

MININD1902-1

THE PROGRESS OF
THE MINERAL INDUSTRY

OF

TASMANIA,

FOR THE QUARTER ENDING 31ST MARCH, 1902.

COMPILED BY

W. H. TWELVETREES, ESQ.,

GOVERNMENT GEOLOGIST.

BY ORDER OF

THE HONOURABLE EDWARD MULCAHY,

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1902.



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*Launceston,
 20th May, 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 31st March, 1902, compared with the corresponding Quarter in 1901 and the previous Quarter ending 31st December, 1901:—

	During the Quarter ending 31st March, 1902.		During the Quarter ending 31st March, 1901.		During the Quarter ending 31st Dec., 1901.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Gold won	ozs. 16,412 ⁹⁶¹ *	£69,717 15s. 9d.	12,443	46,661	14,662½	54,984
Auriferous Quartz and Pyrites exported	tons 55½	1088	53	1255	36½	1110
Silver Ore exported	4205	39,059	2291	39,120	3766¼	39,636
Blister Copper exported	2402½	170,786†	2257 ³⁰	209,958	2503	213,987
Copper Ore exported	1326½	23,430	3650	50,049	950	16,096
Iron Ore exported	745	645	...	...	202	102
Coal raised	11,547	9815	3396	2716	12,587	10,699
Silver-lead Bullion exported	+1093½	36,031	208	7280	2071	65,771
Tin Ore exported	63½	1968	2½	121	41½	1896
Tin (metallic) exported	373½	41,832	435½	52,517	498	56,158
Asbestos exported .....	...	...	36½	37	...	...
Gold Quartz exported	5¾	50	15	79	11	125
Oxide Mineral exported .....	...	...	1	10	...	...
Gold Concentrates exported .....	...	...	...	...	2	45
Zinc Ore exported	183½	1425	...	...	...	...
Iron Pyrites exported .....	...	...	...	...	14½	116
Copper exported .....	...	...	...	...	100	8000
Copper Matte exported	50	1250	...	...	...	...
TOTAL VALUE .....	... £	397,091 15s. 9d.	... £	409,803	... £	468,725

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

† Value of gold contents deducted.

GOLD.

During the past quarter 7814 ozs. 13 dwts. of gold were obtained from quartz, 123 ounces from alluvial, 2139 ounces by means of the cyanide and chlorination processes, 5650 ounces from the blister copper from the Mount Lyell Mining and Railway Company, Limited, 364 ozs. 12 dwts. from the silver-lead bullion from the Tasmanian Smelting Company's Works, Zeehan, and 1718 ozs. 13 dwts. 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 31st March, 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	3518½	113	1197	...	...	...	4828½
Mathinna ...	2483	...	701	...	...	...	3184
Mt. Victoria } Warrentinna }	363 ³ / ₂₀	7	...	...	...	...	370 ³ / ₂₀
Lefroy	28	3	241	...	...	...	272
Lisle .....	...	...	...	...	...	...	...
Golconda ... }	...	...	...	...	...	...	...
Mangana ...	1422	...	...	...	...	...	1422
West Coast.	...	...	...	5650	364 ¹² / ₂₀	1718 ¹³ / ₂₀	7733½
TOTALS	7813 ¹³ / ₂₀	123	2139	5650	364 ¹² / ₂₀	1718 ¹³ / ₂₀	17,809 ¹³ / ₂₀

Total 17,809¹³/₂₀ crude ounces, being equal to 16,412·961 fine ounces, value £69,717 15s. 9d.

BEACONSFIELD.—This district gave employment during the quarter to 619 men, of whom 607 were employed by mining companies, and 12 were prospectors and tributors.

At the Tasmania Mine 65 heads of stamps have been running continuously, and the new battery is working well. During the quarter 3506 ozs. gold were obtained from quartz and 1197 ozs. by chemical treatment.

The Moonlight-cum-Wonder Company has extended its deep crosscut north into a change of country, and has temporarily suspended further driving. Prospecting work has been carried on near Brandy Creek and on the company's Olive Branch section, but without success so far.

The Duchess of York has discontinued sinking, and driven across the lode a little further on in the tunnel. The lode formation here was 51 feet wide, and of a pyritic quartzose nature. Free gold up to 10 dwts. was obtained by washing. Some of the pyrites is now

being locally treated, and a parcel of 10 tons is being got ready for treatment across the Straits. The association has also sunk a prospecting shaft, in which a small vein intersected at 30 feet from the surface gave encouraging indications.

