

MININDI904-1

THE PROGRESS OF
THE MINERAL INDUSTRY
OF
TASMANIA,

FOR THE QUARTER ENDING 31st MARCH, 1904.

COMPILED BY

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BY ORDER OF

THE HONOURABLE CARMICHAEL LYNE,
MINISTER OF MINES.



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PROGRESS OF THE MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 31st MARCH, 1904.

Launceston,

11th June, 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 31st March, 1904, compared with the corresponding quarter in 1903, and the previous quarter ending 31st December, 1903:—

	During the Quarter ending 31st March, 1904.		During the Quarter ending 31st March, 1903.		During the Quarter ending 31st Decr., 1903.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		£		£		£
Gold won	14,235 ³⁷⁰	60,468	14,167 ¹⁰⁶	60,178	16,090 ⁷²⁶	68,349
Auriferous Quartz and Pyrites exported	35	810	34	790	59	1096
Gold Quartz exported	6 ¹	223	13	25	...	...
Silver Ore exported	4097 ³	41,717	4545 ¹	43,434	3850 ¹	41,412
Silver-lead Bullion exported	1694 ¹	42,370	2065 ¹	70,416	1895 ³	58,130
Zinc Ore exported .....	...	...	102 ¹	309	1070	3284
Zinc Blende exported	1295	4008	...	60	...	...
Blister Copper exported	1705 ¹	105,446 [†]	755	35,659 [†]	1554	92,580 [†]
Copper Matte exported .....	...	...	1912	39,258	...	...
Copper exported	9	494	...	...	150 ¹	11,288
Copper Ore exported	26 ³	155	...	...	...	...
Tin Ore exported	48 ³	2150	76 ¹	3464	98 ³	2764
Tin (metallic) exported	559 ¹	71,620	515 ¹	66,738	668	78,512
Iron Ore exported	3450 ¹	1733	310	310	2556 ³	1597
Coal raised	11,873 ⁸	10,092	10,414	8852	9088	7725
Kaolin Ore .....	...	...	...	...	4 ¹	14
TOTAL VALUE .....	... £	341,292	... £	329,493	... £	366,751

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

† Value of gold contents deducted.

GOLD.

During the past quarter 6169½ ozs. of gold were obtained from quartz, 243 ozs. from alluvial, 1196¾ ozs. by means of the cyanide and chlorination processes, 5281 ozs. from blister copper from the Mount Lyell Mining and Railway Company, Limited, 940½ ozs. from the silver-lead bullion from the Tasmanian Smelting Company's Works, Zeehan, and 1069½ ozs. from the sulphide ores from Mount Read, valued at £60,468.

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 1903, and the previous quarter ending 31st December, 1903:—

	Gold obtained during the Quarter ending 31st Mch., 1904.							Totals corresponding Quarter, 1903.	Totals for Quarter ending 31st Dec., 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.	ozs.
Beaconsfield	2355	12	535¾	...	...	...	2902¾	4518½	4698
Mathinna ...	3234	...	602	...	...	...	3836	3043	4542
Mt. Victoria	60½	12	...	...	...	...	72½	129	98
Warrentinna	403	...	59	...	...	...	462	382	432
Lefroy .....	...	162	...	...	...	...	162	159	218
Lisle .....	...	...	...	...	...	...	...	...	...
Golconda ...	117	...	...	...	...	...	117	14	48½
Mangana ...	...	12	...	...	...	...	12	16	8
Bell Mount.	...	...	...	...	...	...	...	...	...
Middlesex...	...	45	...	5281	940½	1069½	7336	6632½	6934½
West Coast.	...	...	...	...	...	...	...	...	...
TOTALS	6169½	243	1196¾	5281	940½	1069½	14,900¼	...	...
Totals corresponding Quarter, 1903.....	6129½	219½	1931	4896	653	1065	...	14,894	...
Totals for Quarter ending 31st Dec., 1903.....	8189½	347	1623	4777	1062½	980	...	...	16,979½

Value £60,468 ; equal to 14,235·379 ozs. fine gold.

BEACONSFIELD.—Four hundred and eleven men were employed in this district during the quarter. Twenty-six of these were prospectors and tributors.

At the Tasmania Mine 3395 tons of quartz were crushed, and 2767½ ozs. gold obtained (by amalgamation and chlorination), being a total under the old and new companies' of 511,056 tons quartz crushed, and 582,461 ozs. 13 dwts. 17 grs. gold obtained. The new company is busy enlarging Hart's shaft.

