wash at the 200-ft. level is being operated upon, as there is, according to the reports, reason to suppose that its treatment will produce satisfactory results. Fifteen men have been employed at the mine.

North Tasmania Mine.—Six tributors here raised 12 tons of quartz, which returned 77 ozs. gold.

Bonanza Proprietary.—The shaft has been sunk to 391 feet. An ore channel was cut through by the shaft between 265 feet and 290 feet, when it passed out, underlying south. Some good gold assays were obtained from this. Shaft-sinking is continuing.

LEFROY.—Sixty-one men were employed in this field, 40 of whom were at the New Pinafore. This company produced 432 ozs. gold. Cross-cutting has started for the Hit or Miss lode.

LISLE.—Twenty-four hands were employed by the Dredging Company, and 218 ozs. gold won.

MOUNT VICTORIA.—Five claims are being mined. The Hinemoo is driving upon a reef with stone reported to be gold-bearing.

MATHINNA.—The statistics of output from this field for the quarter are—

	Crushed.	Gold produced.	Men.
		ozs.	
New Golden Gate.....	4665 tons quartz	2700	180
" " "	8865 " sand	611	
Volunteer Consolidated...	365 " quartz	420	40
New Golden King.....	1000 " "	450	20
Volunteer	920 " "	305	50
Dan's Claims.....	50 " "	50	6
Revenue	not known	6	4
	Total.....	4542	300

In addition, 79 men found employment with other companies, or in prospecting.

New Golden Gate.—The stopes show large quantities of payable stone, and the prospects of the mine are excellent. The successive slides which have been disclosed south of the main slide connect shoots of gold-bearing stone; and the company considers that profitable working is assured for a considerable time. Messrs. Siemens Bros. and Co., Limited, are about to deliver and instal an electric pumping-plant, which is on its way out.

Volunteer Consolidated.—The eastern leg of the lode has been driven upon south-west; for the first 30 feet it was payable, indeed, some exceedingly rich stone was met with, but from that to the present face the reef has not been payable. It has not been driven upon north-east. No. 2 lode in the face shows payable stone, and a main winze is being sunk upon it; and No. 3 is also reported as showing payable gold.

Volunteer.—This mine, to the end of December, put out 6630 tons of quartz, which yielded 2059 ozs. of gold, being an average of 6 dwts. 5 grs. per ton. This realised £7341 12s. 8d. The past half-year showed a yield of 6 dwts. 2 grs., as compared with 5 dwts. 23¼ grs. the previous six months; the accounts disclosed a loss of £1627 7s. The Directors' report states that two causes are responsible for this, viz., unexpected water from the northern ground, with which the appliances could not cope, and a slide heaving the lode to the north-west. It is intended to sink the main shaft a further depth of 160 feet, and to instal the necessary pumping-plant for this purpose. The reef in the bottom of the shaft below the No. 4 level is said to be strong, and it is anticipated that it will improve with depth.

Volunteer Consolidated Extended.—Sixteen men were employed. This property is east-of and adjoining the Volunteer Consolidated. A main shaft has been sunk 115 feet, and three lodes cut, two of which are reported payable, and the third undefined where cut. A crushing will be got out, which will prove the value of the stone. No. 1 lode is considered to represent Nos. 3 and 4 of the Consolidated, junctioned; and No. 2, a continuation of the Consolidated No. 2. The shafts on the two properties are, approximately, 1000 feet apart.

Stevens and Party have made what appears to be a valuable discovery on the old Pride of Mathinna ground, south of and adjoining the New Golden Gate. Auriferous stone, about a foot wide, has been found, and is being sunk upon.

New Golden King.—The crushing during the last quarter yielded 8 dwts. per ton, making the average for the half-year 9 dwts, which, owing to the erratic behaviour of the lode and extreme hardness of the country, does not cover expenses. The cost of sinking the main shaft (continuing the present shaft or sinking a new one) has influenced the company in deciding to continue exploring to the west, extending the adit to the western boundary.

Tasmanian Consols.—The shaft has been sunk to 1300 feet, and gold is now being carried at both the 1200-ft. and 1300-ft. levels. Stone at the latter level, valued at 25 dwts. gold per ton, has been struck since the end of the quarter—another triumph of deep mining in Tasmania.

More activity prevails now on the Mathinna field than for a long time past.

