

MININDI9074

THE PROGRESS OF
THE MINERAL INDUSTRY
OF
TASMANIA,

FOR THE QUARTER ENDING 31ST DECEMBER, 1907.

COMPILED BY

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SECRETARY FOR MINES.

BY ORDER OF

THE HONOURABLE D. C. URQUHART,

MINISTER FOR MINES.



Tasmania:

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1908.



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MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 31ST DECEMBER, 1907.

Hobart, 1st February, 1908.

THE following table shows, as far as can be ascertained, the quantities and values of Metals and Minerals raised during the quarter ending 31st December, 1907, as compared with the previous quarter ending 30th September, 1907:—

	During the Quarter ending 31st Dec., 1907.		During the Quarter ending 30th Sept., 1907.	
	Quantity.	Value.	Quantity.	Value.
		£		£
* Gold won	16,929·527	71,912	16,339·799	69,407
Silver-lead Ore produced tons	21,537½	144,984	23,691½	151,195
† Blister Copper produced	2184	152,728	2224	209,586
Copper Ore and Copper produced.....	3½	960	122½	7744
Tin Ore produced.....	1291½	119,766	1153½	133,855
Iron Ore raised.....	1000	400	1000	400
Coal raised.....	15,730	13,370	16,987	14,439
Wolfram Ore produced...	22½	1994	9¾	1267
Bismuth..... cwt.	1½	12	...	...
		506,126	...	587,393

* Fine gold, including gold contained in blister copper and silver-lead bullion.

† Value of gold contents deducted.

GOLD.

During the past quarter, 8273 ozs. of gold were obtained from quartz, 300 $\frac{1}{2}$ ozs. from alluvial, 2522 ozs. by means of the cyanide and chlorination processes, 5043 ozs. from blister copper from the Mount Lyell Mining and Railway Company, Limited, and 1023 ozs. from the silver-lead bullion from the Tasmanian Smelting Company's works, Zeehan, valued at £71,912.

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 1906, and the previous quarter ending 30th September, 1907:—

	Gold obtained during the Quarter ending 30th December, 1907.					TOTAL.	Totals corresponding Quarter, 1906.	Totals for Quarter ending 30th Sept., 1907.
	From Quartz.	Alluvial.	Cyanide & chlorination.	From Blister Copper.	From Silver-lead Bullion.			
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield	5848	32	2141	...	...	8021	6214	9339
Mathinna ...	2340	...	100	...	...	2440	729	1398
Mt. Victoria	} 78	100 $\frac{1}{2}$	...	...	...	178 $\frac{1}{2}$	85 $\frac{1}{2}$	180
Warrentinna								
Mt. Cameron								
New Burns Creek.....	...	..	...	...	...	...	...	11
Lefroy	7	25	282	...	...	314	90	33
Lisle	} ...	133	...	...	...	133	89	65
Golconda ...								
King Island	...	...	...	...	...	...	1 $\frac{1}{2}$	...
West Coast.	...	10	...	5043	1023	6076	5968 $\frac{1}{2}$	6642
TOTALS	8273	300 $\frac{1}{2}$	2522	5043	1023	17,162 $\frac{1}{2}$	...	...
Totals corresponding Quarter, 1906.....	4634 $\frac{1}{2}$	1059 $\frac{1}{2}$	1558 $\frac{1}{2}$	5227	698	...	13,177 $\frac{1}{2}$	...
Totals for Quarter ending 30th Sept., 1907.....	7886 $\frac{1}{2}$	219	3228	5215	1423	...	...	17,971 $\frac{1}{2}$

Value £71,912; equal to 16,929·527 ozs. fine gold.

BEACONSFIELD.—The quarter's statistics for the district are as follow:—

	Gold produced, ozs.	Men employed.
Tasmania Mine.....	7339	579
Tasmanian Tailings Syndicate...	650	20
Others.....	32	22
Total.....	<u>8021</u>	<u>621</u>

Tasmania Mine.—Thirteen thousand six hundred and sixty tons quartz crushed, and 7339 ozs. gold obtained (by amalgamation and chlorination), which makes a total of 686,735 tons quartz crushed, and 695,158 ozs. gold obtained since the mine was first started.

Mr. C. F. Heathcote, A.M.I.C.E., the general manager, reports:—During the past quarter Grubb's shaft has been continued, the total depth now being 1311½ feet. The temporary plungers have been placed at the 1250-foot level ready for connecting up to the third unit of the pumping-plant when required. The crosscut towards the lode at the 1250-foot level has been driven a total distance of 214 feet. During the past quarter the North Tasmania Mine has been purchased; the ventilation has been improved; and prospecting operations at the 400-foot level started.

