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THE PROGRESS OF
THE MINERAL INDUSTRY

OF

TASMANIA,

FOR THE QUARTER ENDING 30TH JUNE, 1902.

COMPILED BY

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BY ORDER OF

THE HONOURABLE EDWARD MULCAHY,

MINISTER OF MINES.



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MINERAL INDUSTRY OF TASMANIA
 FOR THE QUARTER ENDING 30TH JUNE, 1902.

*Launceston,
 August, 1902.*

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 30th June, 1902, compared with the corresponding Quarter in 1901 and the previous Quarter ending 31st March, 1902:—

	During the Quarter ending 30th June, 1902.		During the Quarter ending 30th June, 1901.		During the Quarter ending 31st March, 1902.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Gold won	18,435 ^{*036}	£ 78,307	14,294	£ 53,602	16,412 ^{*61}	£69,717 15s. 9d.
Auriferous Quartz and Pyrites exported	55	1032	33	653	55½	1083
Silver Ore exported.....	7786¾	41,342	4290¾	47,953	4205	39,059
Blister Copper exported....	2576	188,790	2402½	226,414	2402½	170,786†
Copper Ore exported	1809¾	20,823†	2983	40,316	1326½	23,430
Iron Ore exported	355	355	210	115	745	645
Coal raised	10,981½	9334	12,750	10,837	11,547	9815
Silver-lead Bullion exported	1618½	56,635	1069½	37,140	†1092½	36,031
Tin Ore exported.....	3	36	5½	27	63½	1968
Tin (metallic) exported	440½	57,975	386½	47,815	373½	41,832
Asbestos exported .....	...	...	10	8	...	...
Gold Quartz exported .....	...	...	51	230	5¾	50
Oxide Mineral exported ....	...	...	...	...	...	...
Gold Concentrates exported	...	...	...	...	...	...
Zinc Ore exported .....	...	...	...	...	183½	1425
Iron Pyrites exported.....	...	...	...	...	...	...
Copper exported .....	...	...	...	...	...	...
Copper Matte exported ...	100	2000	...	...	50	1250
Cyanide Slag	½	150	...	...	...	...
TOTAL VALUE .....	... £	456,779	... £	465,110	... £	397,091 15s. 9d.

* Fine gold, including gold obtained from blister copper and silver-lead bullion.

† Value of gold contents deducted.

GOLD.

During the past quarter 10,534 ozs. 14 dwts. of gold were obtained from quartz, 118 ounces from alluvial, 2433 $\frac{8}{30}$ ounces by means of the cyanide and chlorination processes, 5556 ounces from the blister copper from the Mount Lyell Mining and Railway Company, Limited, 688 ounces from the silver-lead bullion from the Tasmanian Smelting Company's Works, Zeehan, and 353 ounces from the sulphide ores from Mt. Read.

The following Table shows the quantities obtained from the various sources on the different fields during the period under review:—

Gold obtained during the Quarter ending 30th June, 1902.							
	From Quartz.	Alluvial.	Cyanide & Chlorination.	From Blister Copper.	From Silver-lead Bullion.	From Sulphide Ores.	TOTAL.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield	6974	110	1449	...	...	...	8533
Mathinna ...	3104	...	739 $\frac{8}{30}$	...	...	...	3843 $\frac{8}{30}$
Mt. Victoria	347 $\frac{11}{30}$	...	...	...	...	...	347 $\frac{11}{30}$
Warrentinna		...	...	...	...	...
Lefroy	17	3	245	...	...	...	265
Lisle .....	...	...	...	...	...	...	...
Golconda ...		...	...	...	...	...	...
Mangana ...	92	...	...	...	...	...	92
Bell Mount.	...	5	...	...	...	...	5
West Coast.	...	...	...	5556	688	353	6593
TOTALS	10534 $\frac{14}{30}$	118	2433 $\frac{8}{30}$	5556	688	353	19,683 $\frac{3}{30}$

Value £78,307, equal to 18,435·038 fine ounces.

BEACONSFIELD.—Five hundred and seven men were employed in this district during the quarter; of these, 491 were in the employ of mining companies, and 16 were tributors or prospectors.

At the Tasmania Mine the two main shafts are being connected, and a Root's blower, of a capacity of 10,000 cubic feet per minute, is being fixed near the Florence shaft, to improve the ventilation. During the quarter, from 60 to 90 heads of stamps have been running; 10,827 tons of quartz were crushed, and the production of gold was 6952 ozs. at the battery, and 1449 ozs. by chemical treatment, making a total since the formation of the company of 463,905 tons of quartz, and 549,860 ozs. of gold, valued at £2,016,314 7s. 9d. The total dividends distributed amount to £769,071 15s.