North Tasmania Mine.—Six tributors crushed 17 tons quartz, for 51 ozs. gold.

Tasman Ophir Mine.—Twelve men were employed here, but productive work has been stopped, pending the obtaining expert advice for future operations.

LEFROY.—Seventy-five men were employed, 43 of whom were at New Pinafore. This company produced 190 ozs. gold. The total quantity of gold obtained from the beginning is 49,710 ozs. 16 dwts. 21 grs., which realised £193,063 9s. 11d., and from which £71,500 was paid away in dividends. Although the shareholders have paid many calls, the total of these has only been £24,222. Crosscuts are now being driven at Nos. 3 and 1 levels, to prove Richard and Bain's and the Hit or Miss reefs.

Digney and Casey's Syndicate is still winning payable stone from the old Volunteer Mine. For the last half-year its production has been 268 ozs.

LISLE.—The Lisle Dredging Company raised 162 ozs. gold with 21 men. Its working-account for the half-year shows a small loss, but the last paddock worked gave a profit, and the ground now being worked shows better prospects. From various causes the barge has not been working continuously, the principal trouble being that of getting sufficient fuel; but to remedy this, a tram is being laid down.

GOLCONDA.—At the New Enterprise the water-race has been cleared, excavations for pump-plant completed, site for shaft cleared, and contract let for sinking 112 feet. This mine was worked some years ago. Levels have been driven at 80 and 115 feet from surface, on a reef averaging 1½ ft. in width, and proved underground for a length of over 1200 feet. The major portion of this is valued at about 14 dwts. per ton, a small block of about 100 feet long being poorer; but absolutely authentic information as to the yield is difficult to obtain. The promoters claim that at least £20,000 worth of gold has been taken from it. Their intention is to sink and prove the reef below the old workings. The reef is in granite, and bears N. 9° E.

The Panama Creek P.A. has a tunnel which is driven 287 feet, leaving 85 feet to drive to intersect the reef at a depth of 100 feet from shaft-collar. The shaft is now down 44 feet, and the reef is said to average 1 foot wide, and to be gold-bearing.

At Jack's Claim, at Panama, a shaft is being sunk.

MOUNT VICTORIA.—Seven claims are being mined. The productive ones are as under:—

	Crushed.	Gold produced.	Men.
	tons.	ozs.	
Long Struggle	20	26	4
Short Struggle	20	34½	4
Krushka's Alluvial ....	...	12	1
Other Claims .....	...	...	17
	<hr/> 40	<hr/> 72½	<hr/> 26
	<hr/> <hr/>	<hr/> <hr/>	<hr/> <hr/>

Attention is being drawn again to the old Una field, a few miles south of Alberton, where a long and persistent reef runs through several properties. Many years ago some good crushings were obtained from it. It is understood that the Una and Hinemoa properties are about to be amalgamated. The Hinemoa has more than one reef, and is situate a little over half a mile south-east of the Una. A tunnel has been driven on one of these for a distance of 200 feet, disclosing gold-bearing quartz of variable width, mostly between 1 and 2 feet, but some of it 4 feet and over. A published crushing of 70 tons returned 8 dwts. per ton. Another long lode on this property has been discovered, and trenched across at various points; assays of the quartz have varied from 4 to 11 dwts. per ton. The width of reef is from 1½ to 3½ feet. Attempts are being made to carry out a programme for working the Hinemoa and Una as one undertaking.

MATHINNA.—The statistics for the field are as follows:—

	Crushed.	Gold produced.	Men.
	tons.	ozs.	
New Golden Gate	4690 tons quartz	... 2881 }	170
" " " treated	8896 " sand	... 602 }	
Volunteer Consolidated...	160 " quartz	... 90	35
" Extended	170 " "	... 60	15
Volunteer .....	... " "	... 11	25
New Golden King.....	189 " "	... 142	28
Miners' Dream	10 " "	... 50	2
Prospectors and others...	... " "	... ..	29
	<hr/> Total.....	<hr/> 3836	<hr/> 304
		<hr/> <hr/>	<hr/> <hr/>

New Golden Gate.—The directors, in their report for the half-year ending 31st January, state that 9325 tons were crushed, from which 5500 ozs. of retorted gold have been obtained at the battery, valued at £20,549 16s. 8d. Eighty-one tons of pyrites were also obtained by concentrating tables, containing 412 ozs. of gold, valued at £1521 9s. 4d.; and 19,127 tons of tailings and slimes have been treated by cyanide of potassium, which produced 910 ozs. of gold, valued at £3620 8s. 7d.; making a total revenue of £25,691 14s. 7d.