The Salisbury Gold Mining Company has commenced work, has sunk a shaft, and is now driving in ground somewhat similar to that of the Duchess of York.

LEFROY.—Seventy men have been working on this field. Forty-one of these were in the service of the New Pinafore Company, the remainder prospecting and tributing.

At the New Pinafore the west drive on the Pinafore south reef at the 1200-foot level has been extended to 288 feet from crosscut; the reef is wide, and gives occasional prospects. The eastern drive has now reached 183 feet from crosscut, is 3 feet wide, and carries gold. The manager, in his half-yearly report, speaks hopefully.

Johns Bros.' Cyanide Syndicate produced 69 ozs. of bullion.

LISLE.—The Dredging Company's plant has been idle for a few months from want of water, but better progress is looked for during the winter months, and the proprietors believe that, with improved arrangements, sufficient water exists for continuous work through the summer.

GOLCONDA.—At the Denison poppet-legs are being put up and preparations made to sink and drive to intersect reef. At the Panama a shaft is being sunk. The Queenslander Mine has sent away a bulk parcel of stone to South Australia for treatment.

WARRENTINNA.—Little is being done here beyond prospecting work.

MOUNT VICTORIA.—Work in a small way continues, and gives encouraging results. Small parties of working miners conduct the operations, but nothing of importance can result without the introduction of capital. A tribute party of four crushed 25 tons of quartz from the Mercury claim for 125 ozs. gold. At the Long Struggle a party of seven crushed 85 tons of stone at their 5-head battery for 169 ozs. gold. At the Central Ringarooma 70 tons of quartz were crushed for 40 ozs. gold.

MATHINNA.—At the end of the quarter the New Golden Gate main shaft was down 1588 feet from surface, and in favourable country. At the 1400-foot level the stone is poor. The manager expects this to improve going south, but anticipates that the main payable portion of this reef will be found lower down, and that the output will be increased by the two deeper levels which are about to be opened. A very large reef has been driven on at the 1200-foot level which has reached 443 feet from shaft; the stone is low-grade. Large

bodies of stone are reported from all the stopes, but not of the best quality.

During the quarter the report has been issued for the six months ending 31st January, showing that during that period 9600 tons of quartz were crushed, from which 6033 ozs. of retorted gold were won at the battery, valued at £21,530 6s. 3d. The concentrating tables gave 100 tons of pyrites, containing 658 ozs. of gold, valued at £2572 12s. 4d. In addition to the above, 17,668 tons of tailings, together with 785 tons of slimes, have been cyanided, producing 1214 ozs. gold, valued at £4697 19s. 10d., making a total revenue of £28,800 18s. 5d. For the same period the cost of raising and crushing quartz, treating concentrates, repairs and renewals of plant, progressive and surface works, and all other working and managing expenses, amounted to £14,016 13s. 6d., or £1 9s. 2d. per ton of quartz crushed. This is exclusive of royalty and stores and labour at cyanide plant, which amount to £2863 12s. 5d., or 3s. 1½d. per ton of tailings treated. The total quantity of quartz obtained from the mine to 31st January is 192,456 tons, yielding 182,002 ozs. gold, an average of 18 dwts. 22 grs. per ton, and which has realised £672,455 7s. 5d. The total amount paid in dividends is £312,000, or £9 15s. per share.

At the Volunteer Mine the reef which was cut at the 100-foot level is 10 feet wide. It has been driven on 50 feet north and 100 feet south. Fifty feet above this an intermediate level was driven 80 feet north and south on a strong body of stone. Two rises N. and S. have been put up, connecting the 100-foot level with the intermediate, and have exposed by measurement 4000 tons of stone. A battery has been erected, and a cyanide plant is in course of erection. A new main shaft further west is to be sunk.

At the East Volunteer, owing to want of funds, work has been abandoned at the 400-foot level. The ground has been let on tribute. At a depth of 40 feet the tributors are raising a crushing from an east and west lode 14 inches in width.

At the New Golden King the lode has been met and driven on north, the stone varying from a few inches to 4 or 5 feet in width. Wherever it makes the stone is payable. The south country is broken, and a rise has been put up to old prospectors' workings, disclosing 6 inches of stone considerably east of the bottom level workings. Twenty-two men are employed at this mine.