The Moonlight-cum-Wonder Company, since suspending work at the main shaft, has been prospecting in various places on its sections. A second prospecting shaft has been started on the Little Wonder ground, the workings at the first pit being overpowered by water. The lode which it is proposed to examine here is supposed to have

been the source of the gold formerly found in the old Brandy Creek. The workings of the Moonlight on the Olive Branch section were put in order, and a little sinking and driving done, but the result did not justify further outlay. The latter section is being prospected from the surface by tributors, who have sunk several shafts and done a considerable amount of driving and trenching. Numerous irregular veins of quartz have been met with, some carrying a fair quantity of gold, but none appear to be continuous. The battery crushed 40 tons of quartz for the North Tasmania Company.

The Duchess of York contemplates sinking a main shaft 200 feet. The ore won from the lode formation is awaiting treatment, but the question of despatching it is in abeyance for the moment. A small winze was sunk in the nugget chamber in the tunnel to a depth of 50 feet, and a drive started from the bottom, but had to be relinquished, owing to bad air. Another prospecting shaft (No. 2) has been begun 120-130 feet S.E. from No. 1, on a formation 18 inches to 2 feet wide.

The Salisbury Gold Mining Company has driven 230 feet, and intersected a quartz vein heavily charged with pyrites, and gold-bearing.

The Bonanza Proprietary has started to sink a main shaft, with the intention of striking the Tasmania reef in depth. It is anticipated that some of the stone belonging to the reef will be reached at between 500 and 600 feet, but that the main body will not be met with before 900 feet or thereabouts. Should the heave which occurs in the Tasmania Mine extend into the Bonanza, it is hoped to find the faulted reef by driving S. on the cross-course; but if the faulting is found to cut out, then the reef, when struck, will be risen upon continuously.

The East Tasmania intends boring, in order to locate the reef on their property, so soon as the Government drill is at liberty.

The Ophir Company has sunk through the alluvial at the base of the Cabbage Tree Hill to the bed-rock, 490 feet below the surface, but without any favourable results.

LEFROY.—Seventy men have had employment on this field; thirty-eight of these were employed by the New Pinafore Company, the rest being prospectors and tributors.

At the New Pinafore the south reef in winze in the west drive has occasionally shown gold; the intermediate reef has also shown traces of gold. The prospecting work on the Native Youth section has not resulted in much. The company is taking over the Golden Point and Crown section, where a N.E.-S.W. lode was worked formerly, and gave some high returns. Winding machinery will be taken from the Morning Star, and an early start made to unwater the Point and Crown shaft. It is a pity that the two deep mines on Lefroy have not been carried down to greater depths.

Johns Bros.' Cyanide Works produced 60 ozs. of bullion.

LISLE.—The Dredging Company has not been at work this quarter. An alteration in the class of pump has been decided upon, and as soon as the new pump is ready, it will be fixed and set to work.

GOLCONDA.—Useful prospecting work has been going on at Golconda, Panama, and the Denison.

WARRENTINNA.—A little prospecting still continues here.

MT. VICTORIA.—Work at the Central Ringarooma continues, and a tribute party has started at the New River. The half-year's work of the Long Struggle G.M. Co. to June 30th has been fairly profitable for a small venture. One hundred and forty-three tons of quartz were crushed, yielding 283 ozs. of gold, which realised £876. A small engine (6 h.p.) enables crushing to be continued during summer months. The reef has been driven upon for 190 feet, of which 140 feet have been stoped. The lower level tunnel to cut No. 2 reef has been driven 150 feet; when this is cut, it will have 110 feet of backs.

MATHINNA.—The New Golden Gate Mine has, in the opinion of the mine manager, never looked better than it does at present. The main shaft is down to 1600 feet, and cross-cutting is to be started east and west very soon. At the 1500 feet a crosscut is being commenced for the No. 1 west reef, which is expected to be reached in September. A good payable reef has been opened up now at 1400 feet by the south drive. At 1200 feet and 1300 feet the south drives on No. 1 east reef, which was poor or barren stone, have disclosed large quantities of payable quartz, and this, with the strong reef at the 1400 feet, puts the mine into an exceedingly strong position as regards the future. The mine manager gives the very satisfactory assurance that the cost of working the 1600-foot level will not be more than that of the 1000-foot level. Since the end of the quarter, the half-yearly statement has been issued, details of which will be given in next Report. One hundred and sixty-six men employed.