MANGANA, &C.—The quarter's statistics are:—

	Quartz crushed. tons	Gold obtained. ozs. dwts.	Men employed. No.
Golden Entrance	41	38 13	7
Sovereign Extended..	9	2 3	4
Abbotsford Creek.....	1500	8 0	50
Elsewhere .....	...	...	4
Total.....	1550	48 16	65

Owing to the disappointing results from the crushing at Abbotsford Creek, the company relinquished work, but others are extending the bottom level, to see whether better stone can be met with.

WEST COAST.—At the Coronation Mine during the quarter a shaft was sunk 42 feet, when the lode was cut, and driven upon for 104 feet. The lode proved to be continuous, without a break, carrying from a fair to highly payable quantity of gold. A trial crushing of about 80 tons was put through the three-head battery, and gave a return of 12 ozs. smelted gold. During the last week of the quarter a battery of 5-head of 800-lb. stamps has been obtained, and will be conveyed to the mine as soon as practicable. It is intended to drive this battery by water-power, a Pelton wheel being provided for that purpose. An 8-inch Cornish lift will also be put in position during the next quarter, the motive power for which will be supplied by a turbine. Men employed, 10. Progress has been slow in consequence of the difficulty of transporting the necessary machinery to the mine. The chief difficulty is the want of a bridge over the King Billy Creek.

At Mt. Darwin there have been about 16 alluvial miners getting gold. The yield is stated to be fairly satisfactory.

At Flannigan's Flat about 10 men were employed in alluvial mining.

The alluvial gold bought by the local banks during the quarter was 103 ozs.

TIN.

The output of tin ore at Waratah during the quarter was as follows:—

	Tons.	Men employed.
Mount Bischoff.....	318	217
Stanhope Alluvial.....	2½	3
Waratah Alluvial.....	2½	3
Wombat.....	...	6
Total	<u>323</u>	<u>229</u>

The Mt. Bischoff has maintained its output with the regularity characteristic of the management of this mine, the per cent. of ore averaging, as usual, about 1½.

EAST AND NORTH-EAST COAST.—*In the Ringarooma Division* 18 leases and 17 Miners' claims have been worked, and the yields have proved fairly good. The Mammoth Company, adjoining the Star of Peace, is erecting a battery. The Star of Peace crushed 1253 tons, which yielded 18 tons tin ore.

In the Branzholm District the output of the Arba Tin Mine was 19½ tons for the quarter, with .36 men employed. Ah Poy's claim, worked by 16 Chinese miners, yielded 3 tons tin ore.

The Briseis Mine, at Derby, produced 107 tons 16 cwts. ore, with 170 miners.

MOORINA DISTRICT.—The output here was as under:—

	Tons ore.	Men employed.
Native Youth	11¼	8
Moorina Tin Mine.....	7½	6
Weld Mine	5½	11
Total.....	<u>24¼</u>	<u>25</u>

Pioneer Tin Mine.—The quarter's output was 108 tons tin ore, with 58 men employed. Mr. C. Ryan, the manager, reports that during 1903 305,200 cubic yards of wash were pumped and sluiced for a yield of 402 tons 3 cwts. 3 qrs., 19 lbs, of stream-tin, assaying 74 per cent. metal, and four dividends amounting to £20,075 were paid. The width of lead worked was about 10 chains, while just ahead of the leading face the width of ground to be worked is 17 chains. The ground is worked in two benches, the upper bench being sluiced direct to the large pumping-plant, while the lower

bench is raised to the suction level of the large plant by a smaller pumping-plant working in the bottom, the continued vertical lift of both plants being 125 feet, of which the large plant is lifting 80 feet and pumping about 6000 gallons of water and 1 cubic yard of sand per minute. It discharges into an elevated tail-race 22 feet high, 600 feet long, and 10 feet wide, with a grade of 22 inches to the chain, in which the tin is saved. The present tailings dump is now filling up, and to avoid increasing the lift for the pumps, to secure more room for tailings, and in order that the pumping-plants may be kept close to their work, the tailings will shortly be discharged into the worked-out ground behind the plant. To enable this to be done, another large pumping-plant, similar to the present one, is in course of erection on the mine; when finished, this will be the most economical and complete of its kind in the State, and will enable much more drift to be sluiced than at present. This plant will probably come into operation about June. In addition, a large dam is being constructed on Bradshaw's Creek, about $1\frac{1}{2}$ mile above the mine. When the new plant is completed, the total horsepower of the pumping-engines will be 900 h.p.—two units of 400 h.p. each and one of 100 h.p.

The prospects of the mine are considered excellent.