LEFROY.—The quarter's statistics are as follow:—

	Gold produced, ozs.	Men employed.
New Pinafore.....	84	11
Creek Cyanide.....	132	17
Wilson's Cyanide.....	53½	9
Gray's Claim.....	12¼	2
Lanham's Claim.....	25	2
Prospectors and others.....	7	12
Totals.....	<u>314</u>	<u>53</u>

New Pinafore Mine.—Mr. J. T. Stubs, the mining manager, reports:—Operations have been confined to shallow prospecting, and no finds of any value have been made. An attempt is likely to be made in the new year towards testing the deep alluvial lead. Cyaniding the old tailings is still being carried on, which accounts for the gold won.

Blue Jacket Syndicate.—This is a new find, from which one crushing has been taken, of $6\frac{1}{2}$ tons for 7 ozs. gold. A shaft has been sunk 50 feet, and the reef again cut, and another crushing is now being taken out.

Ellgatee Syndicate.—This mine has been unwatered, and prospecting commenced.

Liste, Golconda, &c.—One hundred and thirty-three ounces of gold have been won from these fields. Twenty men have been employed.

New Burn's Creek.—Work suspended pending arrangements to sink shaft deeper.

Mt. Victoria.—Sixteen men have been engaged in these mines, winning 78 ozs. of gold from 116 tons quartz crushed.

Alluvial Gold and Dredging Companies.—Gold has been obtained by the following companies in streaming tin:—

	Standard Gold.
	ozs.
Briseis Tin Mines.....	8
New Brothers' Home.....	6
South Mount Cameron	20
Ringarooma Dredge	14
Dorset Dredge.....	40
Gladstone Dredge.....	12 $\frac{3}{4}$
Total	<u>100$\frac{3}{4}$</u>

MATHINNA.—The quarter's statistics are as follow:—

	Quartz crushed.	Sand treated.	Gold produced.	Men.
	tons.	tons.	ozs.	
New Golden Gate	997	1000	1004	45
Tasmanian Consols.....	3717	...	1381	96
Others	66	...	55	51
	<u>4780</u>	<u>1000</u>	<u>2440</u>	<u>192</u>

Golden Horseshoe.—One of the directors visited the Golden Horseshoe Mine on 4th January, 1908, and reports as follows:—The company's property comprises most of a hill bounded by the junction of the South Esk River and Dan's Rivulet, $1\frac{1}{2}$ mile from Mathinna Post Office. The manager has got a large amount of work done since starting three months ago. No. 1 temporary main shaft has been sunk 65 feet and timbered 50 feet, and it is expected to pass

through the lode at 100 feet. This lode is gold-bearing on the surface, and if the shoot of gold is met with at this depth in a good lode, the company will have nothing to fear. No. 2 shaft is a prospecting one, and has been sunk on gold-bearing stone to a depth of 80 feet, but the country passed through is very much disturbed, and the gold-bearing stone is small. At a depth of 80 feet this stone was faulted. The manager is now driving east and west, and the gold-bearing stone has again been picked up, but is still small. Owing to the peculiar character of the country, a rich shoot of gold and payable lode may be met with at any time. Samples of stone taken from the end of each drive gave excellent prospects on crushing. Previous to the acquirement of the property by the company a number of rich veins and leaders had been discovered, giving from 1 oz. to 5 oz. of gold per ton. This work was done by prospectors, who were content to take out the rich stone in a cheap and primitive manner, without attempting to follow it to any depth. The whole spur seems to be auriferous, as prospects of gold can be got almost anywhere upon it. A recent crushing of about 14 tons of "waste rock" by the battery herein referred to gave about 2 oz. of gold. From all I have seen I am led to the conclusion that we have a most promising prospective mine, the indications being far beyond anything I had anticipated. All that seems to be needed is capital to continue and extend the present workings.

Battery.—There is a 10-head battery within easy access of the workings, which the directors have the opportunity of purchasing upon very favourable terms. This battery is run by a turbine, capable of giving 10 to 12 horse-power, supplied by a water-race $2\frac{1}{4}$ miles long. Inquiry concerning this battery is now being made, with a view to its acquisition by the company. The battery in question is the only one in the district at present available for public crushings, and could be utilised to advantage in this respect.

Tasmanian Consols Mine.—Mr. Arthur R. Canning, manager, reports:—During the quarter, 3973 tons have been mined and crushed, for a return of 1105 ozs. of bullion and 29 tons concentrates, containing 338 ozs. fine gold (the last parcel of 9 tons being estimated).

The extraction has been equal to 6·6 dwts. fine gold per ton, and the tailings carrying away ·7 dwts. showing a recovery of 90·4 per cent. The cyanide process is not employed, the method of milling being as follows:—Grizzly, rockbreaker, self-feeders, 11-foot copper-plate tables without wells or drops, and finally, Wilfley tables. The duty per stamp per 24 hours is about 3 short tons or 2·6 long tons.