The Volunteer Mine crushed 500 tons of stone, which returned 144 ozs. of gold, or 5 dwts. 18 grs. per ton. A new main shaft has been started, and will be sunk to 200 feet before cross-cutting, or 100 feet deeper than the old shaft. The crosscut is not expected to exceed 50 feet in length. In the meantime, the present working shaft keeps the battery fully supplied. This mine is exciting the interest of the mining community, as it is paying its way, and paying for the construction of the new shaft with $5\frac{1}{2}$ dwts. stone—a new experience for Tasmanian gold mines. Thirty men employed.

The New Golden King contemplated sinking a new main shaft, but has abandoned this intention, and is deepening the present one by 100 feet, making it 220 feet altogether. The shaft will pass through the reef at 36 feet below the present level. Two hundred

and fifty-one ounces of gold were obtained during the quarter from 96 tons stone. Twenty-six men employed.

The Havelock Mine is on tribute. The mine is not sufficiently developed to admit of its low-grade stone being worked profitably. The Loane P.A. has been prospecting with 9 men. Fifty feet have been sunk, and 50 feet driven. It is intended to float this venture. At the Lord Kitchener, 15 tons of tributors' quartz were crushed for 32 ozs. of gold. Prospecting was carried on during the quarter at the East Volunteer, Revenue, Douglas, Golden Princess, and Golden Stairs. The Mathinna field has given employment to 270 men.

MANGANA.—The Golden Entrance Mine has not produced any gold this quarter. Prospecting has been carried on with 5 men, and expert advice is to be taken as regards future work. At the Mangana Reefs several tribute parties are making wages. One hundred and twenty-one tons of quartz were treated, and 92 ozs. of gold obtained. The Salmon Gold Estates is sinking a shaft on its western section.

FINGAL.—Fingal reefs are idle, the large reef being too patchy and the small lode too narrow to be profitable. Hit-or-Miss is extending its tunnel. Abbotsford Creek Mine has been abandoned, and an option is being exercised over Grant's Freehold, where a lode is being prospected.

NORTH-WEST COAST.—The Dredge on the Whyte River has stopped for repairs, and in consequence of the unsatisfactory results obtained hitherto, it is intended to remove it down to the Pieman River.

WEST COAST.—The Queen River Dredging Company has again suspended work, but the reasons are not reported. At the King River Claim a large quantity of ground has been sluiced, and it is hoped that the result will be satisfactory when the clean-up takes place.

TIN.

The output of tin ore at Waratah during the quarter has been 323 tons 16 cwts., raised from the following mines:—

	Tons. cwts.	Men employed.
Mount Bischoff	318 0	227
Waratah Alluvial	3 0	2
Stanhope	2 16	4
West Bischoff ... ..	...	8
	<hr/>	<hr/>
	323 16	241
	<hr/>	<hr/>

During the past six months the output from the Mt. Bischoff Mine has been 636 tons tin ore, and the cost of mining crushing, and dressing the stanniferous material was, per ton, as follows:—

	s.	d.
Mining, including new works, maintenance, &c.	2	8·221
Filling, hauling, and emptying trucks	0	6·026
Crushing, dressing, and maintenance of plant	0	9·600
Slime sheds	0	1·228
Ring-tail sheds	0	2·072
Management and supervision	0	6·370
Plant, including all machinery	0	3·075
Development and progressive work	0	2·063
Waterworks	0	0·305
Ore-bagging	0	0·374
Sundries	0	0·868
Stores	0	5·226
	<hr/>	
	5	9·428

Since the formation of the company, 60,310 tons 14 cwt. 3 qrs. 19 lbs. tin ore have been raised. The dividends declared during the last six months have been £27,000, in regular instalments of £4500 monthly, making a total of £1,831,500, or £152 12s. 6d. per share.

The alluvial discovery on the northern side of the hill has proved an important development. The face now opened on this deposit is 176 feet wide, with an average depth of 25 feet, and the wash not yet bottomed. The east and west ends of this face have been worked principally, and 4794 tons of dirt removed. The central part of the face is clayey and poor, and will be sluiced later. An exploratory drive through the centre has shown the clay to extend 160 feet, after which, 21 feet of payable porphyry were passed through. This is being proved by a crosscut, and is still payable. The crush-dirt at the Brown Face is still of good quality, and is the principal mainstay of the mine.