The Golden Stairs is still prospecting a line carrying gold.

The Havelock employs 23 men, and has produced 83¾ ozs. gold during the quarter from 140 tons quartz. The mine is rather more than paying its way with the gold won. The reef varies from 1 foot to 18 inches in width.

The Revenue Prospecting Association has obtained 23 ozs. 11 dwts. from a trial treatment of 18 tons. Additional capital has been provided to put in a tunnel at a lower level and to construct a battery. The reef is 4 to 5 feet wide, and the owners estimate that it is worth 15 dwts. per ton.

Mr. Goodall, sen., is prospecting 7 or 8 miles south of Mathinna, and a lode is reported.

The Malahide Prospecting Association has been prospecting, but is idle at present.

Altogether, on the Mathinna field, 325 men have been employed, and a good deal of prospecting is going on, but the introduction of English capital is awaited to give a greater stimulus to the field.

MANGANA.—The Mangana Gold Reefs, Limited, has continued prospecting, but unsuccessfully. The Golden Entrance is on the usual quality of stone, over 2 ozs. to the ton. During the quarter 81 tons of stone were treated, returning 140 ozs. gold. The total gold won amounts to 1472 ozs., valued at £5888, obtained from 394 tons stone.

The Union Jack has had a small crushing of 20 tons, from which 10 ozs. gold were obtained.

The Salmon Gold Estates obtained 12 ozs. from 82 tons of stone, but work has been mostly confined to sinking main shaft on the western section.

The Mangana field this quarter has given employment to 54 men.

FINGAL.—There is no change to report at the Fingal Reefs. The small lode continues to carry payable stone. Another formation at the top of the spur is being prospected.

The Hit or Miss has improved prospects, having found gold at 10 feet from surface in 7 to 8 dwts. stone.

At Abbotsford Creek two adits are being put in to cut three lodes at a depth of 130 feet. So far the prospects are variable, and on the whole the grade is poor.

NORTH-WEST COAST.—The Whyte River Company has been dredging intermittently in different places, without much success.

WEST COAST.—The Queen River Dredging Company has resumed operations, but no results are reported. The King River tributors continue to sluice the hill, and their face is now attaining large dimensions, but no clean-up has been attempted this quarter.

TIN.

The output of tin ore at Waratah during the three months has been 323 tons, contributed by the following mines:—

	Tons.	Men employed.
Mount Bischoff	318	226
Waratah Alluvial	3	4
Stanhope Alluvial	2	4
	<hr/>	<hr/>
	323	234
	<hr/>	<hr/>

Mt. Rex Mine.—The mine is still idle, the difficulty of finding a satisfactory market for the complex ore not being yet overcome.

Briseis Mine.—Thirty-five tons of tin ore were raised during the quarter, and 60 hands employed at the mine. The new water-race is now finished, and at the trial the flow and pressure were found satisfactory.

The New Brothers' Home No. 1 Company employed 47 men at its mine, principally in stripping the overburden. The manager reports that 50,000 cubic yards of gravel are now stripped.

The Ringarooma Company continues removing the heavy overburden with the aid of its powerful pumping-plant, which supplies the water for nozzles very satisfactorily.

On the Echo claim at Moorina six miners raised 4 tons 4 cwts. tin ore, and on the Weld claim in the same locality 3 tons of tin ore were obtained by nine men.

At Bradshaw's Creek the Pioneer Tin Mining Company raised 62½ tons ore during the quarter with 44 men. This quantity represents the work of two months, one month being lost through the removal of punt and plant to a new site on the mine. This is the first time that the lower drifts could be worked, from which 40 tons were obtained the first month's run. The mine has distributed £5000 in dividends, and the outlook for a long time ahead is very good.

There is some activity in the Boobyalla district. At the Boobyalla Proprietary the engine and boiler have been placed in position, and the water race finished. At the Wilberforce Pump No. 1 claim, on the west terrace of the Boobyalla River, about 1½ miles from the Boobyalla Proprietary, several prospecting shafts have been sunk, and show tin-bearing wash. The pumping plant is being conveyed to the ground. The Derby and Moorina Mine at Boobyalla has constructed a water-race, and sluicing operations will shortly begin.