At Wyniford River.—The Garibaldi Company raised 8 tons 12 cwt., with 14 men employed. Sun Tan Kee won 5 tons with 23 Chinese miners, and Yon Hun $4\frac{1}{4}$ tons with 13 Chinese.

At Gladstone.—The Scotia claim yielded 19 tons with 10 miners, and the Ruby claim, at South Mount Cameron, 7 tons 9 cwt. with 19 men.

At Boobyalla, or Mt. Horror, the Wilberforce Company raised 3 tons 1 cwt., with 4 miners.

Besides the above, 73 tons ore were raised by sundry individuals and small parties in the North-East Division.

EASTERN DIVISION.

WELDBOROUGH.—The output has been as under:—

	Tons, cwt.	Men employed.
Weldborough Tin-mining Company.....	1 9	6
Weldbrook " "	1 15	6
R. B. Inglis	3 3	6
Chinese claims	9 8	52
Other claims.....	17 0	37
Total	<u>32 15</u>	<u>107</u>

LOTTAH.—The Lottah and Blue Tier mines during the quarter have raised as follows:—

	Tons. cwts.	Men employed.
Anchor Mine	64 7	112
Liberator and Cambria.....	0 17	4
Australian.....	0 10	6
Other claims.....	4 2	21
Total	<u>69 16</u>	<u>143</u>

ST. HELENS.—The quarter's raisings were:—

	Tons. cwts.	Men employed.
Royal Ruby.....	5 8	14
Thureau's Deep Lead	3 12	4
Hunt Tin Mine.....	2 1	5
J. E. Stevens (Constable's Creek).....	1 1	3
Other claims	7 4	37
Total	<u>19 6</u>	<u>63</u>

AVOCA.—These mines have produced:—

	Tons. cwts.	Men employed.
Mount Rex Mine.....	41 10	50
South Esk	10 4	12
Eclipse.....	1 14	3
Prospectors.....	...	5
Total	<u>53 8</u>	<u>70</u>

WEST COAST.—The registered output of tin ore on the West Coast was:—

	Tons.	Men employed.
Tasman Tin Mine, North Heemskirk.....	2	2
Birthday Tin Mine, Heemskirk	7	7
Mayne's Tin Mine, Heemskirk	20	15
	<u>29</u>	<u>24</u>

Mr. W. Fisher reports that 2 men have been continuously prospecting at the Tasman Tin Mine, with the above results. A haulage is shortly to be installed.

SILVER.

WEST COAST.—The registered output of silver ores from the mines in the Zeehan and Dundas districts for the quarter ending 31st December, was as follows:—

	Ore.	Tons.	Value. £	Men.
<i>Zeehan Mines:</i>				
Mount Zeehan, Tas.	galena	1997	17,979	190
Zeehan-Montana	"	836	10,593	203
Zeehan-Queen	galena and gossan...	39½	216	48
Oonah	"	50½	580 }	
"	stannite	119	1000 }	33
Silver Queen Extended	galena.....	17	144	14
Silver King	"	6	35	4
Zeehan Sth. Comstock	"	7	70 }	
" "	zinc blende	104	208 }	10
Florence	galena.....	38	389	30
Zeehan Western	"	58½	336	43
Zeehan Bell	"	7½	32	3
<i>Dundas Mines:</i>				
Hercules	zinc-lead sulphide...	3670	6393 }	
"	gossan.....	126	659 }	103
Ring Valley	lahl ore	44	1271	14
Comet	galena.....	460	2785 }	
"	gossan flux.....	1233	832 }	62
West Comet	flux	4000	1600	18
Curtin-Davis	"	187	449	8
	Total	13,000 ²⁰	45,571	783

Mount Zeehan (Tasmania).—Mr. T. Vincent, manager, reports that preparations are being made to open out No. 4 level on the Spray main lode. Lode as usual. At No. 2 shaft, No. 2 lode is not yet payable. At No. 6 shaft 122-ft. level, the crosscut has been extended east 292 feet, and cut three lodes, two of which were not payable. No. 3 driven 29 feet south, 30 feet north, and paid sinking costs the last month. This lode looks well for opening up profitable stopping ground. The water is heavy, but well under control.