At Derby, the new Briseis-Ringarooma-Maurice Race was permanently opened on the 16th April, and has given no trouble, delivering satisfactorily and easily the 100 sluice-heads for which it was designed. Two inspectors and six caretakers have been established over the length of 30 miles, and telephonic communication completed throughout. A powerful electric plant, driven by a 3-foot diameter Pelton wheel, is under erection for lighting and other purposes. The development of the mine is now being pushed ahead, the removal of overburden for the quarter totalling 57,945 cubic yards, and the current work is practically confined to removal of overburden. The tin ore despatched to the smelters during the same

period amounted to 44 tons 1 cwt., and metallic tin shipped from Launceston was 30 tons. Since the commencement of the year, resort has been had to dumping and stacking the tailings on the company's extensive dumping area, thus reserving a large proportion of material, which would otherwise have been discharged into the Ringarooma River. Seventy hands are employed at this mine.

The Ringarooma Tin Mine has employed 35 men, principally in removing the heavy overburden.

The New Brothers' Home No. 1 has 44 men at work, principally stripping the basaltic overburden, and good progress has been made, about 80,000 cubic yards of drift being uncovered, and 120,000 yards partially so. As the work has been confined to stripping, the output of ore has not begun, only 3 tons 4 cwts. being produced during the year.

The Pioneer Tin Mine at Bradshaw's Creek is fulfilling the expectations of its owners. The produce of tin ore for the past quarter was $93\frac{1}{2}$ tons, making a total of 217 tons 8 cwts. for the year ending 30th June, obtained from 237,900 cubic yards of drift pumped and sluiced, against 121,400 cubic yards and 77 tons 4 cwts. the previous year. The new plant is doing first-rate work. There is now a 5-inch nozzle working under a pressure of nearly 100 lbs. per square inch, and discharging $37\frac{1}{2}$ sluice-heads per minute, which makes light work of the material to be sluiced. The pump is lifting this water, together with the drift and condenser circulating water and drainage, to a height of 70 feet. The main tail-race, 500 feet long by 10 feet wide, is built on trestles 12 feet above the surface, and the working tests show that only the very finest tin escapes, and of this there is no great quantity. The old plant is being overhauled and improved. The water supply has been very good the past year, and the races are all in good order. A new dam, which will augment the summer supply, is being constructed on Bradshaw's Creek, about $1\frac{1}{2}$ mile above the mine. A dividend of 2s. 6d. per share was paid in April, and 3s. in June, making, with the previous one, 7s. per share paid in dividends this year.

The Arba Tin Mine at Branhholm employed 19 men, and raised 8 tons 8 cwts. ore, but work here for the past half-year has been principally of a developmental character. It is anticipated that everything will be ready to begin to produce tin on a larger scale in about three months' time.

The Wilberforce Pump No. 1 Company is making preparations on the Boobyalla for commencing work. The foundations for the machinery are now ready. The Boobyalla Proprietary has decided to move its plant nearer to the river, where there is a face of good wash ready to operate upon.

At Gladstone the Scotia Claim has produced 36 tons for the year. The output of this district for the past year has amounted to 77 tons, which has provided employment for 61 men; of this, 64 tons have been produced with the assistance of the Government race at Mt. Cameron, but the outlook for the future is at present very dubious, as the present condition of the race involves either collapse in a

short time, or a heavy outlay for repairs, and it is not yet known whether these repairs will be undertaken. The Government boring trials have shown that the Mussel Roe lead cannot be depended upon for future supplies of tin ore. There remain, therefore, the stanniferous terraces on the slopes of the mount, which, unfortunately, are mostly too high to be commanded by the race, and sundry gravel terraces at Gladstone itself, which could be supplied by a new disposition of the conduit. The contact line of the granite with the slates is tin-bearing near Gladstone, and would be worthy of attention if sufficient water were procurable.

The 50 tons of ore sent to London by the Mt. Rex Company realised £52 per ton. The company has resumed work at the mine, and is sinking its shaft another 100 feet; and also a winze from the 40-foot to the 140-foot levels. The mill is being overhauled preparatory to starting. The dam will be raised seven feet, in order to conserve the winter-water.

The South Esk Mine produced 12½ tons tin ore, employing 12 men. Instead of the tin-bearing ground going up to the head of the flat, as expected, it has turned N.W. to the granite ranges. On the range, 600 feet above the present workings, 25 to 30 chains distant, a formation of micaceous tin-granite, stated to be highly payable, has been discovered. Its dimensions are reported as being 30 feet across in one direction and, as yet, undefined in the other.

