

THE PROGRESS OF
THE MINERAL INDUSTRY
OF
TASMANIA,

FOR THE QUARTER ENDING 30TH JUNE, 1901.

COMPILED BY

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BY ORDER OF

THE HONOURABLE EDWARD MULCAHY,

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FOR THE QUARTER ENDING 30TH JUNE, 1901.

Launceston, 10th August, 1901.

THE following Table shows, so far as can be ascertained, the quantities and values of Metals and Minerals raised and exported during the Quarter ending 30th June, 1901, compared with the corresponding Quarter in 1900, and the previous Quarter ending 31st March, 1901 :—

	During the Quarter ending 30th June, 1901.		During the Quarter ending 30th June, 1900.		During the Quarter ending 31st Mar., 1901.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		£		£		£
Gold won ozs.	14,294	53,602	14,737	55,264	12,443	46,661
Auriferous Quartz and pyrites exported tons	33	653	28½	279	53	1255
Silver Ore exported..... "	4290½	47,953	2284½	31,845	2291	39,120
Blister Copper exported.... "	2402½	226,414	2306½	209,954	2257½	209,958
Copper Ore exported "	2983	40,316	24½	230	3650	50,049
Iron Ore exported "	210	115	1447	1227	...	...
Coal raised "	12,750	10,837	12,484	10,611	3396	2716
Silver-lead Bullion exported "	1069½	37,140	1069½	33,162	208	7280
Tin Ore exported..... "	5½	27	1	30	2½	121
Lead exported..... "	...	...	½	8	...	...
Tin (metallic) exported "	386½	47,815	437½	60,087	435	52,517
Wolfram Ore exported .... "	...	...	11½	382	...	...
Asbestos exported "	10	8	33	29	36½	37
Gold Quartz exported "	51	230	...	...	15	79
Oxide Mineral exported..... "	...	...	...	...	1	10
Gold Tailings exported .... "	...	...	1	10	...	...
Zinc-lead exported ..... "	...	...	¾	15	...	...
Zinc Ore exported ..... "	...	...	18	216	...	...
TOTAL VALUE .....	... £	465,110	... £	405,349	... £	409,803

GOLD.

During the past quarter 10,403 ounces of gold were obtained from quartz, 193 ounces from alluvial, and 3698 ounces by means of the cyanide and chlorination processes, valued at £53,602.

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 1900 :—

	Gold obtained during the Quarter ending 30th June, 1901.				Totals corresponding Quarter, 1900.	Totals for Quarter ending 31 Mar., 1901.
	Quartz.	Alluvial.	Cyanide & Chlorination.	TOTAL.		
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Beaconsfield	6051	3	2665	8719	8264	8509
Mathinna	3489	...	820	4309	5537	3297
Mount Victoria, and Warrentinna	40	40	...	80	104	116
Lefroy	154	...	213	367	604	251
Lisle and Golconda	75	150	...	225	150	100
Mangana	574	...	...	574	...	148
West Coast, Middlesex, &c.	20	...	...	20	78	22
TOTALS	10,403	193	3698	14,294	...	...
TOTALS for corresponding Quarter, 1900	9309	269	5159	...	14,737	...
TOTALS for Quarter ending 31st March, 1901...	8572	202	3669	...	...	12,443

BEACONSFIELD.—At the Tasmania Mine during the quarter ending 30th June, 6240 tons of quartz were crushed for 6051 ounces gold; 2665 ozs. 8 dwts. 12 grs. gold were obtained by chlorine, making a total of 8717 ozs. 5 dwts. 12 grs.; value, £33,134 13s. 6d. Since the formation of the company 434,975 tons of quartz have been crushed, yielding (inclusive of gold obtained by chlorination) 520,613 ozs. 10 dwts. 17 grs. gold; value, £1,907,411 11s. 2d. The dividends distributed from the commencement amount to £745,071 15s.