The cost of raising and crushing quartz, treating concentrates, repairs and renewals of plant, progressive and surface works, and all other expenses incidental to working the mine and managing the company, amounted to £13,136 1s. 3d., or £1 8s. 2·08d. per ton of quartz crushed. This does not include cost of stores and labour at cyanide plant, which amounted to £2361 0s. 5d., or 2s. 5·62d. per ton of tailings and slimes treated. The total quantity of quartz obtained from the mine to 31st January was 231,431 tons, which has yielded 199,952 ozs. of gold, an average of 17 dwts. 6 grs. per ton, realising £762,641 16s. 7d. The total amount paid in dividends is £334,400, or £10 9s. per share. The profit for the half-year was £10,194 12s. 11d., and four dividends, amounting to £8000, were paid.

Mr. T. Andrews, the mine manager, reports:—That no work was done at the 1600-foot level, owing to new developments in upper levels and to the delay in the erection of the electric pump. Above the 1500-foot level the reef was divided by a horse 30 feet wide, and both blocks are expected to produce a large quantity of fair crushing-stone. A winze from the 1400-foot level showed the reef 5 feet wide, payable stone, estimated to open a fair block of stoping-ground. In the 1300-foot level, south, beyond the slide, a nice body of clean gold-bearing stone was struck. At the 1200-foot level the first shoot of stone south of the slide was struck, and proved 60 feet long, with an average width of 8 feet, and of payable quality. At the 700-foot level the first make of stone was discovered south of the main slide, and driven on for 30 feet; average width 5 feet, and of good quality. At the 600-foot level two short shoots of good stone were discovered south of the main slide. At the 500-foot level a large quantity of stoping-ground has been opened up. All the stopes are showing large bodies of dividend-paying stone.

Volunteer Consolidated.—During the half-year ending 31st March 525 tons of quartz were crushed, from which 496 ozs. standard gold were obtained, averaging 18 dwts. 21½ grs. per ton. The total crushings to date have been 585½ tons, which yielded 562 ozs. gold, equalling 19 dwts. 5 grs. per ton. The south drive on No. 5 lode, which has an average width of 4 feet, with two good walls, and carries occasional bunches of stone very rich in gold, but not in payable quantity, is being pushed forward, in order to reach the junction of the eastern and western legs of the Black Boy reef. The No. 2 lode in winze is 2 feet wide, clean stone, and payable.

Volunteer Consolidated Extended.—Sinking the main shaft has been proceeded with.

Volunteer.—A start has been made with deepening the main shaft.

Miners' Dream.—Stevens and Dick have raised a crushing of 5-ozs. stone, and are still sinking on quartz of equal value.

Dan Claims.—The Carnegie and King Edward claims have been raising a little stone. This locality, in which are situate the Havelock, Lady Havelock, Starlight, Strickland's, Laranda, and O'Brien

Company's sections, is attracting attention, as possessing numerous reefs, all of which have been fairly gold-bearing, producing from $\frac{1}{2}$ -oz. to 1-oz. stone. Work was formerly carried on intermittently and with inadequate capital, and subsequent abandonment did no good to the reputation of the field. But it is beginning to be seen that there are as encouraging prospects here as anywhere in the auriferous slate belt, and endeavours are being made to enlist the aid of English capital for some of the more promising properties, *e.g.*, Havelock, &c.

MANGANA, &c.—The statistics for the quarter are:—

	Quartz crushed, tons	Gold obtained, ozs.	Men employed, No.
Tower Reefs	20	23	6
Golden Entrance	125	94	6
Abbotsford Creek.....	...	...	4
Prospectors.....	...	...	5
Total.....	<u>145</u>	<u>117</u>	<u>21</u>

WEST COAST.—At the Coronation Mine during the quarter work has been confined to the moving and erecting of an overshot water-wheel, and the placing in position of an 8-inches column of pump. The water has now been overcome, and the work at present is the cleaning out of the lower level, which for several years has been standing untouched. A start to break quartz will shortly be made. Men employed, 10.

WOODY HILL.—Operations consisted of the construction of dam and 10 chains of water-race and fluming, and the erection of a 10-head battery. Men employed, 5.

FLANNIGAN'S FLAT AND MT. DARWIN.—From 20 to 30 men were engaged on alluvial work, with fairly satisfactory results. Forty-five ounces of gold were sold to the local banks, the value of which was £170.

TIN.