The Lottah mines have produced as under:—

	Tons. cwts.	Men employed.
Anchor Mine	31 10	77
Australian Mine	11 18	28
Blue Tier Claims	1 18	14
	<hr/>	<hr/>
	45 6	119
	<hr/>	<hr/>

The Anchor race is completed to the North George, but the full benefit has not been felt yet, as several slips and falls of trees have caused trouble.

The mines at Weldborough, Main Creek, and Cascade River have produced 10 tons tin ore, and employed 66 men. The tunnel of the Weldbrook Company is nearly completed, but work is impeded by having come upon a run of soft ground, which renders access to the tunnel only possible from the surface.

In the St. Helens District 70 men have been at work, and the produce has been 9 tons of tin ore. The Royal Ruby is constructing a race to bring in water from the Groom River, a distance of 12 miles.

The Stony Ford Mine has started crushing with a 5-head battery. The plant has been obtained from America. The mill is spacious and substantially built, and room has been provided for erecting 5 heads more when needed. At present there is not much stone ready for the battery, as the development work is behind requirements. The ore-deposit being of an exceptional nature, there is special need for its vigorous exploration.

WEST COAST.—Eight tons fourteen hundredweights of tin ore were exported from the Coast. A good deal of prospecting work has been carried on at Heemskirk, but some of the claims have not yet started to produce ore for market.

The raisings of tin ore throughout the State have exceeded those of the previous quarter, and are also in excess of the quantities produced during the corresponding quarter of last year.

SILVER.

WEST COAST.—The quantities and value of the ore raised by the principal mines in the Zeehan and Dundas division during the quarter have been as follows:—

Mine.	Ore.	Tons.	Value.
Mount Zeehan, Tas. (British Zeehan)	galena.....	1287	£ 14,130
Zeehan-Montana	"	1020	16,753
Silver Queen	"	752	4254
Oonah	"	231	6681
Silver Queen Extended	"	25	205
New Mount Zeehan	"	29	165
Western Consolidated	"	10	75
Watt & M'Auliffe	"	21	189
Comstock	"	8	123
Zeehan South Comstock	"	8	48
Comet "	zinc blende.....	88	146
" "	galena.....	458	2392
" "	gossan.....	777	524
Ring Valley	fahl ore	31	541
Hercules	gossan ore	1752	3824
" "	zinc-lead sulphide .	883	1840

At the Mt. Zeehan things generally are in a satisfactory state. The Queen End has a very fair lode, which has gone below No. 1 level, and which has been proved by a winze to 30 feet. Now sinking No. 2 shaft 100 feet. The Spray Mine looks well, and it is intended to sink for another level. One hundred and sixty-six men are employed.

The Silver Queen has had a successful half-year, and has sold its property to the Mt. Zeehan Company. During the half-year the tributors, numbering 43, raised 1238 tons 18 cwts. 2 qrs. 16 lbs. of ore, which realised £6159 2s. 11d.

The Oonah Mine is working on tribute, as well as the New Mt. Zeehan.

At the South Comstock the main adit at the intermediate level is being continued 100 feet further. Stopping is being done from this level and the open-cut level. Eleven men are employed.

No ore was raised at the Silver King last quarter. The work was confined to driving a crosscut out to parallel lodes, one of which will be cut in about 6 weeks' time.

The Comet Mine is looking well. The principal stopping has been in the back of No. 2 level. Sixty-eight men are employed.

MT. READ.—At the Hercules Mine the installation of the new haulage rope and new sheaves at the send-off and terminal has been completed. The whole is working satisfactorily. These alterations affected the output somewhat in May, but the capacity of the tram is now increased. The delivery of 5000 tons sulphide ore to the Tasmanian Smelting Company has commenced, and will be at the rate of 500 tons per month. Consignments of gossan ore to Dapto are still in progress, and are showing increased gold value. The work in the mine in the upper levels shows a continuance of the gossan, and fresh shoots of very satisfactory width. A winze has been sunk to 50 feet in No. 5 tunnel, and the cross-cutting from the bottom, now in progress, discloses very good copper ore. The number of men employed during the quarter averaged 92.

Tasmanian Smelting Company.—Notwithstanding the decline in market values both of lead and silver, the purchase of ore has increased, as compared with the corresponding period of last year. The quarterly purchase has been 4088·755 tons of ore, containing 1294·069 tons of lead, 188,917 ozs. silver, and 291·874 ozs. gold. The smelting was carried on with one furnace during the whole time, and the sulphide ore, which underwent a primary treatment by the Huntingdon-Heberlein process, did not interfere in any way with regular and clean work. The tonnage of the ore smelted exceeded the quantities received during the quarter, and this necessitated drawing to the extent of about 2000 tons upon the large stocks in hand. The ore smelted totalled 6131·823 tons, which produced 1878·728 tons base bullion, containing 1831·759 tons lead, 234,939·07 ozs. silver, 600·394 ozs. gold. As usual, this bullion was sent to Antwerp for refining.