At Branhholm the Arba Company has completed the removal of a portion of the mining plant to a new site on the mine, and expects soon to be in a position to carry on operations on a more extended scale than heretofore. At Ruby Flat the Chinese party of 16 raised 6 tons of tin ore.

At Gladstone, on Galloway's Scotia claim, 15 men were employed, and raised 9 tons 17 cwts. ore during the quarter. The Government bores have continued unsuccessful in striking tin north of the Ringarooma. The gravels appear to have been re-distributed by marine action, and the tin too widely scattered for the deposits of drift to be payable, except on the terraces which cling to the base of Mt. Cameron, or in the leads which proceed directly from the mountain.

At the Lottah Mines the output has been as follows:—

	tons	cwts.	Men employed.
Anchor.....	34	0	98
Liberator.....	0	10	16
Australian	4	7	28
Crystal Hill.....	1	2	8
Blue Tier.....	2	8	Miners' claims
	<hr/>	<hr/>	
	42	7	
	<hr/>	<hr/>	

The usual shortage of water in the autumn has affected the raisings. At Weldborough the mines have raised between 6 and 7 tons during the quarter. At the Cascade River 2 tons 18 cwts. were raised.

Near St. Helens the Royal Ruby is bringing water to its claims. On this ground, and at the Ruby King, Thureau's Lead, Patterson Bros., Russell Bros., and a few other claims, work has been proceeding, and about $8\frac{1}{2}$ tons tin ore raised during the quarter. At the Stony Ford work in the shafts has been discontinued.

At the South Esk Mine, near Avoca, a line of holes has been sunk eastwards across the flat, which has never been prospected. The shallow ground at the head of the flat has yielded several tons of ore, but the deep ground has not been proved.

WEST COAST.—During the quarter 12 tons tin ore were raised by 4 men at Mayne's Show, Mt. Agnew. Interest has been revived in the South Heemskirk tin field by this discovery of ore at Mayne's. A formation was found on the old Orient ground, carrying rich tin ore. Out of a space 12 feet square about £1500 worth of ore was taken. From a 14-lbs. sample of dirt taken from the grass-roots 1 lb. 10 ozs. tin ore was washed, assaying 74 per cent., and from 69 lbs. clay 5 lbs. 4 ozs. of 74 per cent. tin ore was taken. Large lumps of cement, carrying half their weight in tin ore, have been brought to town as specimens. The Assistant Government Geologist has been instructed to visit and report upon the field.

SILVER.

WEST COAST.—The output of ore during the quarter from the principal mines in the Zeehan and Dundas division has been as follows:—

		Tons.	Value. £
Zeehan-Montana	galena.....	1080	11,282
Silver King	"	993	11,194
Silver Queen	"	126	1974
"	stannite	$7\frac{1}{4}$	89
Oonah	"	165	2400
"	galena.....	14	353
Colonel North	"	105	675
Zeehan-Bell	"	136	1928
New Mt. Zeehan	"	29	121
Silver Queen Extended	"	13	142
British Zeehan	"	806	9149
South Comstock	zinc blende.....	295	590
Comstock	galena.....	7	97
Hercules	gossan ore	2511	6485
"	zinc-lead sulphide .	728	2087
Comet	galena.....	460	2090
"	gossan	793	535

At the Oonah Mine the tributors have, on the whole, been successful. During the six months to the end of March they raised 61 tons 2 cwt. 16 lbs. galena and gossan ore, which realised £702 5s. 7d., and 111 tons 11 cwt. 1 qr. stannite, which was sold for £925 4s. 7d. The company is endeavouring to make better arrangements for the disposal of the stannite, which is now being worked from three levels. Forty-two men have been employed.

At the Colonel North the Silver Foam Syndicate has cut the Spray lode 416 feet from mouth of tunnel, and has sunk 52 feet on it. Two feet of good ore are reported underfoot. Ventilating rise to surface is being put up before sinking further. This is regarded as a promising development.

The Silver Queen half-yearly report, published during the quarter, shows that up to the end of December last the total quantity of ore obtained from the mine since the company was formed was 23,442 tons, valued at £218,856. Forty-two tributors have been at work on the property this quarter.

The New Mt. Zeehan is being worked by tributors only. Six parties are at work, but the returns are small. Altogether about 650 men are employed on the Zeehan field proper.