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

	Tons.	Men employed.
Mount Bischoff.....	318	220
Wombat Mine	2	4
Waratah Alluvial.....	2½	4
Stanhope .....	...	4
Total	<u>322½</u>	<u>232</u>

Mt Bischoff.—The general mine manager's report for the six months ending 31st December (published in January), shows that 636 tons tin ore were obtained, making a total since the formation

of the company of 62,230 tons 18 cwt. 2 grs. 2 lbs. The quantities dealt with during the six months were—

60-head battery, 36,789 tons stuff, producing 368 tons 17 cwt. 0 qrs. dressed ore					
15 " 11,302 " " 164 " 2 " 3 " "					
Slime sheds	80	"	13	"	1 " "
Ring-tail sheds	22	"	7	"	0 " "
Total.....	636	"	0	"	0 " "

The average per cent. of ore obtained from the whole mine is 1·322. The reduction of ore by stampers equalled 4·546 tons per stamp-head per twenty-four hours. The cost of mining, crushing, and dressing a ton of stanniferous material is as follows:—

	s.	d.
Mining, including new works and maintenance ...	2	11·836
Fitting, hauling and emptying trucks	0	5·258
Crushing, dressing, and maintenance of plant.....	0	11·439
Slime sheds.....	0	1·372
Ring-tail sheds	0	2·325
Management and supervision	0	6·776
Plant	0	1·530
Development and progressive work	0	2·304
Waterworks	0	0·036
Ore bagging	0	0·476
Stores	0	4·193
Sundries	0	0·706
Total... ..	6	0·251

NORTH-EASTERN DIVISION.—The output in this division has been 317½ tons tin ore, with 575 men. For convenience in collating statistics, the divisions may be sub-divided into five districts, viz., Ringarooma District, Pioneer and Gladstone District, Moorina District, Derby District, Branxholm District.

The raisings for the past quarter in the Ringarooma District were as under:—

	Tin ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Hope Creek leases.....	2	4	3	...
Dorset claims.....	0	13	3	...
Cascade claims	2	8	9	5
Star of Peace lease ...	0	3	2	...
Maurice leases	1	3	5	...
Star of Peace Co.	11	5	25	...
Mammoth Co. ....	...	...	10	...
Black Creek lease.....	0	5	2	...
New Hope mine	0	6	6	...
Nugget mine	0	1	2	...
Total	18	8	67	5

A good deal of preparatory work has been proceeding on Mr. Gerald Walker's Mammoth property. A 5-heads battery is being constructed, to be driven by a 15-h.p. Pelton wheel. A start is to

be made sinking to 50 feet at first, and if results are satisfactory a main shaft will then be sunk.

PIONEER AND GLADSTONE DISTRICT.—The recorded returns are:—

	Tin ore obtained.		Men employed.	
	tons.	cwt.	Europeans.	Chinese.
Pioneer mine	79	0	60	...
Garibaldi and Wyniford claims	14	17	5	50
Little Mt. Horror claims...	3	5	7	...
Ringarooma River.....	3	6	...	10
South Mt. Cameron	7	15	25	17
East Mt. Cameron	2	6	8	...
Mussel Roe River.....	4	1	5	...
Scotia mine.....	28	10	13	1
Gladstone claims	4	6	17	...
Mount Cameron ..	1	14	3	...
Thos. Mounteny (Pioneer)	0	7	...	2
Total	149	7	143	80

At the Pioneer Mine the ground is still being worked in two benches. The lead appears now to be widening out, the portion worked being about 12 chains in width, with an average depth of over 50 feet. The amount paid in dividends during the quarter was £5400.

At Gladstone, attention is being paid to the high-level drift between the Ringarooma and Mussel Roe rivers. There is a large area of these gravels above the level of the Mt. Cameron Water-race, and it is thought that they would repay the expense of pumping water from the Ringarooma River, and washing them on an extensive scale.