At the Moonlight-cum-Wonder Mine the shaft was down 782 feet at the end of June, and an application has been made to the Government for a further grant of £500 to assist in prospecting at that level. Work done at the 613 feet level has not shown the lode to be payable. The east drive off the north

crosscut at that level was driven 102 feet on a lode channel from 3 to 6 feet wide, with quartz varying from 6 inches to 3 feet, and was then stopped. A crosscut south of shaft was started at the beginning of March, and has been driven 167 feet across conglomerate, pug, quartz, and pyrites, and graphite-like slate. A formation met with in this crosscut was prospected by an east drive for 50 feet, but with no result. At 646 feet the reef was again cut in the shaft 3 feet wide, with 6 to 9 inches quartz on the footwall, showing fine gold by mortar test. At 654 feet the underlay again took the lode out of the shaft. Sets have been put in position at 750 feet, ready for opening out when required. Sinking has been resumed and continued to 782 feet from surface.

The North Tasmania Mine has been let on tribute for two years.

At the Tasmania United it is intended to intersect the main lode by driving south from end of the present level.

LEFROY.—At the 1200-foot level of the New Pinafore the reef is still hoped to be cut shortly. The White Pinafore has closed down, but several prospecting parties are working on the Lefroy field. The old Clansmen claim has had a small crushing, with fair results. A small reef is being worked near the old Perpetual. The Wooden Prospecting Association has cut the reef at a depth of 20 feet, with fair prospects. At the old Industry, Laird and Sons have been breaking very payable stone from a small lode. Adjoining this on the west the Tregurtha Prospecting Association is preparing for development of the claim. Weetman and Crockford have prospected at Specimen Hill. A. D. White has been working at the Good Chum. T. Cannon's ground, north of the old Chum's section, is being prospected. The old Monkland ground has been taken up by Geddes and party. From the above it will be seen that though the larger mines have for some time had a discouraging history, a good deal of activity prevails on the small claims.

LISLE.—About 40 men still get a living from this goldfield.

GOLCONDA.—The Enterprise has been let on a three years' tribute to a party who propose sinking a main shaft 100 feet and erecting a 5-head battery.

The Wyengatta tributors have excellent quality stone. Jarman and others have also been getting payable stone.

WARRENTINNA.—The Derby is raising stone with fair gold. On Bayley's leases an iron tramroad is being laid, and preparations made for the erection of machinery. At Bradshaw's Reef, Gellibrand's Freehold, a shaft has been sunk 50 feet on stone carrying fair gold. A shoot of stone has been driven on north with good average prospects.

MOUNT VICTORIA.—At Alberton the tributors at the New Mercury have been getting good gold. At the Caxton a wheel and battery have been put up, and some stone obtained.

MATHINNA.—At the New Golden Gate during the quarter to 30th June, the crosscuts east and west of the shaft at the 1400 feet level were driven. The east crosscut proved the reef to be 26 feet in width, of clean, hard stone. No. 1 west reef has been risen upon, and proved to be highly payable for about 60 feet high. The north drive on this reef has shown it to be worth from 5 to 14 dwts. per ton, and from 5 to 12 feet wide. The main shaft will be sunk another 200 feet; the appearance of the deep levels is very encouraging for further sinking, and throughout the mine there are large quantities of payable stone in sight.

During the past half-year three Wilfley concentrating tables have been added to the plant, and the lease of the adjoining section, known as the "South Gate," with the buildings and plant thereon, has been acquired by purchase.

The Tasmanian New Golden Gate Extended resumed work, with every promise of continuing; but work has been suspended owing to instructions from London.

The City of Hobart has, to date, expended about £1000 on their property.

On the Volunteer property there are five lodes outcropping, three of which are east and west, the other two nearly north and south. Two of the east and west lodes have been worked down to 60 feet, and have given battery returns of a few dwts. to 3 ozs. 15 dwts. gold per ton; the third, which is called the main lode, has been tributed down to 150 feet, with highly payable results. One of the north and south lodes exposed by trenching is four feet wide at surface, and carries 5 dwts. gold per ton. It is assumed as certain that the Old Boys north and south lode passes through the property. The company's work has been mostly restricted to the main lode, and a large quantity of stone, worth from 12 to 20 dwts. gold has been proved above the No. 1 or 150 feet level. At this level gold-bearing stone was met with in disturbed country, and it is believed that this belongs to a large N. and S. lode. The main shaft is 360 feet deep, and a

crosscut level is now being opened out from it at 250 feet. Eighty feet of driving will intersect the N. and S. line of lode, and another 100 feet the main reef. During the half-year to 30th June, 52 tons of stone have been crushed and 30 ozs gold won, leaving the blanket sand for future treatment. The assay value of the sand is 6 ozs. 5 dwts. gold per ton.