Zeehan-Montana.—Mr. Jno. Craze, manager, reports:—Nos. 4 and 6 lodes have been cut at 600 ft. level, and are being driven upon. No. 4 lode is showing a little ore, but not payable; No. 6 lode without value. Mining operations are being carried on in 6 levels. Two drives are being driven at No. 5 level on Nos. 4 and 8 lodes. At No. 2 shaft (late S. Queen No. 2), the east crosscut No. 2 level is in 400 feet from shaft, but nothing intersected. No. 2 lode west of shaft has been cut at No. 1 level, and a drive is being driven north, but the lode so far is poor. At No. 2 level the north drive on No. 2 lode has been driven north 100 feet from crosscut. The lode may be considered payable for 50 feet. A rise is now being

put up to communicate with the north drive at No. 1 level, for ventilation. When this is done, a stope will be started along the back of No. 2 level, and the value of the lode further proved by continuing to drive north.

Zeehan-Queen.—Mr. T. H. Vincent, manager, reports:—No. 1 level, No. 4 lods, winze sunk 30 feet, good ore in bottom. Driving No. 2 level north. Clarke's lode, No. 1 level, carrying little ore occasionally. Prospects fair.

Oonah.—Mr. W. Fisher reports:—Good ore came in the gossan tunnel at 85 feet north, bulking over 200 ozs. silver per ton. The stannite is about the same as last reported. Stopping continues between Nos. 4 and 3, and driving north end; 6 inches of good ore continues to be the average width, with occasional blanks.

Silver King.—Mr. W. Fisher reports:—At Taylor's tribute a mixed lode (9 in.) has been cut, and is being driven upon without much improvement. The silver contents of the ore in the heaps of seconds are proving too low for profitable dressing.

Zeehan South Comstock.—Mr. Hy. Castle, manager, reports:—Work has been confined to surface and open-cut, on which tribute parties have been engaged.

Florence.—Mr. F. K. Astell, manager, reports:—At main shaft, No. 1 level (128-ft.), a drive north cut lode at 30 feet. This was driven on to 120 feet, and contained mostly milling-ore. At the south end, same level, another lode was cut at 20 feet, and driven on to 140 feet, with nice bunches of first-class ore. These two levels will receive attention after the erection of the mill, which is being brought to the mine.

Zeehan-Western.—Mr. Jno. Craze, manager, reports:—The mine pumps, with the aid of bailing tanks, drained the mine to No. 9 level, 26th November. Three hundred and twelve thousand five hundred tons of water were pumped and bailed. The total cost of unwatering, *i.e.*, of pumping (including firewood), was £969. The shaft has been re-timbered from 200 feet to the surface, and is now in good working condition. Mining is being carried on at levels 2, 3, 5, 8, and 9. The lode was cut at No. 9, but so far is of no value. At the present time there are four drives on lodes, two of which have not been previously worked. No stopping is being done. The ore raised has been obtained from new lodes. It is intended to push on with the drives, with a view of adding to the reserve of stopping ground. Simson's workings will be probably connected with the main shaft at No. 4 level.

Zeehan-Bell.—Mr. H. Daniel, manager, reports that the ore has been raised from the shallow tunnel above water-level.

DUNDAS AND MT. READ.—*Hercules Mine.*—Eight hundred and fifty-five tons zinc ore were forwarded to Europe, and 2941 tons gossan and lead sulphide ore consigned to the Tasmanian Smelting Works, Zeehan.

Ring Valley.—Mr. Jno. Moyle, manager, reports:—Work has been confined to the lower tunnel level, driving and stoping with steadily improving prospects. The ore raised is of uniformly high grade.

Tasmanian Smelting Company, Limited.—The managers supply the following statistics of production for the quarter:—5976·551 tons of ore were purchased, containing 1829·709 tons lead, 256,661·78 ozs. silver, 984·211 ozs. gold. The production of bullion was 2193·761 tons lead, 295,764·41 ozs. silver, and 1062·800 ozs. gold. The purchases for the year were—

	Ore, tons.	containing	Lead, tons.	Silver, ozs.	Gold, ozs.
against 1902	26212·133		7793·565	1148903·22	3941·317
showing an	19338·498	"	5838·908	881105·32	1697·166
increase of	6873·635	"	1954·657	266797·80	2244·151

The export for the year was—

	Lead, tons.	Silver, ozs.	Gold, ozs.
against 1902	7515·535	1144864·82	3378·29
showing an increase of	6654·376	962502·88	2135·056
	861·159	182361·94	1243·237

In addition, 10,314 tons of iron flux were smelted. The following figures show the differences in the character of the ores treated in the last two years:—

	1902. Tons.	1903. Tons.
Galena	11,049	8620
Hercules and low-grade ores	6327	10,218
Gossan	5445	6228
	<u>22,821</u>	<u>25,066</u>

This shows a large proportionate increase in the low-grade ore treated.

NORTH-WESTERN DISTRICT.