MOORINA DISTRICT.—The registered output is as follows:—

	Tin ore obtained.		Men employed.	
	tons.	cwt.	Europeans.	Chinese.
Native Youth Tin Mine	2	9	7	...
Moorina Tin Mine.....	3	0	6	...
Weld	4	15	9	...
Moa	5	10	8	...
R. and A. Barnes	0	9	2	...
P. Dunn	0	4	1	...
Ah Wah	0	3	...	1
Total	16	10	33	1

DERBY DISTRICT.—The production this quarter was as follows:—

	Tin ore obtained.		Men employed.	
	tons.	cwt.	Europeans.	Chinese.
Briseis	108	0	160	...
Cascade claims	3	7	3	14
Main Creek claims	1	15	8	...
Tin Pot Creek	1	2	2	...
Low Chang (Derby).....	0	16	...	1
Total	115	0	173	15

BRANXHOLM DISTRICT.—The raisings have been as follows:—

	Tin ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
Arba Tin Mine.....	16	5	35	...
Ruby Flat Claims	2	0	5	18
	18	5	40	18

EASTERN DIVISION.—The quarter's statistics are as under:—

	Tin ore obtained.		Men employed.	
	tons.	cwts.	Europeans.	Chinese.
<i>Weldborough Mines.</i>				
Weldborough Tin Mine	4	0	7	...
Weldbrook "	2	14	5	...
R. B. Inglis	2	0	...	5
Emu Mine.....	1	5	2	0
Chinese claims	5	18	...	55
Other claims.....	14	1	27	...
Total	29	18	41	60
<i>Lottah and Blue Tier Mines.</i>				
Anchor Mine	59	10	120	...
Liberator and Cambria	2	2	6	...
Australian Tin Mine	0	8	6	...
Ogilvie's Lease.....	0	8	2	...
White and Kirwan's Lease...	0	5	2	...
Chinese Claims.....	0	13	0	5
Miners' claims	3	1	13	...
Total	66	7	149	5
<i>St. Helen's Mines.</i>				
Royal Ruby	5	1	11	...
Thureau's Deep Lead	1	16	5	...
Hunt P.A.....	1	6	9	...
Other claims	6	10	34	1
Total	14	13	59	1
<i>Avoca Mines.</i>				
Mount Rex (3300 tons crushed)	46	0	55	...
South Esk	4	10	12	...
Eclipse	1	0	3	...
Excelsior .....	...	...	4	...
Prospectors .....	...	...	4	...
Total	51	10	78	...
TOTAL EASTERN DIVISION	162	8	327	66

WEST COAST.—The output for the quarter was:—

	tons.	cwt.	Men employed.
Mayne's Tin Mine.....	13	15	14
Tasman Tin Mine	0	12	2
Birthday Tin Mine	2	15	6
Other claims	6	0	...
Total	23	2	22

Mr. W. Fisher reports that hands were employed at the Tasman Tin Mine till the end of February, in cutting new water-race and moving plant. The ground worked at this mine is reported by him as averaging $6\frac{1}{2}$ lbs. per cubic yard.

A good deal of ground has been taken up recently on the Stanley River Tin Field, from 19 to 24 miles north of Zeehan. Extensive alluvial deposits, with rich wash and abundant boulders of tin-stone, border the river and creeks. Stanniferous quartz-tourmaline lodes also occur. The prospecting work which is now going on all over the district is locating some of these lodes, which vary greatly in value, and is showing that the alluvial deposits are of a very favourable character. It is expected that outside capital will be introduced almost immediately.

SILVER.

WEST COAST.—The recorded output of silver ores from the mines in the Zeehan and Dundas District for the quarter ending 31st March was as follows:—

	Ore.	Tons.	Value. £	Men.
<i>Zeehan Mines:</i>				
Mount Zeehan, Tas.	galena	1863	16,258	193
Zeehan-Montana	"	847	11,375	209
Zeehan-Western	"	157	1260	45
Oonah	"	9	89	30
"	silver ore	76	670	
"	fluxing ore.....	103	71	
"	stannite	73	580	18
Sylvester	galena.....	36	239	
Currie's Mine	"	23	276	
Nubeena	"	33	349	9
Zeehan-Queen	"	19	128	37
Silver Queen Extended	"	6	39	11
Silver King	gossan.....	12	56	3
Florence	galena.....	140	1522	32
<i>Dundas Mines:</i>				
Hercules	zinc-lead sulphide...	2474	3164	110
"	zinc-blende	1334	3515	
Comet	galena.....	413	2083	66
"	gossan.....	1198	809	
Ring Valley	fahl ore	106	1806	10
West Comet	fluxing ore.....	2350	1050	20
Total		11,272	45,339	799

MOUNT ZEEHAN (Tasmania).—Mr. T. Vincent, manager, reports:—No. 13 lode, No. 1 level, winze down 50 feet—rich lode. Spray, No. 4 level opening up well. No. 3 level, crosscut to No. 3 lode extended 300 feet. No. 3 lode, upper levels producing good quantities of first and second-class ore. No. 6 shaft, No. 3 lode driven south 100 feet, and north 150 feet—payable; 8 men stoping on this lode. Nos. 1 and 2 lodes driven upon 360 feet, and 141 tons ore obtained, value £1533. Outlook promising.