The values from the stopes have been disappointing, falling short of assay plan estimates. This has been due to the frequent

replacement of quartz by large intrusions of slate vein filling in the ore-channel, which slate has come away with the quartz, and been impossible to eliminate from the crushing dirt, and thus impoverishing it considerably.

Tables have been compiled giving useful figures of costs, and the following are interesting:—Total cost of ore-extraction, milling, and general expenses, 17s. 0½d. per ton; of this, 4s. 4d. has been cost of milling, inclusive of heavy charges of freight and treatment of concentrates in New South Wales; and general expenses, 2s. 1d. per ton.

The stoping has been between the 1300 and 1500 feet levels, and the depleted stopes have had to be filled in with rock or sand sent down the shaft from the surface.

The above figures do not include cost of plant or prospecting. This latter has gone on contemporaneously with stoping, but no very encouraging results have been met with.

The chief work has been at the extreme north of the ground, on the east reef, worked so profitably in the New Golden Gate ground. Six hundred feet intervenes between their workings and this spot, where a rich, but very limited, patch was found on the 1400-foot level. Its downward continuation is now being sought.

Cyaniding.—Three thousand and ninety-one tons of old tailings have been treated in the New Golden Gate plant, at a cost of 3s. per ton, including 11d. paid for rent of plant and supervision. The value of the gold recovered from this source has been £683.

A diamond-drill has been at work, and several hundred feet of bores put in. The results have been interesting, but have not to date located any new pay shoot.

WEST COAST.—Ten ounces have been reported as received from six men.

TIN.

The statistics for this metal for the past quarter are as follow:—

	Ore won.		Men employed.	
	tons.	cwt.	Europeans.	Chinese
Northern and Southern Division	14	10	36	...
North-Eastern Division.....	860	8	801	96
Eastern Division.....	126	18	329	35
Western Division.....	37	0	84	...
North-Western Division.....	252	11	382	...
Totals.....	<u>1291</u>	<u>7</u>	<u>1632</u>	<u>131</u>

NORTH-WESTERN DIVISION.

The output has been as under:—

	tons.	cwt.	Men employe d.
Mount Bischoff	205	0	300
Mt. Bischoff Extended	37	11	42
Waratah Alluvial.....	5	6	5
Wombat Mine	3	10	3
Mount Cleveland.....	0	0	19
Others	1	4	8
Mt. Balfour (no return received)	0	0	0
Totals.....	252	11	377

Mt. Bischoff Mine.—The mine manager's report contains, among others, the following passages:—Prospecting has been carried on in a vigorous and systematic way, and the results obtained have been far beyond what was ever expected, both as to the character and the quantity of the deposits opened up in so short a time. The diamond-drill was, as you are aware, at work on the property, but as the bores were not put down systematically, the work was valueless, and in my opinion the results obtained by this drilling proved nothing. The positions of the holes were not selected according to any recognised law, but purely in a haphazard manner, and nothing of any value was struck. However, a start has now been made with systematic prospecting, but as the time at my disposal has been so limited the work is far from complete. An expenditure of both time and money will be required to bring the work up to the position it would have been in had prospecting been carried on for, say, the last 20 years, along with other mining work; also, had this been done, the property would have been on a sounder footing. A commencement was made on the north-east slopes of the mount, and in a short time a lode was unearthed, which was traced by means of trenches for upwards of 1500 feet. This lode has an average width of 2 feet 6 inches on the surface. A shaft was sunk to a depth of 80 feet, when an influx of water caused a cessation of the work. The width of the lode at this depth is 3 feet 6 inches. At the same time a commencement was made to drive along its course by means of an adit on the south-east side of the mount, and which, being 250 feet below the position of the shaft, will test the lode at a depth. The returns from this lode, so far, have given an average assay of tin oxide of 3 per cent. A little to the westward of this, another lode has been traced, making into No. 3 bench. It has been trenched for upwards of 400 feet, and we are now driving along its course. This drive will give over 150 feet of backs at No. 3 bench. The lode has a varying width on the surface of from 12 inches to 2 feet 6 inches, and in the drive it has increased from 12 inches to over

3 feet 6 inches, and has an assay value at present of 7 per cent. On the north slopes another lode was cut by means of trenches 12 feet deep for a distance of 200 feet, and its width varies from 5 feet 6 inches to over 10 feet, and gives an excellent prospect of tin throughout. It has the appearance of opening up into a remarkably good body. On the south-west slopes a lode has been opened on the surface on the side of the mount for over 400 feet, and has a varying width of from 12 inches to 6 feet, and gives good prospects. From the indications it is likely that this will prove a good addition to our other lodes. One hundred yards to the east of the last-mentioned a lode has been opened for about 300 feet by means of trenches, and is similar in characteristics to the preceding one. As soon as possible these lodes will be surveyed and mapped, and also charted on the assay plan, with the tin contents shown thereon, and thus a fuller knowledge will be obtained of their values. Apart from the lodes mentioned, we have tested, by means of trenches, &c., the talus gravels, consisting of the accumulations of ore-bodies formed by the destruction and redistribution of the primary deposits on the various slopes of the mount; and, as the result, have been able to outline some big bodies of this material, which, of course, give varying returns, all of which are payable, some being more so than others. This detrital matter occurs in some instances to a depth of over 30 feet, and the lengths and breadths vary according to its location. These bodies have added very materially to our reserves, and taken with the lodes which have been unearthed, have added a fresh complexion to the outlook of the mine.