The Smelting Works employed about 150 men, besides wood-cutters, and consumed during the three months 2940 tons firewood and 811 tons coke.

Mr. Max. Heberlein, the general manager, is about to retire from the control of the works, but it is gratifying to know that he considers the prospects of these smelters, even under the present depressed conditions of the metal market, to be better than ever before. A very small proportion of the district ores is being exported, and the ores of other districts have found their way to the company's furnaces. These works have undoubtedly stimulated the production of the surrounding field, and Zeehan may be considered fortunate in having the means of turning its output into metal so easily available.

NORTH-WESTERN DISTRICT.—The quantity of silver-lead ore sent away from the Magnet Mine during the past quarter was 1564 tons, of which 365 tons were consigned to Dapto and 1199 tons to Zeehan. The output of the mine is now on a large scale, 1000 tons per month being sent off regularly to Dapto and Zeehan, in about equal proportions to either works. The ore is dried to 7 per cent. moisture; that which is shipped to New South Wales is bagged, while the consignments to Zeehan go loose. The returns are satisfactory to the company, and larger contracts will be shortly entered

into, those now current being for 10,000 tons. Additional trucks have been ordered from America. The crushing and drying plant is now quite complete. The drier, which is of a novel description, works satisfactorily, and is fully capable of grappling with the output of the mine. The final works at the mine consist of ground and self-acting tramways; the former on the level to the lowest adit, and the latter for utilising the accumulation of ore on the dumps at a higher level. These, with hoppers, will be completed by the end of August. New assay and mine offices are being erected at the railway terminus, as well as a residence for the general manager. The number of men employed during the quarter averaged 88.

There has been an increased production of ore at the Heazlewood and the Whyte River. The output of the few mines at work there has been as follows:—

	Tons.	Men employed.
Bell's Reward	35	6
Mount Stewart... ..	1	6
Washington Hay	10	6
	—	—
	46	18

In the Mt. Farrell District only the two mines, North Farrell and Farrell, are at work, but there are signs of coming activity, which may be expected when tramway communication is established.

The Mt. Farrell Company is progressing with its lower tunnel, and in a further 100 feet of driving, expects to reach the ore-bearing slates.

The North Farrell has raised during the quarter 320 tons of silver-lead ore, averaging 64 per cent. lead and 72 ozs. silver per ton. Forty-four men were employed. The output is increasing steadily, and the ore at the lower levels is improving. There is now a large quantity of first class ore stacked, 14,155 bags, equalling, approximately, 725 tons, and there is every probability of this increasing to 1000 tons by the time the tramway now being constructed is completed.

The Devon Mine produced 35 tons 7 cwts. silver-lead ore during the quarter.

COPPER.

MT. LYELL MINE.—The ore treated at the Reduction Works during the quarter ending 30th June has been as follows:—

	Dry Weight.			
	Tons.	cwts.	qrs.	lbs.
Ore from Mt. Lyell Mine.....	79,969	0	1	25
Purchased ores.....	4841	5	3	20
Metal-bearing fluxes from South Tharsis Mine	7431	18	2	23
Metal-bearing fluxes from Royal Tharsis Mine	706	10	1	21
Total.....	92,948	15	2	5

The metal produced was—

Blister copper, 1892 tons, containing—	£	s.	d.
Copper, 1870 tons, valued at	101,354	0	0
Silver, fine, 171,133 ozs., valued at.....	18,500	16	0
Gold, fine, 5556 ozs., valued at	23,613	0	0
Total.....	<u>£143,467</u>	<u>16</u>	<u>0</u>

The number of men employed was—

At the Company's Mount Lyell Mine	326
At the Company's South Tharsis Mine	30
At the Company's Royal Tharsis Mine	10
At the Company's Mt. Lyell Reserve Leases...	4
At the Company's Reduction Works	1288
On the Company's Railway	213
Total	<u>1871</u>

At the Iron Blow, or main workings, in addition to the work of ore-winning, 160 feet of driving, 120 feet cross-cutting, 20 feet rising, and 25 feet sinking were accomplished. The cross-cutting was chiefly confined to the No. 8 level, where high-grade ore has been cut. Bores, by means of the diamond-drill, are being put through the ore-body sectionally. On the reserve lease 34 feet of sinking, 13 feet of driving, 11 feet of rising, and 55 feet of cross-cutting have been done. Here, too, high-grade ore has been found.