Zeehan-Montana.—Mr. John Craze, manager, reports:—No. 1 shaft, No. 4 lode: No. 6 level is being driven on north and south. Lode payable. No. 6 lode: No. 6 level is being driven north, but so far without ore. At No. 5 level a crosscut is being driven east to cut No. 8 lode, and at No. 4 level the north drive on No. 8 lode is highly payable. This part of the lode has been faulted downwards a distance of 200 feet. The last level on which the lode was worked was No. 2, at 200 feet below the surface. The winze being sunk on No. 6 lode below No. 4 level is now showing ore, although the level at Nos. 4 and 5 was quite barren in the vicinity of the winze. No. 2 shaft: the east crosscut, No. 2 level, is now 750 feet from shaft. At 650 feet the crosscut passed through a small vein of carbonate of iron and galena; but no work has been done on this yet. The crosscut will be continued 300 feet further east into the Despatch section, and when the Despatch lode is cut, ventilation will be provided by rising through to surface. All the veins will then be taken in hand, and further proved. The west crosscut is in 450 feet from shaft. No. 2 lode: Nos. 1 and 2 levels are both in payable ore, and stoping will be started at once, when it is probable that this part of the mine will begin to pay its way. The prospects of the mine are very good.

Onah.—Mr. W. Fisher reports:—The stannite lode averages 12 inches good metal, but is getting limited above water-level. Gossan tunnel lode is 30 inches of sulphide, with bunches of high-grade ore, carrying ruby silver. Sales up to 513½ ozs. silver per ton have been made. The Junction main workings are being opened up for carbonate of iron flux. One hundred and three tons raised to date carried 18·4 ozs. silver per ton. The lode is 5 feet wide, from which it is expected large quantities (100 tons per week) will be raised, with the chance of meeting with good ore as the mine is opened up.

Silver King.—Mr. W. Fisher, manager, reports:—Had to abandon working down shaft owing to increase of water; now on patch of gossan left in old stopes. About 700 feet south from main shaft on line of South King lode a nice-looking formation was sunk on a few feet, but nothing could be done with it owing to water. This is probably the main lode, which was lost going south in the main workings, No. 1 level.

DUNDAS AND MT. READ.—*Ring Valley.*—Mr. John Moyle, manager, reports:—All underground work has been confined to No. 1 tunnel. This was driven 45 feet north on the fissure lode, pro-

ducing very fair quality ore. Parallel to this lode a body of very dense ore has been disclosed. It consists principally of iron pyrites, with which copper pyrites and a good deal of pyrrhotite are associated. Fahl ore occurs in bunches. It is intended to push on with No. 1 tunnel, and connect with the level above it, when probably a good block of stoping-ground will be available.

Hercules Mine.—Mr. Sydney Thow, general manager, reports that 2474 tons sulphide ore were consigned to the Tasmanian Smelting Co., Zeehan, and 1334 tons zinc-blende exported to Europe. The directors' report for the half-year ending 31st January states that during that period 348 tons gossan ore and 5970 tons sulphide ore were sold to the Tasmanian Smelting Co., and 1460 tons zinc ore were exported to Europe. The average assays of these were:—

	Gold, ozs.	Silver, ozs.	Lead, per cent.	Zinc, per cent.
Gossan	0·32	30·9	20·5	...
Sulphide	0·318	19·32	10·9 dry	...
Zinc	0·36	10·7	12·4 wet	44·4

The total receipts (actual and estimated) from these sales were £14,383 10s. 7d., making a total to date of £76,410 13s. 0d. The general manager estimated that there were 4000 to 5000 tons of zinc ore in sight, carrying 38 to 45 per cent. zinc, and that this quantity will be substantially increased by developmental work. With spelter at £22 per ton, this class of ore shows a fair margin of profit.

Tasmanian Smelting Company, Limited.—The managers furnish the following statistics for the quarter:—6428·559 tons of ore were purchased, containing 1921·766 tons lead, 281,515·01 ozs. silver, 773·822 ozs. gold. The export of bullion was 1864·061 tons lead, 275,298·02 ozs. silver, 940·427 ozs. gold.