The question of milling and concentration is one which needs serious attention, and will have to be faced in the near future. Our present plant is in a deplorable state, both as regards efficiency and the condition of the buildings, machinery, and other things incidental to a mill. Extensive work has been accomplished in experiments and tests on our concentrating appliances, with the result that the tables, and buddles especially, are found to have a very low efficiency, and to be very wasteful in the use of water. A system of sampling has now been inaugurated at the mills, so that a daily knowledge is obtainable as to the work going on there, without which it is impossible to control the operations. The present site of the mill necessitates the bringing of the crush-dirt from the mine to the sheds by haulage for nearly $1\frac{1}{4}$ miles, in trucks that are totally unsuitable for the work required of them. This traction, and the handling of the material—that is, the loading and unloading of the trucks, and haulage and upkeep—cost the company £2000 per annum, or equivalent to the interest on a capital of nearly £35,000, at 6 per cent.; therefore, on the completion of our present developmental and prospecting works, I shall advise the moving of the mills to a site that will ensure the cheapest

possible handling of the dirt from all parts of the property, and at the same time be convenient to a water-supply. These mills will be equipped with the most modern machinery, and designed according to the best practice; but as it will take some time to decide on the best site, preparation of plans, building the structure, and the installation of the machinery, it will be necessary to make arrangements for the present mill to be in operation for at least another two years, and with this object in view, work is being done in effecting repairs and replacing the obsolete with the most modern appliances. Up to the end of the year we have substituted four card concentrating tables, and one Sperry slimer, which we find a very considerable improvement on the remaining buddles and tables working there; at the same time we are experimenting with the classification of the pulp as it leaves the battery, and hope to effect a marked improvement in the present system. The ringtail sheds are also in a bad condition, and without alteration will continue to be unsatisfactory, and of a very low efficiency as far as tin-saving is concerned. Work is now under way to improve this state of things, and the much-needed alterations will be completed early in the new year. It will be readily understood that the renewing and replacing of the many things needed is a job of considerable magnitude, as this work has been much neglected for some years past, and it will therefore be some time before it is completed. The tin concentrates obtained during the six months is 300 tons, against 340 tons for the previous half-year.

NORTH-EASTERN DIVISION.

RINGAROOMA DISTRICT:—

	Tin ore won.		Men employed.	
	tons.	cwt.	Europeans.	Chinese.
Tin-pot Creek.....	4	15	23	...
Cascade River.....	1	18	7	4
Black Creek.....	1	14	9	...
Dorset River.....	2	18	20	...
Dunne's Creek.....	0	15	7	...
Gorge Creek.....	0	16	4	...
Mount Maurice.....	1	4	9	...
Bell's Hill.....	1	13	4	...
Hope Creek.....	3	5	8	...
Ruby Flat.....	0	13	2	...
Star of Peace.....	0	7	2	...
Britannia Creek.....	1	1	6	...
Totals.....	20	19	101	4

PIONEER AND GLADSTONE DISTRICTS:—

	Tin ore won.		Men employed.	
	tons.	cwt.	Europeans.	Chinese.
Pioneer Tin Mine	140	10	120	...
Pioneer Extended	0	19	9	...
Argus Tin Mine	26	2	20	...
South Mt. Cameron	21	14	41	...
Ringarooma Dredge	11	6	26	...
Dorset	30	12	24	...
Mussel Roe	5	0	7	...
Gladstone Dredge	10	6	17	...
New Aberfoyle	2	8	22	...
Purdue Tin Mine	42	2	24	...
Garibaldi	18	14	12	5
Scotia	0	0	4	...
Miners' Claims	18	9	19	43
Totals	328	2	345	48

<i>Mt. Horror Claims.</i>	Tin ore won.		Men employed.	
	Tons.	cwt.	Europeans.	Chinese.
North-Eastern	3	0	10	...
Others	0	7	2	...
Total	3	7	12	...

DERBY DISTRICT:—

	Tin ore won.		Men employed.	
	tons.	cwt.	Europeans.	Chinese.
Briseis Tin Mines	240	19	137	...
New Brothers' Home, No. 1	101	5	23	...
Briseis Extended	38	0	36	...
Mutual Hill	5	2	10	...
Ah Choon & Co.	9	6	...	28
Clyde	0	15	2	...
Baker Brothers	0	9	3	...
Total	395	16	211	28

Briseis.—Mr. Lindesay C. Clark, general manager, reports:—During the past quarter removal of the overburden on Section 5303-93M (late Ringarooma Company's property) has been started. This required the laying of a column of steel pipes, 29 inches in diameter, from the Briseis-Ringarooma race 3400 feet in length. To carry it across the Ringarooma River, a bridge 300 feet long has been built.