The Old Boys section, acquired by the East Volunteer, has, for financial reasons, not yet started work. At Hickson's, operations have been confined to the ground above No. 1 level. The battery returns have averaged 1 oz.

The New Golden King, situate four miles north-east of the New Golden Gate, is in altogether new country. The shaft is down 30 to 40 feet, and the lode stripped along surface for a couple of chains. A new make of good stone has come in on the footwall in shaft. Lode-channel 3 feet wide. A trial crushing of seven tons has given $41\frac{1}{2}$ ozs. gold. Three miles beyond the King is the Golden Queen, the main shaft of which is down 42 feet, with 9 to 12 inches of quartz. The stone is of good quality. Samples of stone from the Duke of Cornwall shaft have been received, and, on being crushed, gave good prospects of free gold. O'Brien, Davis, and others have raised small crushings from various parts of the field with payable results.

The Miami (Salmon Gold Syndicate, Limited) has kept the battery running on 12 dwts. stone. The last return, 114 ozs. from 207 tons, was the lowest. Alec Loane, prospecting between Mangana and the old Twilight, has got gold-bearing stone.

MANGANA.—The Mangana Gold Reefs are crosscutting east and west at the 600-foot level. The country is favourable for meeting ore-bodies. The Golden Entrance is driving a main adit and sinking two prospecting shafts, the deeper over 100 feet. The lowest quality stone sent away has been 4 ozs.

FINGAL.—The Fingal Reefs are driving a level north on the No. 1 lode, carrying stone 21 feet wide, so far, averaging 8 dwts. No. 2 lode is 4 to 6 inches wide, and the depth reached is 23 feet. The whole of the stone from this lode is being bagged.

BEN LOMOND.—The Bright Prospect Company is just about to start work on two reward claims in the Ben Lomond district, situate on the South Esk River, at a point equidistant from Fingal and Avoca. Two lodes have been discovered in a new zone of slate country, and can be worked by adits. No. 1

lode has been traced three chains on surface, with an average width of 5 feet 6 inches. Two prospecting shafts, 16 feet deep, have been sunk on it 40 feet apart and show payable stone. By driving an adit 150 feet this lode can be cut with 100 feet of backs. No. 2 is a parallel lode, and requires further prospecting.

NORTH-WEST COAST.—The White River Company's dredge has got down to Terry's Flat, below the junction of the Whyte and Rocky Rivers, and is now working on fairly deep wash on a slate bottom. There is no clean-up to report yet, but both gold and tin are reported as being saved. The dredge-master reports that the dredge is cutting up the bottom easily, and that the logs are being removed without much trouble. This plant has cost the company £5000. It was wholly made in Launceston (except the engine) by Messrs. Bogle & Clark. The engine is a 12-h.p. Robey. The plant is on the ladder or bucket system, fitted with 25 buckets and three grabs. The capacity is $3\frac{1}{2}$ cubic feet per bucket, and the working-rate 12 to 14 buckets per minute, equivalent to 100 tons per hour for 12 buckets, when worked at 14 buckets per minute.

WEST COAST.—At the King Golden Gate and at Harris' Reward mining work is suspended, awaiting the construction of a road whereby machinery may be taken to the property.

The King River P.A. has completed a race $1\frac{1}{2}$ mile long, and capable of carrying six sluice-heads. A start has been made to sluice away the decomposed auriferous clays containing the stone for which this property was noted in the early days. In the old history of the mine one pocket of stone weighing 34 lbs. is reported as producing 250 ozs. gold. Thirteen men have been employed altogether, mining and clearing.

The Queen River Dredging Company has had seven men employed. Dredging was started at Lynchford towards the end of June; and a test dish of samples taken from the various buckets gave a good gold prospect. The plant can treat 100 cubic yards per hour, with 22 buckets, carrying $3\frac{1}{4}$ cubic feet of stuff at the rate of 12 per minute. The bucket-rope is provided with three sets of grab-hooks. The ladder over which the buckets run has a telescopic range of 8 feet, and will work to a depth of 25 feet below water-level. The water for the screen and gold-saving tables is supplied by a 10-inch centrifugal pump. The whole plant is lighted by acetelyne gas.