NORTH-WESTERN DISTRICT.—Magnet Mine.—During the quarter 1714 tons (dry weight) ore, net value £2572, were consigned to Dapto, N.S.W., and 1065 tons, value £1764, were shipped to Newcastle, N.S.W. One hundred and thirty-seven men were employed. The No. 5 level crosscut, at 60 feet below No. 4, has cut the lode and exposed good ore, which, since the close of the quarter, has been driven on for 70 feet. The lode in the southern part of the northern block held by the company has absorbed a large amount of the mine's earnings, owing to the unsettled nature of the ground, but the directors anticipate winning yet a considerable quantity of pay ore from this portion of the ore deposit. The lode continues still further south, and will be explored in that direction in due time. The directors' half-yearly report to 29th February states that during this period a regular output has been sustained, and 5500 tons of ore sold, containing nearly 5½ tons silver, with 362 tons of lead, and approximately 2000 tons of iron and manganese oxides. Another dividend of £2000 (equalling 1s. per share) was paid on 1st February, making £4000 for the half-year. The company has still to deliver 20,000 tons of ore under contract to the Smelters in New South Wales, and this will be sent forward at the

usual rate of 1000 tons per month. The foundations of a small ore-dressing mill are being started, so that the treatment of the milling-ore accumulated on the dumps, as well as seconds coming henceforth from the lode, may be taken in hand when thought desirable.

HEAZLEWOOD AND WHYTE RIVER.—Ore-winning has started at the Long Tunnel and Victorian Magnet mines. Exploratory driving has also proceeded at the Godkin Extended.

MT. FARRELL.—The North Mt. Farrell Mine resumed work 21st February, and 210 tons of ore were dressed, containing 60 per cent. lead and 60 ozs. silver per ton. Ninety men employed. The Murchison Mine produced 27 tons silver-lead ore. Fifteen men.

Devon Mine.—Shaft-sinking is proceeding, with a view of opening out on the lode at 60 feet below the present level.

COPPER.

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

	Tons.	Dry weight.		
		cwts.	qrs.	lbs.
Mt. Lyell Mine ore	73,257	1	1	13
North Lyell Mine ore	24,539	0	2	17
Purchased ores.....	155	2	2	26
	97,951	4	3	0
By product from Crotty Smelters.....	9	2	2	1
Metal-bearing flux from— South Tharsis Mine	1	16	1	1
	97,962	3	2	2

The metal produced was—

Blister copper, 2133 tons, containing—	£	s.	d.
Copper, 2106 tons, valued at	120,609	0	0
Silver, fine, 224,009 ozs., valued at.....	24,734	6	6
Gold, fine, 5281 ozs., valued at	22,444	5	0
Total value.....	£167,787	11	6

Number of men employed—

At the Company's Mt. Lyell Mine	350
" " North Lyell Mine	450
" " Reduction Works	1008
" " Mt. Lyell Railway.....	129
" " North Lyell Railway.....	19
Total	1956

Mt. Lyell Blocks Mining Co., N.L.—Mr. C. E. Nicholas, manager, reports:—Men employed, 94. At the office tunnel the main drive was driven 258 feet, making a total length of 399 feet; No. 2 cross-

cut, 78 feet; No. 3 crosscut, 89 feet; No. 4 crosscut, 51 feet; No. 5 crosscut, 2 feet; air-shaft risen 57 feet. At Consols main tunnel driven 203 feet; prospecting, 51 feet; air-shaft sunk 10 feet; balance shaft sunk 154 feet; and opening-out sets put in at 86 and 148 feet. The concentrating mill building has been practically completed, and the machinery is now being placed in position.

Crown Lyell Copper Mine.—Eight men employed. As a result of the prospecting and development work in No. 3 level, the management decided to sink the main engine-shaft another 100 feet, and work is now confined to the shaft, which is down 480 feet. It is proposed to open out for No. 5 level at 512 feet. Mineralised quartzitic schist in bottom of shaft carries very fair grade copper pyrites.

Mt. Lyell Comstock Mine.—A decision has not yet been arrived at as to the treatment of the ore, and consequently work has been confined to prospecting. Five men employed.

Tasman and Crown Lyell Extended.—The work for the quarter consisted of the sinking of No. 1 winze from No. 2 tunnel to a total depth of 72 feet. At 66 feet a crosscut was opened and driven south-westerly for 50 feet. Four feet of sulphide ore, worth from $3\frac{1}{2}$ to 6 per cent. copper, was passed through, and also a second band 12 feet wide, assaying up to 7 per cent. These prospects were sufficiently good to warrant a rise being put up from the No. 3 main tunnel that is 160 feet deeper to intersect and further operate on these developments; the latter work is now in hand. Six men employed.