A good measuring weir has been placed at the intake of the column for measuring purposes, as well as a Venturi meter at the mine.

To test the value of the drift on this section, 3300 feet of prospecting tunnels have been driven.

On the other parts of the company's property the usual work of winning tin has been carried on without any change worthy of note, except that at times we have to use our pumping plant for elevating and stacking tailings. This plant consists of a water-driven double reaction turbine, which receives its pressure water at a head of 250 feet. The passage of the water through the machine lowers the pressure head to 170 feet. This is regarded by suitable mechanism so as to go on to the sluicing nozzles at this constant pressure. Two pumps have been installed—one, a 13-inch Thompson gravel pump, of the ordinary three-ported runner type; the other, a small high-speed, high-efficiency pump, designed by Mr. H. G. M. Michell, of Melbourne, as was the turbine, and manufactured by Messrs. Weymouth, Limited, also of Melbourne. The somewhat novel type of plant is thus all Australian made. It is working quite satisfactorily.

BRANXHOLM DISTRICT:—

	Tin ore won.		Men employed.	
	tons.	cwt.	Europeans.	Chinese
Arba Tin Mine	51	6	47	...
New Ruby Flat	28	...	20	...
Other Branxholm Claims.....	1	11	...	16
Total	80	17	67	16

MOORINA DISTRICT:—

	Tin ore won.		Men employed.	
	tons.	cwt.	Europeans.	Chinese
Weld Tin Mine	6	15	12	...
Wyniford Tin Mine	2	3	4	...
Native Youth	6	14	9	...
Abbotsford	4	19	6	...
Moorina	4	0	7	...
Other Moorina Claims	4	11	17	...
Total.....	29	2	55	...
Mount Stronach Tin Mine .	2	5	10	...
<i>Total for North-Eastern Division</i>	860	8	801	96

EASTERN DIVISION.

	Tin ore won.		Men employed.	
	tons.	cwt.	Europeans.	Chinese.
<i>Weldborough Mines.</i>				
Fancy Creek Co.	5	4	12	...
Weldborough	2	19	6	...
Cambria	1	15	6	...
Eyers & Party	2	8	5	...
Bryce Bros.	4	16	6	...
Walker & Party	2	18	6	...
Chinese (Weldborough).....	10	3	...	30
Other Claims	15	16	37	...
Total	45	19	78	30

Moorina Mine.—Mr. John Rundle, mine manager, reports:—During the past quarter have sluiced 11,300 cubic yards, for a yield of 4 tons of tin. Cost of raising same was £217. Mine looks promising for the future.

	Tin ore won.		Men employed	
	tons.	cwt.	Europeans.	Chinese.
<i>Lottah and Blue Tier Mines.</i>				
Anchor Mine.....	41	14	120	...
Other Claims	4	8	31	...
Chinese Claims	0	7	...	4
Total	46	9	151	4

Anchor Mine.—Mr. James B. Lewis, manager, reports:—For the quarter ending 30th December we crushed 32,303 tons of ore, for a return of 43 tons 14 cwts. black tin; and from alluvial we have recovered 2 tons 13 cwts.; or a total of 46 tons 7 cwts. altogether.

The falling-off in the water-supply, and the Christmas holidays, have affected the quantity crushed; a large quantity, also, was harder and a little poorer than usual. We are, however, opening new faces that we expect will improve our returns. We have made certain radical alterations in the battery that greatly reduce the quantity of water required, and have also taken advantage of the holidays for a general overhaul, and we expect that the amount crushed, and the saving of tin, will both be improved, provided that the water-supply keeps up.

	Tin ore won.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
<i>St. Helens Mines.</i>				
McAuliffe & Party	1	17	5	...
A. Williams	2	1	6	1
J. C. Macmichael	1	11	3	...
Royal Ruby Co.	2	11	6	...
C. Miller ..	1	7	4	...
Deep Lead	1	5	3	...
F. Budgeon	0	19	4	...
Others	1	2	11	...
Total	12	13	42	1
<i>Arcoa Mines.</i>				
Gipp's Creek.....	2	14	5	...
South Esk Co.	1	0	3	...
Mount Rex Co.....	0	7	3	...
Scott & Williams.....	0	15	3	...
Shepherd & Oliver	0	14	2	...
Freeman & Greaves.....	1	6	2	...
Dalrymple T.M. Co.	2	0	7	...
Cameron & Party	1	6	4	...
Ward & Jackson	0	11	2	...
Cox & Byatt	0	14	3	...
Others.....	10	10	24	...
Total	21	17	58	...
<i>Total for Eastern Division</i>	126	18	329	35

WESTERN DIVISION.