Magnet Mine.—One hundred and thirty-eight men employed. The consignments of silver-lead ore despatched during the quarter were—

1579½ tons to Dapto, N.S.W., net value.....	3459 4 10
1460½ " Newcastle, " "	4143 11 11
<u>3040</u>	<u>£7602 16 9</u>

The underlay shaft from No. 4 level has been sunk 72 feet on the incline, equivalent to 60 feet vertical. The opening set is put in and chamber excavated. The shaft is equipped with pumping-plant sufficient to cope with probable inflow of water.

HEAZLEWOOD AND WHYTE RIVER.—Development work has been proceeding at the Godkin, Godkin Extended, and Long Tunnel mines. The Confidence and Washington Hay mines have attracted the attention of capitalists, who are, it is reported, about to examine their prospects.

MT. FARRELL.—Work at North Farrell Mine was discontinued, owing to a lock-out. The Mt. Farrell Mine also ceased work.

COPPER.

Mount Lyell Mine.—The following are the returns of ore treated at the Reduction Works for the quarter ending 31st December last:—

	Dry weight.			
	Tons.	cwts.	qrs.	lbs.
Mt. Lyell Mine ore	69,908	17	1	0
North Mt. Lyell Mine ore	20,410	4	0	1
Purchased ores.....	142	11	2	3
	<hr/>			
	90,461	12	3	4
Metal-bearing flux from—				
South Tharsis Mine	151	7	1	21
Royal Tharsis Mine	1535	15	0	14
Middle products from Crotty Smelters.....	559	9	2	25
	<hr/>			
	92,708	5	0	8
	<hr/>			

The metal produced was—

Blister copper, 1882 tons, containing —	£	s.	d.
Copper, 1859 tons, valued at.....	109,597	6	11
Silver, fine, 199,598 ozs., valued at.....	22,454	15	6
Gold, fine, 4777 ozs., valued at	20,302	5	0
	<hr/>		
Total value.....	£152,354	7	5
	<hr/>		

Number of men employed—

At the Company's	Mt. Lyell Mine	330
"	North Mt. Lyell Mine	435
"	South Tharsis Mine	11
"	Royal Tharsis Mine.....	16
"	Central Lyell Mine.....	5
"	Section 136-86	4
		<hr/>
		801
"	Kelly Basin Railway	22
"	Strahan Railway.....	140
		<hr/>
"	Reduction Works	1030
		<hr/>
	Total	1993
		<hr/>

At the Iron Blow the usual output of low-grade pyritic ore has been maintained from the open cut workings. All the underground work has been discontinued at the big mine, and the whole of the company's supplies of high-grade ore is now obtained from the North Lyell Mine. At the latter, development work has been energetically prosecuted, with the object of enabling the ore-bodies to be worked systematically and economically. In the future it is intended to hoist all the ore mined underground to the 200-ft. level. With this object in view, the main shaft has been equipped with a compressed air winding-plant at the 200-ft. level. Underground bins of 300 tons capacity have been erected, and from these the ore will be sent direct to the top of the haulage by the new 2-ft. gauge steam tramway. Above the 200-ft. level, the ore has been stoped out to within 30 feet of the floor of the open cut workings. Most of the underground supplies have been derived from the stopes between the 300 and 200 ft. levels. At the 400-ft. level, stoping has only just commenced. Below this level the only work done consists of a winze, which has been sunk in good ore to a depth of 80 feet. It is intended to start sinking the main shaft to the next level immediately.

The Mount Lyell Blocks Mining Company, No Liability.—The work of opening up and equipping this mine has been energetically pushed ahead during the last quarter, under the management of Mr. C. E. Nicholas. It is proposed to attack the deposit of copper-bearing clay at several levels. A low-level tunnel, No. 4, has been lately started, which will become the main outlet to the mine. This is 475 feet below the collar of the main shaft, and is to be continued in the country to the west of the deposit right up to the main shaft, a distance of 1981 feet; crosscuts being put into the deposit the whole way along. At 1000 feet from the entrance, a balance shaft is to be sunk from the surface down to the No. 4 tunnel level, with the object of enabling the ore to be lowered from the upper levels down to No. 4.

Near the mouth of No. 4 tunnel, the site for a concentrator has been chosen. This will be equipped with puddling machinery for the disintegration of the copper-bearing clays. Concentration is to be effected by means of Wilfley tables.

The following is a *resumé* of the work done during the quarter:—

No. 1 Tunnel.—This has been repaired for the whole distance of 309 feet through the main shaft, and an extension of driving in the crosscut off the same has been made for 32 feet.