Copper Mines of Mt. Lyell West.—Work has been confined to surface prospecting, to the exportation of a quantity of samples to London, and to the extension of the Razor Back crosscut in the main tunnel to a total of 100 feet. At present, negotiations are proceeding, with a view to carrying out additional and more rapid prospecting by means of the diamond-drill. Three men employed.

Lake Jukes.—Mr. H. S. Muir, manager, reports:—Prospecting work has been confined to driving a low-level tunnel at the south end of ore-channel, to meet its contact with the porphyry rock to the west; distance driven, 80 feet, through altered felsite. Also, a high-level tunnel was commenced from the north (lake) end, along the porphyry contact; distance driven, 22 feet. It is believed that the most enriched ore will be met with along the contact of the ore-bearing metamorphic rock with the quartz porphyry, and exploratory work to prove this is being carried out. Five men employed.

MT. DARWIN.—Findon's Sections.—Owing to the non-attainment of satisfactory results, the Tasman Syndicate, Limited, of London, suspended operations on these sections during the quarter.

BLYTHER.—At the Rutherford Mine, 9 miles south of Burnie, a shaft has been sunk 32 feet, and a crosscut west driven across the lode at 15 feet. The lode was then driven upon south-east for 120 feet, the average width of ore being a foot. An average assay by

Mr. C. E. Nicholas at this depth returned 5·6 per cent. copper; 3 ozs. 5 dwts. 9 grs. silver, and 10 grs. gold per ton. At the 32-foot level the lode is stated by the syndicate to be 8 feet wide. Ten tons from the 15-foot level were tested at Mt. Lyell, and returned 8·45 per cent. copper, 3·6 ozs. silver, and 0·03 ozs. gold per ton; and 10 tons at the Dapto Works, New South Wales, returned 7·2 per cent. copper, 4 ozs. 11 dwts. 4 grs. silver. It is intended to develop this mine at a greater depth.

Prospecting is going on at other points in this belt of copper-bearing country, and the discoveries which are being made foreshadow possible profitable copper-mining at more than one place between the Rutherford and the coast.

COAL.

The output this quarter was 11,873 tons 8 cwts., against 9088 tons the previous quarter. The production of the respective collieries was as follows:—

Colliery.	Tons raised.	Men employed.
Cornwall	6397	68
Mount Nicholas	4511	54
Dulverton	62	6
Teasdale's	73	2
Spreyton	194	4
Bound's (Illamatha)	70	2
York Plains	70 ^a ₃₀	3
Marialva	40	3
Sandfly	20	3
Mt. Cygnet	436	4
Total	11,873 ^a ₂₀	149

At the Cornwall the 6-foot seam is now divided into 18 inches of coal below the band, and 3 feet 6 inches above it. The work is being carried on in the upper part of the seam.

At the Dulverton Colliery a new tunnel has been started parallel to the old one. Teasdale and Co. have opened upon the same seam on the opposite side of the valley. It is 18 inches thick, with floor and roof of hard sandstone. A tramway from Dulverton Station to the mine, 1½ mile, is being built. At Spreyton the same seam, 18 inches, is being worked by Mr. Allison on the west side of the valley. The Illamatha Mine is also on the same seam, and close to the Spreyton Colliery.

The Marialva Mine at Colebrook has changed hands, and work is going to be carried on more systematically than hitherto.

Mount Cygnet Mine has a nice payable seam. The settled country beyond the fault has now been reached.

IRON.

The Tasmanian Iron Company, at the Penguin, raised 2200 tons high-grade hematite ore this quarter. Twenty-nine men were employed.

CONCLUSION.

The total value of minerals raised and exported this quarter was £341,292, as compared with £329,493 for the corresponding quarter of the previous year. The increase has been mainly in copper and tin, reduced to some extent by lower exports of silver-lead bullion. The exports of bullion in any given quarter, however, are affected by accidental circumstances, and for exports generally, the first quarter of the year is by no means the heaviest.

Return showing the average number of men employed in or about the mines during the quarter ending the 31st March, 1904.

District.	European.	Chinese.	Total.
North and South.....	568	...	568
North-East	494	119	613
East	774	66	840
North-West	379	...	379
West	3552	...	3552
Total	5767	185	5952

Value of the mineral output per man employed, £57 6s. 9 $\frac{3}{4}$ d.

The dividends paid during the quarter were:—

	£	s.	d.
From Gold Mines.....	5774	14	6
„ Tin Mines	18,925	0	0
„ Silver Mines	9626	17	0
Total.....	£34,326	11	6