	Tin ore won.		Men employed.
	tons.	cwt.	Europeans.
Renison Bell	8	15	14
Heemskirk Claims.	0	18	4
Moutana Tin Co.	6	13	15
Munro & Co.	5	0	17
Yorke & Co.	4	10	15
Brumby's Section	1	16	5
Emu Bay Railway	9	8	14
Total.....	37	0	81

NORTHERN AND SOUTHERN DIVISION.

Shepherd and Murphy Mine.—Fourteen tons 10 cwts. tin ore concentrates were raised, and 36 men employed.

SILVER.

WEST COAST.—The registered output of silver ore in the Western Division for the quarter ending 31st December is given below:—

	Ore.	Tons.	Value. £	Men.
<i>Zeehan Mines:</i>				
Mount Zeehan, Tas.	galena	1761	26,471	266
Zeehan-Montana	"	1057½	18,293	248
Zeehan-Western	galena, &c	415	3979	118
Zeehan-Queen	"	48	316	12
Silver Queen Extended	galena, &c.....	66¾	994	12
Oonah	"	789	3250	37
Silver King	galena	19	226	6
Florence	"	1126	26,702	60
Watts' Section	"	55	730	6
Austral Valley	"	404	5302	32
Zeehan Bell	"	55	422	22
Silver Harp	gossan	5	82	7
Section 1064	galena	57¼	412	5
Colonel North	" .....	...	...	7
New Mt. Zeehan	"	61¼	516	7
Tas. Smelting Co., Balstrup	"	49	790	12
Sylvester	"	29	115	10
Victoria-Zeehan	" .....	...	...	24
<i>Dundas Mines:</i>				
Comet	galena & gossan.....	2009½	3838	60
West Comet	fluxing ore	3850	1134	49
Hercules	sulphide	3915¾	11,727	75
Red Lead	" .....	...	...	2
<i>Rosebery Mines:</i>				
Primrose	lead-sulphide	414	1512	19
Tasmanian Copper	"	3055	9914	43
<i>Mt. Farrell Mines:</i>				
Mt. Farrell	galena.....	25¾	522	23
North Mt. Farrell	"	330	10,700	200
White Hawk	" .....	...	...	9
<i>Sundries:</i>				
Tasmanian Smelting Co. ....	.....	...	...	320
Prospectors, &c. ....	.....	...	...	193
Total .....	.....	19,598	127,947	1884

Mount Zeehan (Tasmania).—Mr. T. Vincent, manager, reports:—Spray Mine: No. 6 level, driving; north lode, 3 feet wide; south, 12 feet (seconds); Nos. 2 and 5 levels, north lode at present valueless; expect ore in these ends very shortly; stopping No. 1 lode over Nos. 2, 3, and 5 levels; lode highly payable; are also stopping No. 3 lode over No. 3 level, with payable results. No. 2 Queen Extended: crosscutting east and west without result;

stopping Nos. 10 and 30 lodes (payable). No. 5 shaft: expect to commence sinking in a month. Mill: have added two new slime tables; doing good work; generally, the mines are looking well.

Zeehan-Montana.—Mr. J. Craze, manager, reports:—There are no fresh discoveries to report. Mining operations are being carried on at the company's Nos. 1, 2, and 3 shafts. At No. 1 shaft exploratory work is being carried on at Nos. 8, 7, 6, and 5 levels; and at No. 2 shaft, at 4, 3, and 2 levels. No. 3 shaft: operations are being carried on at No. 1 level with fair results, and fair progress is being made with erection of machinery at the main shaft.

Zeehan-Western, Limited.—Mr. John Craze, manager, reports:—Active exploratory work is being carried on at Nos. 11, 10, 9, 8, and 5 levels. The latter is on Simson's lode, where a small shoot of pay ore is being mined. At No. 11, or 800-feet, level a stope is being worked on the main lode with fair results. A start has been made to sink the main shaft to the 1000-foot level, where we hope to find the lode of better value.

Silver Queen Extended.—Mr. Charles Stevens, manager, reports:—During the quarter the development was as follows:—Driving, 120 feet; sinking, 59 feet; rising, 100 feet; stopping, 181 feet; total, 460 feet.

Primrose.—Mr. G. Barker, manager, reports:—No. 2 level: the north drive is being extended to the Tasmanian Copper Company's boundary. The lode in the end is 15 feet wide, of good quality. Main adit: this adit is being driven conjointly with the Tasmanian Copper Company, and is in a distance of 630 feet out of a total distance of 1430 feet. This will give about 137 feet of backs.