No. 2 Tunnel.—This has been cleaned out and repaired, and an extension made of 71 feet, making a total of 157 feet.

No. 3 Tunnel.—This is a new tunnel, and was started in October.

The following amounts of driving have been done:—

Main drive, 141 feet; No. 1 crosscut, 132 feet; No. 2 crosscut, 33 feet.

No. 4 Tunnel.—This also is a new tunnel lately started, and has been driven a distance of 57 feet.

Main Shaft.—At the main shaft the work has been confined to keeping the mine unwatered, and maintaining the workings.

New Site for Machinery.—The excavations necessary have been completed, and the preparation of the buildings is now going on.

Balance Shaft.—Excavations completed, and poppet-heads erected; the sinking of the shaft will be proceeded with in due course. No ore has been raised or treated during the quarter. The number of men employed has averaged 48 weekly.

Crown Lyell Mine.—Prospecting and general development work has been carried out at this mine, as follows:—A winze has been sunk on promising formation at No. 3 level for a distance of 23 feet; it is intended to continue this through to the No. 4 level. Two cross-cuts, 50 feet and 23 feet in length respectively, have also been made at No. 3 level, for the purpose of testing the country on either side of the main drive; in both instances ore has been cut. Preparation has been made to send away a trial parcel of 100 tons of ore to the Mt. Lyell Company's smelters. In all, 13 hands have been constantly employed by the company during the quarter.

Mt. Lyell Comstock Mine.—This company has been engaged in prospecting new ground, pending a system of treatment for the ores being decided upon. The deep level tunnel has been extended a distance of 85 feet. Six men were employed.

Tasman and Crown Lyell Extended.—The prospecting operations carried out during the quarter have been as follows:—East crosscut extended 39 feet; No. 4 west crosscut, 13 feet; No. 2 west crosscut, 56 feet; rise put up, 9 feet. The average number of men employed has been 5. Mr. Con. H. Curtain, late Inspector of Mines, Queenstown, has taken over the management of this property.

Lake Jukes.—Mine prospecting work has been carried on continuously, under Mr. W. H. Muir's management, during the quarter with encouraging results. High-grade ore has been exposed in a number of cuts and trenches on the flanks of a prominent hill of altered felsite, and a tunnel is now being driven from the south which will test the value of the formation effectively. There have been 5 men employed.

Findon's Sections, Mt. Darwin.—These sections have been taken over by the Tasman Syndicate, Ltd., of London, and are being prospected by Mr. J. Findon. A tunnel is being put in to test the copper formation which has been exposed by trenches on the surface. The tunnel is now in 59 feet; at 25 feet, the top of a felsite formation was cut, showing fair quantities of copper. This cut out at 27 feet, and the remainder of the tunnel has been in porphyry. The main deposit has not yet been reached.

COAL.

The output for the quarter was 9088 tons, against 14,873 tons the previous quarter. The raisings from the different collieries were as under:—

Colliery.	Tons raised.	Men employed.
Mount Nicholas	3225	56
Cornwall Mine	5185	65
Dulverton	45	4
Teasdale's	120	3
Spreyton	202	7
Bound's	20	2
Marialva	208	3
York Plains	83	3
Total	9088	143

IRON.

The consignments made by the Tasmanian Iron Co. at the Penguin underwent a large increase this quarter. The output of iron ore from the mine totalled 1900 tons of high-grade hematite. Twenty-five men were employed.

CONCLUSION.

The total value of minerals raised and exported this quarter was £366,751, against £404,950 for the corresponding quarter the previous year. There was an increase of £7232 in tin, and £1242 in iron ore, but this was not sufficient to compensate for decreases in copper, silver, gold, and coal; but, compared with the September quarter, there have been increases all along the line, except in copper and coal; and the decrease in copper existed in the export figures only, not in the quantity produced.

Return showing the average number of men employed in or about the mines during the quarter ending 31st September, 1903.

District.	European.	Chinese.	Total.
Northern and Southern	529	...	529
North-Western	379	...	379
North-Eastern	521	130	651
Eastern	877	72	949
Western	3170	...	3170
Total	5476	202	5678

Value of mineral output per man employed, £64 11s. 10d.

The dividends paid during the quarter were:—

	£	s.	d.
From Copper mines .....	...	
„ Gold mines	4800	0	0
„ Tin mines	18,135	0	0
„ Silver mines	9627	17	0
TOTAL	£32,562	17	0