NORTH MT. LYELL.—Exploratory work at the mine has comprised the sinking of winze in the green schist or hanging-wall country. It is now 50 feet deep. It is proposed to crosscut and prick the ore-body, and then to sink another 50 feet and open another level (No. 3). Large quantities of high-grade ore continue to be won from all opened portions of the mine. During the past quarter the realisations have been as under:—

	Tons.	Value.
Ore sent to the Crotty smelters, and shipped	1486	£15,600
Ditto.....	3535	15,900
Ore sold to the Mount Lyell Company	4927	17,200
Total.....	<u>9948</u>	<u>£75,663</u>

The number of men employed was—

At the mine.....	221
At smelters	304
On railway	90
On Comstock tramline	100
Total	<u>715</u>

MT. LYELL BLOCKS.—Work underground has proceeded on the course of the cupriferos clay body south-east of the shaft for a length of 240 feet by a width of 30 feet. Three thousand five hundred and thirty tons of crude ore treated gave the following:—127 tons concentrates, 30 tons slimes, 39 tons gossan, approximately valued at £4000. Forty-one men were employed.

LYELL THARSIS MINE.—Boring has been carried on under the supervision of Mr. J. E. Elliott, of the Gold Fields Diamond Drilling Company of West Australia. Over 1000 feet of country have been passed through. Six men have been employed.

TASMAN LYELL MINE.—In the section worked from the No. 1 level, North Mt. Lyell, 70 feet have been risen with variable prospects, and on the northern sections work has been confined to the adits on the schist and conglomerate contact. Thirty men have been employed.

TASMAN-COMSTOCK MINE.—Preparations are being made for stoping, to facilitate which a deeper or tramway adit has been driven 250 feet, finally to connect with the higher workings, and enable the produce of the mine to be expeditiously handled. Twenty-five men were employed.

TASMAN AND CROWN LYELL EXTENDED.—The main adit has been advanced to a total of 1020 feet. The face is in favourable schist country, and the first lode is expected to be cut during the ensuing quarter. Six men employed.

LYELL PEAKS.—Work has recently been resumed on this property. Total distance driven, 143 feet. Two men employed.

LYELL PIONEER CONSOLIDATED.—One hundred feet have been driven, and work was suspended on the 11th June. Two men employed.

GREAT MT. LYELL COPPER COMPANY, LIMITED.—Eighty-six feet have been driven, and a considerable quantity of costeaning done on these sections. Seven men have been employed, but the property is idle at present.

DARWIN AND JUKES FIELD.—At the King Jukes 225 feet have been driven in the lower tunnel; at this point a change of country occurred, accompanied by a heavy flow of water, which is believed to indicate an approaching improvement.

Work is about to commence on Section 3360, south of the South Mt. Jukes section, under the supervision of Mr. J. Bean. The prospects are said to be favourable. Prospectors have begun to go out again to the Jukes and Darwin fields, and it is to be hoped that they meet with success. It is reasonable to suppose that the copper ore, with which the country-rock is so widely impregnated, must exist in the form of payable deposits somewhere in this belt, and that these will eventually be discovered.

COAL.

The raisings this quarter have been 10,981½ tons, against 11,547 tons the previous quarter. The different collieries have contributed to the output as under:—

Colliery.	Tons raised.	Men employed.
Mount Nicholas	7117	61
Cornwall	1739	76
Jubilee	225	3
Cardiff	12	14
Spreyton	500	10
Dulverton	131½	4
Mount Cygnet	1039	10
York Plains	138	2
Glen Leith	80	2
Total.....	<u>10,981½</u>	<u>182</u>

A strike occurred at the Cornwall Colliery in April, which injuriously affected the output for the quarter, but work has been resumed recently, by the company engaging fresh hands, to some extent.

The Cardiff Mine is between three and four miles north of St. Marys, and a start has been made in winning coal from a 10 feet 6 inch seam of a very good quality. The coal is being taken down to the station by a traction engine for the present, but a tramway is contemplated in the near future. There are a few other strong seams on the property, to which no great attention has been paid yet. The transport facilities limit the output at present, but the deliveries which have been made in Launceston have given great satisfaction in point of quality. There is every probability of this becoming an important colliery.