Tasmanian Copper Company.—Mr. G. Barker, manager, reports:—No. 3 level (330 feet): cutting approach; gossan and sulphide of good quality. No. 4 level (425 feet): No. 4 cross-cut has exposed a body of sulphide 40 feet wide; the ore is of fair grade. No. 6 level (597 feet): the north drive is in a distance of 276 feet on the lode; about 6 feet of the lode broken out; no sign of foot or hanging-wall; stopes are showing large bodies of ore. Main adit (715 feet) is in a distance of 630 feet; country very favourable for driving.

Silver King.—Captain W. Fisher, manager, reports:—The principal work carried on has been by tributer J. Pepperd, who has put in machinery and sunk main shaft 40 feet, and now opened out and cut the lode, and obtained one parcel of ore from these workings. He will look for better returns next quarter.

Tasmanian Smelting Company.—Mr. T. Kapp, manager, reports:—

Ore bought during the quarter, 14,039 tons, containing—

3267 tons lead,
436,140 ozs. silver,
1277 ozs. gold.

Exported 3018 tons bullion, containing—398,500 ozs silver, and 1023 ozs. gold.

NORTH-WESTERN DIVISION.

Magnet Mine.—Mr. E. A. De Lautour, general manager, reports:—One thousand eight hundred and fifty tons of silver-lead ore were sold, of a gross value of £15,502.54, and consigned to New South Wales and Zeehan. During the quarter the main lode has been cut at No. 8 level, and is opening up to expectations. The face is still in payable lode matter, after having exposed about 4 feet crude ore fit for market, and about 18 feet milling dirt. In October last the 10th dividend of 1s. was paid. The mine has about three years' supply of ore ready blocked out, and the faces generally look well. At present, material additions are being made to the mill to increase its output to 750 tons per week. A dam to hold 28,000,000 gallons of water is being built so as to carry us over the short periods of dry weather which we occasionally experience. The whole of the pelton-wheel plant is working very satisfactorily, as also are the compressor and drying plants and locomotives. Two hundred and nineteen men employed.

Long Tunnel Mine, Mt. Stewart.—Forty-six tons of silver-lead ore were raised, valued at £815. Ten men employed.

Confidence Mine.—Two men were employed.

Victoria Magnet Mine.—Five men employed.

NORTHERN AND SOUTHERN DIVISION.

Devon Mine.—During the quarter 28½ tons galena were raised by 8 men; value, £570.

COPPER.

Mt. Lyell Mine.—Mr. Robert Sticht, general manager, reports:—The ores and metal-bearing fluxes treated during the quarter ending 31st December were as follow:—

	Dry weight.			
	tons.	cwt.	qrs.	lbs.
Mt. Lyell Mine ore.....	69,748	15	0	17
North Lyell Mine ore.....	32,266	16	3	27
Purchased ore.....	108	3	1	17
North Lyell Mine fluxes.....	1536	19	0	13
Lyell Tharsis fluxes.....	2616	10	3	22
South Tharsis fluxes.....	122	15	1	13
	<hr/> 106,400	<hr/> 0	<hr/> 3	<hr/> 25

Quantity and value of metal produced :—

	£	s.	d.
Blister Copper, 2184 tons, containing—			
Copper, 2157 tons, valued at.....	132,763	7	0
Silver, fine, 177,466 ozs., valued at.....	19,964	18	6
Gold, fine, 5043 ozs., valued at	21,432	15	0
Total.....	£174,161	0	6

Number of men employed :—

At the Company's Mt. Lyell Mine	340
" " North Lyell Mine.....	479
" " Lyell Tharsis Mine.....	26
" " Royal Tharsis Mine	4
" " Reduction Works.....	1032
Railway Department—Mt. Lyell Railway	147
" " North Lyell Railway	19
Total	2047

Mount Lyell Mining and Railway Company's Mines.—Mr. Inspector Curtain reports:—Iron Blow: Pyritic extractions continue on lines similar to those of the past. At the North Lyell and Tharsis Mines satisfactory developments continue, so that with increased daily withdrawals the reserves at the 850-foot level have practically increased in quantity to that known at the beginning of the past term. At the 1000-foot level, connections have been commenced between the main and auxiliary shafts for ventilation, development, and other purposes. At the Reduction Works the No. 12 furnace has been completed; also the building and foundations for the extra blowers, which have arrived on the works.

Lyell Blocks.—The repairers (4) have been recently withdrawn, and this mine is now closed and idle.

Lyell Consols.—Mr. John Carroll, mining manager, reports:—Callaghan's, or the No. 3 adit, has been connected with the main shaft, and underground work suspended pending the erection and completion of a winding-plant. An average of 20 men has been employed.

Copper Mines of the Mount Lyell West.—Mr. Thomas Griffiths reports:—Prospecting has been resumed with three men.