TIN.

During the last six months the Mt. Bischoff Tin Mining Company has raised 794 tons of ore, making a total of 59,000 tons 14 cwt. 3 qrs. 19 lbs. since the formation of the company. The total dividends declared to the 30th June amount to £1,866,100. The cost of mining, crushing, and dressing a ton of stanniferous material has been, for the last half-year, 5s. 8'634d. The quantity of material treated at Waratah during the past six months has been :—

60-head battery, 40,729 tons, producing 468 tons 2 cwt. 3 qrs. ore
15-head battery, 11,124 tons, producing 223 tons 4 cwt. 2 qrs. ore

51,853 tons, producing 691 tons 7 cwt. 1 qr. ore

The average percentage of ore obtained from the whole mine is 1'534 per cent. A new alluvial find has been made on the northern side of the mount, above the Brown Face workings, similar to another patch still higher up the hill. The necessity is anticipated for more completely prospecting this slope of the hill. Underground prospecting from the main tunnel is going on, without improved results, so far.

At the Mt. Rex Mine, the crushing plant has been given a trial run. The winding plant is nearly all on the mine. The large dam is now 36 feet high, at which level it is 43 feet wide and 722 feet long. A race has been finished from the dam to the mine, 4 miles. There are large bodies of rich ore to be treated at this mine.

At the Briseis, stripping is being proceeded with, and is expected to have advanced far enough by the time the Ringarooma race is finished to allow sluicing to be carried on without interruption. There is a fine show of tin in the lower levels. The syphon-pipes for the water-race are being made at a new foundry, started at Scottsdale by Mephan Ferguson, of Footscray. Between 25 and 30 men are employed at these works. A start has been made to roll and bolt the plates, which will be rivetted by hydraulic pressure later on, when the rivetting machines are in position. An important event in the history of the Briseis Mine is the resignation of Mr. H. W. Ferd. Kayser, as General Manager. The output of tin during the quarter has been 24 tons; 60 European miners being employed. At the New Brothers' Home, No. 1, the overburden of a portion of the mine is being removed by dry stripping. Sluicing is going on at the lower face, as usual: 30 men are employed on this mine.

The Ringarooma Tin Mine, at Derby, has finished the erection of the new pumping plant. Four sets of pumps will raise the

water to the face from the Ringarooma River; and the removal of the overburden will be proceeded with systematically when the whole installation is complete. When this mine is fully at work, it is expected that 50 or 60 men will be permanently employed.

The old dredge of the Tasmanian Tin Dredging Company, which has formed an obstruction in the Ringarooma River for a long time, has been removed higher up stream, and work is to be resumed with the additional aid of a grab dredge.

Properties at the Ringarooma Valley have been reported on as dredging propositions. At Bradshaw's Creek considerable activity prevails, and the prospects of the Pioneer Mine continue very satisfactory; additional machinery and pumping-plant are being provided. Twenty-five tons of tin ore were won during the past quarter, and 30 miners employed. The Garibaldi Company, on the Wyniford River, has raised six tons of tin ore. At Moorina the Weld claim has yielded 5 tons 1 cwt. A good deal of enterprise is being exhibited in this locality in providing mining plant and carrying out preparatory work.

At Branhholm the Arba Mine is removing overburden and erecting machinery.

At Gladstone the Scotia has raised 10 tons tin ore, which represents nine weeks' work, the remainder of the quarter being occupied with dead work. Preparations have been made by the Mount Cameron Water-race Board for testing the alluvial ground near Gladstone by boring, and a boring plant has been sent on the ground by the Government for that purpose. It is intended to trace the course and test the character of the old lead of the Great Mussel Roe River from the Proprietary to as far north as the Aberfoyle country.

On the Crystal Hill Proprietary, two miles west of Lottah, a 10-head battery is to be erected, and it is expected that work will be in full swing in a couple of months. Several cuttings and trenches have exposed tinstone; conservative estimates place a value of from 1 per cent. to 2 per cent. on the stone shown.