The Coronation Syndicate owns a property 1¼ mile from Cullenswood Station, north of the line. Several seams exist on the property, and a tunnel is being driven on the No. 4, which is 4 feet 6 inches thick. A road and sledge track have been made to get the coal to the station. The trials made by consumers in Launceston have been satisfactory.

MT. REX.—Half a mile below the mine a seam of coal, 12 feet thick, of excellent quality, is being opened up at present by a small syndicate. Hanlith Station is the nearest outlet, and a tramway 6 to 8 miles in length will have to be constructed to connect with this.

PREOLENNA.—The outcrops of oil shale and coal in this parish have been examined by a New South Wales expert. The thickest seam is 20 inches, consisting of a high-grade oil shale, splint, and bituminous coal. The shale is well adapted for gas-making. The present idea of the owners is to thoroughly prospect the property and trace the seams towards the coast, as near the port as possible.

LATROBE.—Besides the Tasmanian Shale and Oil Company, a few other ventures have taken up land for working the dysodile shale near Latrobe, viz., the Struck Oil Company, the Mersey Syndicate, and Clements and Irvine; the two former have amalgamated. Apart from mining, the exploitation of the shale appears to be a purely industrial enterprise, dependent for its success, first upon the grade of the shale, and secondly upon the readiness with which its various products can be utilised. The tests applied by the parent company are stated to be satisfactory, and to warrant further trials on a larger scale.

LLANDAFF.—The No. 3 Government Bore was continued to a depth of 751 feet. It entered granite at 726 feet from the surface, and boring ceased on the 8th May. During the quarter coal was passed through at 540 feet, as follows:—

	<i>ft. in.</i>
Coal	0 8
Shale, with veins of coal	3 6
Coal	0 6
Band	0 4
Coal	1 0
Band	0 6
Coal	0 9

The sandstone and shale throughout the bore were very generally marked with coaly matter, but nothing payable was intersected. The lower half of the bore was in strata of the Permo-Carboniferous system. The bores have shown that the Permo-Carboniferous beds, in which coal seams are very poorly developed in this part of the State, succeed to the Mesozoic at no great depth below the surface of the flat country, and that the upper beds of the Mesozoic are those in which prospecting should be carried on for the discovery of powerful seams.

RECHERCHE BAY.—The Moss Glen Colliery Company has succeeded in picking up its seam on the dip.

The Government drill has been transferred from Llandaff to the Catamaran River, where a trial bore will first be put down on Crown land on the south side of the river, to test measures which look favourable for the occurrence of seams.

EDEN.—Two or three years ago (1900) a little coal was found here, and it has been known for several years that the measures near the Henty River contain fossil coal plants. The importance of a discovery of payable coal on the West Coast being realised, the Government decided this year to put down bores in the Permo-Carboniferous country between Eden and the Henty. The first bore was begun on the 15th March, between 15 and 16 miles from Strahan, on the north side of the railway line. It was carried to a depth of 456 feet 9 inches, through shales, mudstones, and grits, without intersecting any coal. Boring ceased on the 4th June, and the drill was taken to a fresh site, a little distance to the N.E.

GENERAL.

MOUNT RAMSAY.—A Devonport syndicate is proving a hornblende formation at the granite contact of Mt. Ramsay. Bismuth and gold are the metals sought. A tunnel is being driven to the contact across the hornblendic rock, which is charged with arsenical pyrites and carries bismuth.

CONCLUSION.

The mineral production of the State shows satisfactory figures, especially when the depressed market values of the various metals are taken into account. Despite a certain amount of relaxation of prospecting work, there is an increase this quarter over the preceding one in the values of gold, silver, and tin won by £59,688, and the following comparisons of the raisings and exports in the corresponding quarter of previous years will serve to indicate the progress of the industry.

	£
1898, during the quarter ending 30th June ..	222,434
1899 " " " " " " ..	313,347
1900 " " " " " " ..	405,349
1901 " " " " " " ..	465,110
1902 " " " " " " ..	456,779

Return showing the average number of men employed in or about the mines during the quarter ending 30th June, 1902:—

District.	European.	Chinese.	Total.
North and South	635	...	635
North-East	440	160	600
East	699	62	761
North-West	347	...	347
West	3464	...	3464
	5585	222	5807

Value of the mineral output per man employed, £78 13s. 2d.

The dividends and bonuses paid during the quarter were:—

	£	s.	d.
From Copper Mines	20,625	0	0
" Gold "	9200	0	0
" Tin "	17,850	0	0
" Silver "	2000	0	0
" Coal " .....	...	
Total.....	£49,675	0	0