Tasman and Crown Lyell Extended.—Mr. Carter reports:—His chief work consists in prospecting the "bornite" seams in the bottom adit, and driving west from the "intersection" of the No. 2 winze (Holehan's) and "70-foot intermediate rise connection" on the large sulphide deposit, whose metal contents consist chiefly of sphalerite and galena. Seven men employed.

Tasman Comstock Consolidated.—Mr. P. Briggs, mining manager, reports:—Work has been centred in the middle and bottom adit levels, on green schist, that carries fair samples of copper ore. An average of six men has been employed.

Thompson P.A. (Mt. Darwin).—Have continued prospecting work with two men; also the "Woods Syndicate" with a like number of men. Both properties present favourable prospects, that are likely to improve and again draw attention to this little-known portion of the district.

DUNDAS DISTRICT:—

	tons.	£	Men employed.
Ring Valley Mine	3½	960	12
	<u>3½</u>	<u>960</u>	<u>12</u>

Walford Peak P.A.—This association has employed 11 men prospecting at Lake Dora.

NORTHERN AND SOUTHERN DIVISION.

Burnie Copper Mines.—Thirty men employed.

WOLFRAM.

The output of wolfram during the quarter was as follows:—

	tons.	cwt.	£	Men.
Shepherd and Murphy Mine.....	15	0	1319	...
Claims on Ben Lomond	7	10	675	17
Total.....	<u>22</u>	<u>10</u>	<u>1994</u>	<u>17</u>

COAL.

The output this quarter was 15,730 tons, against 16,987 tons the previous quarter. The output of the respective collieries was as follows:—

Colliery.	Tons raised.	Men employed.
Mourt Nicholas Colliery	5916	72
Cornwall "	6693	65
Spreyton "	290	6
Illamatha "	120	2
York Plains "	154	2
Sandfly "	2252	60
Mount Cygnet "	305	2
Total	<u>15,730</u>	<u>209</u>

IRON.

The Tasmanian Iron Company at Penguin raised 1000 tons of iron ore, with 14 men, valued at £400.

The following return shows the average number of men employed in or about the mines during the quarter ending the 31st December, 1907:—

District.	European.	Chinese.	Total.
Northern and Southern	851	...	851
North-Eastern	817	96	913
Eastern	675	35	710
North-Western	611	...	611
Western	4077	...	4077
Total	7031	131	7162

Value of mineral output per man employed:—£70 13s. 4½d.

Dividends paid by mining companies during the quarter ending 31st December, 1907:—

	£	s.	d.	£	s.	d.
From Copper Mines:—						
Mount Lyell Mining and Railway Co., Limited	120,000	0	0	120,000	0	0
From Gold Mines			Nil			
From Tin Mines:—						
Bischoff T.M. Co., Registered	9000	0	0			
Pioneer Tin Mining Co., Limited	8775	0	0			
New Brothers' Home No. 1 T.M. Co., N.L.	4500	0	0			
Wilberforce Pump Co., No. 1, N.L.	300	0	0			
Briseis Tin Mines, Ltd.	22,500	0	0			
New Ruby Flat T.M. Co., N.L.	1921	0	0			
Fancy Creek Tin Sluicing Syndicate, N.L.	225	0	0			
				47,221	0	0
From Silver Mines:—						
Mount Zeehan (Tas.) S.L. Mines, Limited	11,440	0	0			
Zeehan Montana Mine, Limited	8000	0	0			
Magnet S.M. Co., N.L.	2000	0	0			
North Mt. Farrell Mining Co., N.L.	1718	0	0			
Oonah Silver Mining Co.	1060	0	0			
				24,218	0	0
Total .....	...			£191,439	0	0

APPENDIX.

Mount Darwin.

Mr. W. H. Tylour, of Queenstown, has forwarded to the Department samples of copper ore from mining works on the Darwin Copper Syndicate's leases at east and south Mt. Darwin. During the past month encouraging results have been met with while exploring the country close to the conglomerate capping of the sub-range upon which the old Darwin Proprietary and South Lyell leases are situated. Some 500 feet above the old underground workings, where the pyritic ore occurs, and in contact with the red sandstone associated with the conglomerate capping, a belt of talc-like schist has been struck, similar in many respects to that prevailing at the North Lyell and Tharsis Mines. In several places in this schist veins of cupriferous pyrite occur. This schist has been traced by the syndicate for about 6 chains, and wherever it has been cut into, veins of rich ore have been struck. One vein is a foot wide, and the ore fairly solid, where struck in the drive. It is intended to put in an adit 200 feet below this, and the owners hope to locate an ore-body of appreciable dimensions. Some of the pyritous ore contains high gold values (0.85 oz. per ton). What looks like a fissure-lode has been discovered on the granite plateau of South Darwin, showing dense iron sulphide, stated to be associated with some copper. During the summer it is hoped to prove this lode by driving below the outcrop. This belt of country, which is the southern prolongation of the Lyell-Farrell line, deserves the attention of the geological staff.