The Weldbrook Alluvial Tin Mine, at Weldborough, has shifted its hydraulic plant to Ferny Gully Flat, a field discovered by the early pioneers.

NORTH-WEST COAST.—At the Shepherd and Murphy Mine about 100 bags are on hand ready for carting. Stopping has been proceeding, but water has been short during the dry months.

WEST COAST.—On the Federation Tin Mining Company's property at Heemskirk a new discovery has been made. This,

put on tribute, has resulted, so far, in 164 tons of stone being treated, and 59 bags of tin ore being obtained. The formation is decomposed ferruginous tourmaline rock, and has been proved to a width of eight feet without reaching the wall. As the lode-stuff is easily broken, and there is plenty of hydraulic power for driving the stamps and dressing plant, this discovery is regarded as important.

Several parties are tin-sluicing near Mount Agnew with fair results, but suffering from irregular water supply.

The creeks at North-East Dundas are giving employment to a number of men, who have been making good wages. At the Mount Lyell Copper Estates Company's mine, North Dundas, work has proceeded in two tunnels. At the No. 5 open cut, the face exposes bands of ferruginous rock, 25 feet in width, carrying tin. Prospecting is also going on elsewhere on the property, and is encouraging.

SILVER.

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

	Tons.	Net Value. £
British Zeehan	1181½	16,544
Zeehan-Montana	929	13,286
Silver King, South	932	611½
Western	460½	6068
Silver Queen	141	616
Oonah	139	1404
Hercules	1374	7851
Mount Reid	1302	1875
Comet	407½	2998
North Farrell	126	1890
Watt & M'Auliff	61	274
Curtin-Davis	34	466
Western Consolidated	16	143

The British-Zeehan still holds the premier place on the Zeehan field. The Silver Spray section is opening up remarkably well, and the progressive work is being kept well ahead of the output. One hundred and twenty men are employed, and there are also several small tribute parties on the property.

At the Zeehan-Montana the manager estimates that he has five years' ore in sight. The extensive winding, pumping, and dressing plant is in first-class order, and is giving great satisfaction. Two hundred men are employed here. The quantity of ore produced during the past year was 3217 tons, containing 272,600 ozs. of silver.

At the South King, Fahey's Tribute, the dressing mill was completed and started this quarter, and is working to the owners' satisfaction. The No. 1 shaft has been put down another 50 feet, making the total depth from surface 260 feet. At No. 3 level a drive is being pushed along on a strong payable lode to connect with the Silver Bell workings. When connection is established a considerable increase in the output may be expected. Two parties of tributors are working on the Bell property, with fair prospects. At the Western Mine very encouraging results are being obtained from No. 7 level, 430 feet. Preparations are being made for sinking the main shaft a further distance of 100 feet. This will make the total depth 730 feet, or 6 feet below sea-level. Large quantities of dressing ore are being broken in Simpson's workings.

The main workings of the Silver Queen are still idle. In the portion of the mine known as Clarke's, tributors are doing fairly well. In all, 40 men are employed tributating on the property.

The alterations and additions recently made to the mill at the Colonel North Mine have increased its capacity 90 per cent., and reduced the cost of treatment by about half, besides raising the value of the concentrates and saving additional lead.

At the Western Consolidated the sinking of the main shaft another 100 feet has been recommended. It is believed that at that depth the lodes will be in more settled country. The shoot of ore sunk upon in No. 5 shaft has proved to be shorter than was anticipated.

The stannite ore from the Oonah is now being sent for treatment to the Wallaroo Smelting Company in South Australia.

COMSTOCK DISTRICT.—Developmental work has been going on vigorously. About 20 men are employed breaking ore for shipment. Several hundred tons of zinc-blende are stacked at surface, awaiting the completion of the new tramway from Zeehan. The firsts will then be sent to the Dapto works for treatment. A good quantity of mixed ore is at grass, and this will have to be dressed. It is estimated that fully 10,000 tons of ore are already disclosed, and can be mined cheaply. Some clean galena has also been met with in the tunnel.