At the South Comstock the main adit has been continued 175 feet through graphitic slate. A crosscut is now being driven from this. The western crosscut has been driven 80 feet through iron pyrites carrying about 30 per cent. zinc. Stopping has been done from the underlie shaft, some good ore being recovered.

The Comet is showing improving prospects, good bodies of ore being disclosed.

Mt. Read.—The Hercules Company shipped 2511 tons of gossan ore during the quarter to the Smelting Company of Australia, Limited, Dapto, N.S.W. This quantity contained 1341 ozs. gold, 35,409 ozs. silver, 118 tons lead, and $4\frac{1}{4}$ tons copper, and is valued at £6485. Consignments of zinc-lead sulphide ore were also made to the Tasmanian Smelting Company, Zeehan, amounting to 728 tons, containing 346 ozs. gold, 17,300 ozs. silver, 70 tons lead, 4 tons copper, and 175 tons zinc, valued at £2087. The mine gives employment to 103 men. Alterations and repairs in progress upon the haulage tramway have lessened the output of sulphidic ore during the last two months of the quarter. All output is likely to cease for May, when the new tramway machinery will be installed. Exploratory work has been re-commenced in the lowest level (No. 5), where a winze is being sunk upon copper ore. It is intended to follow this ore down, and, if the results warrant it, a lower tunnel will eventually be driven. The company has purchased the lease of the East Hercules Mine, where the copper ore is of good quality, and free from zinc.

At Dunne's Mt. Read the driving of the main tunnel at the 300-foot level has been continued. A total length of 230 feet was driven

during the year ending 28th February, a considerable portion of which was through mineralised country.

Tasmanian Smelting Company.—The following quantities of ore were received at these works during the quarter:—3861·859 tons net weight, containing 1469·203 tons lead, 145,552·92 ozs. silver, and 364·623 ozs. gold.

NORTH-WESTERN DISTRICT.—The total quantity of silver-lead ore consigned by the Magnet Company to the Tasmanian Smelting Company, Zeehan, to 31st March, is 834 tons, which quantity has been raised to 1386 tons to the end of April. About 130 tons are now being sent weekly to Zeehan without difficulty. The installation of crushing and drying plant, with extra storage-bins, is almost complete. New developments have taken place in the south end of the mine, where rich sulphide ore has been disclosed. At the north end the lode is being stripped at surface, with a view to work by open cut to the 50-foot level. The lode here is over 20 feet wide, and of satisfactory assay value.

At the Heazlewood 7 men are working at Bell's Reward Mine, where they are breaking sedimentary rock charged with chloride and chlorobromide of silver. A few parcels have been sold, one of which (8 tons) assayed 104 ozs. silver per ton.

At the old Godkin Mine a cut 4 feet by 4 feet has been boxed in from Whyte River for about 20 chains, which gives about 22 feet of cut at mouth of adit. At 465 feet from this point the lode was cut, of a very sandy nature, and poor-looking, but assays are stated to have reached 144 ozs. silver. Now driving on course of lode towards the North Godkin shaft, distant from mouth of adit 565 feet. The intention is to continue it further 40 chains, to drain the north workings.

Mt. Hope (formerly Mt. Stewart) is at work again, the adit being continued, and ore discoveries are reported.

At the Whyte River the Washington Hay tributors have raised 3 tons of rich silver-lead ore, and intend to sink shaft another 25 feet, total 45 feet.

The general progress of the North Mt. Farrell Mine has been retarded owing to want of tramway communication, but the company is considering now the construction of a wooden tram, which it is thought will serve the needs of the mine. The stopes are looking well. At the end of the quarter 8658 bags ore were stored at the mine.

At the Mt. Farrell Mine a new crosscut tunnel is to be put in 2 chains south of and parallel with the south boundary of the North Farrell property, to intersect that lode.

The Devon Mine raised 17 tons silver-lead ore during the quarter.

COPPER.

Mount Lyell Mine.—At the Reduction Works the ore treated during the quarter ending 31st March has been as under:—

	Dry Weight.			
	Tons.	cwts.	qrs.	lbs.
Ore from Mt. Lyell Mine.....	71,110	15	3	1
Purchased ores	11,679	13	3	15
Metal-bearing fluxes from South Tharsis Mine	6299	0	1	15
Metal-bearing fluxes from Royal Tharsis Mine	1403	7	0	17
Total.....	90,492	17	0	20

and the metal produced was—

Blister copper, 2556 tons, containing—		£	s.	d.
Copper, 2529 tons, valued at	136,566	0	0	
Silver, fine, 182,487 ozs., valued at.....	21,290	3	0	
Gold, fine, 5650 ozs., valued at	24,012	10	0	
Total.....	£181,868	13	0	

The number of men employed was—

At the Company's Mount Lyell Mine	344
At the Company's South Tharsis Mine	30
At the Company's Royal Tharsis Mine	20
At the Company's Mt. Lyell Reserve Leases, Block 4691-91m	2
At the Company's Reduction Works	1300
On the Company's Railway	220
Total	1916

At the mine extensions of the crosscuts on either side of the main shaft from No. 8 level have been continued, in addition to which a branch drive to intersect a winze on the ore from No. 7 is nearly finished, when produce for the smelters will be obtainable from this depth. Contouring the upper levels continues, in addition to stoping over Nos. 7, 6, and 5 levels. In the open cuts operations are chiefly confined to the ore-benches, the portion hugging the hematite, or footwall, still producing the best quality ore. The South Tharsis continues to supply its quota of flux, and satisfactory developments have taken place on the recently-acquired section 4691.

North Mt. Lyell.—Exploratory work is still in abeyance. Ore-winning from Nos. 1 and 2 levels and the open cuts has proceeded. The ore disposed of during the quarter has been—

	Tons.	Net value.
Sold to the Mount Lyell Company ...	11,873	£47,492
Shipped at Pillinger.....	2683	28,171
Total		<u>£75,663</u>

At the end of the quarter the buildings and plant at Crotty consisted of the following:—Smelting works, 210 feet by 75 feet, with electric-crane conveying ore and fluxes to the furnaces and matte to the converters, and four reverberatory furnaces and converting plant; lofty sampling-mill, 72 feet by 69 feet, with automatic plant; boiler-house, 56 feet by 41 feet, with three Stirling boilers, 250 h.p. each; power station, 100 feet by 60 feet, containing twin tandem compound condensing Corliss engines, aggregating 600 h.p., to drive 200 K.W. electric generators, for distributing power over the whole works; also one Cross compound steam blowing engine, for furnishing blast for the converters, and an auxiliary lighting dynamo of 30 K.W.; concentrator building, 284 feet by 50 feet, for dressing low-grade silicious ores; machine, blacksmith's and carpenter's shops, assay and general offices, store, and dwelling-houses.

The number of men employed, including those on the Comstock tramway, was 590.

Mt. Lyell Blocks.—Work is proceeding at the 450-foot level N.W. and S.E. of the shaft. The clayey ground for a length of 200 feet by 30 feet in width carries native copper; 583 tons of this material has been treated by two puddling machines and blanket-tables for 36 tons 16 cwts. of concentrates, containing 18 tons of copper. Thirty men have been employed.

Lyell Tharsis Mine.—Work has been irregular during the quarter. The diamond-drill is now being employed. The number of hands has averaged 13.

Lyell Comstock Mine.—Prospecting work continues, and the construction of the branch line to Linda, by which ore will be conveyed to the North Lyell Smelters at Crotty; 24 men have been employed.

Tasman Lyell Mine.—The drive from the North Lyell No. 1 adit has been extended north to 871 feet, when conglomerate country was met with, and the drive suspended. At a point 740 feet from the North Mt. Lyell workings a vein of ore was cut, which opened out favourably, and produced 250 tons of payable ore. At the north end, adjoining the Comstock, two adits are being driven, and some surface-trenching is proceeding; 23 men are employed.

Tasman and Crown Lyell Extended.—The main prospecting adit has been advanced 153 feet, and totals 850 feet, leaving about 250 feet to meet the lode on its underlie. Good work is being done with 6 miners.

Mt. Lyell Tasman Comstock.—Eleven feet of sinking, making a total depth of 33 feet, has been done during the quarter, but work was suspended on 1st March.

Great Mt. Lyell Copper Company, Limited.—Work at the whim shaft in Conglomerate Creek has been suspended, and operations directed to driving another prospecting adit in section 1674. Trenching is being carried on on sections 789 and 682; 11 men are employed.

Darwin and Jukes Field.—At the King Jukes a tunnel is being driven to prove the run of copper-bearing rock which was opened upon higher up the hill. With this exception, the numerous shows on Mts. Jukes and Darwin are at a standstill.

COAL.

The output this quarter has been 11,547 tons, against 12,587 tons the previous quarter. The slight decrease has been due to a strike at the Mt. Nicholas Colliery. The quantities raised at the various mines throughout the State during the three months ending 31st March have been as under:—

Colliery.	Tons raised.	Men employed.
Cornwall	7825	75
Mount Nicholas	2356	46
Mount Cygnet	770	9
Spreyton	372	2
York Plains	114	3
Glen Leith	60	2
Dulverton	50	5
Total.....	<u>11,547</u>	<u>142</u>

St. Mary's Coal Syndicate.—Work has been started on a large seam north of St. Marys.

Mt. Rex.—An outcrop of apparently good coal has been found a little below the property of the Mt. Rex Tin Mining Company.

Tasmanian Shale and Oil Company.—Professor Black, from New Zealand, has been exhaustively testing the Latrobe dysodile shale on the spot, and the tests are reported to have shown a large proportion of valuable lubricating oil. The shale seams vary in thickness from 6 to 9 feet, and can be worked above river-level. Boring has been started, but a temporary suspension of the work has occurred, in consequence of the drilling-plant not being complete.

Moss Glen Colliery Company, on Recherche Bay, is proving one of its seams, which crops out at 190 feet above sea-level, and in a good position for sending the output down to the coast. The seam has 4 feet 6 inches of good coal, separated by a 5-inch clay band from a foot of coal not equal to the other in quality. The assay is 54 per cent. fixed carbon, 26·2 per cent. gas and moisture, 19·8 per cent. ash. A hand-drill is being used to search for the coal on its dip, but up to the present the search has not been successful.

Catamaran Coal.—The owners have decided to use the diamond-drill, in order to test the extension of the seam of good coal passed through in the shaft. A favourable site has also been selected on the south side of the Catamaran River for a Government bore to be put down in settled sandstone country belonging to the upper coal measure series. The position is convenient for the drill, being alongside a working tramway, 2 to 3 miles from the mouth of the Catamaran River.

Llandaff.—The No. 2 Government bore was continued in sandstone, shale, and conglomerate, to the 24th January, when it left off in granitic rock.

Bore No. 3 was started 70 chains north-west of No. 2, and at a height of 380 feet above sea-level, 330 feet above No. 2. It attained a depth of 269 feet on the 31st March. The coal intersected to that date was—

		ft. in.
At 56 ft.	Shale with small veins of coal ...	6 0
At 72 ft.	" " " " " "	9 0
At 81 ft.	Coal and bands	0 8
At 153 ft. 4 ins. ..	Coal	0 8
At 163 ft. 6 ins. ..	Shale with small veins of coal ...	34 6
At 200 ft.	Sandstone with coal markings...	27 0
At 227 ft.	Shale with small veins of coal ...	4 0
At 235 ft. 2 ins. ..	Coal and bands	1 3
At 236 ft. 5 ins. ..	Sandstone with coal markings...	32 7

The boring work done at Llandaff would seem to show either that considerable faulting has taken place or, which is very probable, that the seams are inconstant. It shows also conclusively that strong seams are not developed in the Permo-Carboniferous strata on the East Coast. It must be borne in mind, in considering the prospects of Llandaff as a coal field, that the most powerful seams crop out at a height considerably above the highest bore-hole. Whatever work is done at this locality will, according to the boring results, have to be undertaken in the high ranges.

Return showing the average number of men employed in or about the mines during the quarter ending 31st March, 1902:—

District.	European.	Chinese.	Total.
North and South	756	...	756
North-East	487	170	657
East	727	90	817
North-West	334	...	334
West	3487	...	3487
	5791	260	6051

Value of the mineral output per man employed, £65 12s. 5½d.

The dividends and bonuses paid during the quarter were:—

		£	s.	d.
From Copper Mines	Dividend.	34,375	0	0
	Bonus	20,625	0	0
" Gold	"	6200	0	0
" Tin	"	13,500	0	0
" Silver	"	5737	12	0
" Coal	" .....	...	
Total.....		£80,437	12	0