The construction of the tramline from the Zeehan railway station to Comstock is being pushed on vigorously. When this is completed, the mine-owners in this neglected district will be in a position to get their ores to Zeehan at a reasonable rate. The terminus is to be in such a position that the line can be extended to the Silver Stream district and Mount Heemskirk when circumstances warrant it. In consequence of the impending arrival

of the line in the Comstock district considerable activity prevails on the mining sections there. Prospecting is going on upon the T.L.E. property, near the old Stonehenge. At the Tasmania some good gossan ore has been raised from the old tunnel on C. Riley's sections. At the North Tasmania, Windsor's tunnel is being driven to come beneath a large surface outcrop. The Susannite is beginning again. Both tunnels are being cleaned out, and a parcel of ore is to be broken down for sampling.

Work is being resumed at the Silver Stream by a new company, the Kynance Prospecting Syndicate. Some good copper prospects have been met with in the No. 2 adit.

At Dundas the Comet Mine has employed 50 men. During the six months ended 31st May, 713 tons 11 cwt. ore were sold, returning £4659. The crude ore tested at the mill was 3199 tons, producing 564 tons 9 cwt. concentrates, equal to an average of 17.64 per cent. In the north-east crosscut, No. 2 level, a nice shoot of metal has been exposed in quite new country, 220 feet from the main lode, and it is intended to prove this at a greater depth.

Lucas' section, on Carbine Hill, shows high-grade galena, with fahl ore. On Quinn and Hodge's section four galena lodes have been stripped and trenched. This property has been inspected by the agent of an English syndicate. On the section formerly held by the South Curtin, Griffiths and party have a substantial galena show. Davis and Everest are crosscutting to cut their No. 2 lode.

The winding plant for the main shaft has been started at the Ring Valley Mine, and the pumping engine will be on the ground shortly. The shaft is sunk between two formations to a depth of 80 feet, and, in sinking, some high-grade fahl ore was met with, assaying from 179 to 700 ozs. silver, and from 9 to 25 per cent. copper. The first level will be started from 100 feet.

At Mount Reid Mine the despatch of ore to the local smelters has been discontinued for the present, and all energy is being devoted to the construction of tramway and erection of air-compressing plant. The Mount Reid Mining Company has raised from their mine, to 31st March, 24,849 tons of ore of various grades, having a gross value of £152,740. The bulk of this ore has been raised from the surface benches.

At the Hercules Mine a very severe winter has been experienced, and, as the gossan ore has to be dried before bagging it, the output has only been maintained by strenuous effort. The new drying oven will greatly facilitate the despatch of ore. Large shipments have been made the last quarter to Dapto; in all, about 3000 tons have been sent away to date. The profit realised on these sales has been satisfactory. The mine is

opening up well, and large quantities of ore are in sight. The Zeehan Smelters, having re-arranged their sampling plant, &c., the Hercules Company has contracted to deliver 10,000 tons to the smelters, at the rate of 500 tons per month. Preparatory to a larger output, and consequent strain on the self-acting cable, the company is calling for tenders for a new wire-rope, two miles long. Work will also shortly be started again at No. 5, or the copper ore zone.

The Tasmanian Smelting Company has purchased during the quarter 2307·2 tons of ore, containing 1173 tons lead, 88,304 ozs. silver, and 26·8 ozs. gold. It shipped 1064 tons bullion, containing 112,184 ozs. silver, 451·7 ozs. gold. The new installation of the Huntingdon-Heberlein process has given every satisfaction. Further mechanical furnaces with increased capacity are now in course of construction.

Colebrook Mine.—Work was resumed here in January and prospecting continued, which has confirmed the existence of large ore-bodies going down without decreasing in size. The mine manager recommends a tunnel to be driven across the strike to intersect, by 250 feet of driving, No. 1 ore-body at a depth of 225 feet, No. 2 at 375 feet, and Nos. 3 and 4 at a depth of 530 feet. These four bodies are separated on the surface by from 60 to 80 feet of country. He also recommends the construction of a self-acting tramway to connect with the Emu Bay Railway. The fall in 60 chains would be 1200 feet. The following assays of samples taken from the various ore-bodies have been made by Mr. J. G. A. Stitt, of Zeehan, in April this year :—

	Gold.	Silver.	Copper.
No. 1. From B. Bench, No. 1 Lode	Faint trace	1 oz. 15 dwts. 22 grs. per ton	5·95 %
No. 2. From J. Trench, 177 ft. S. of B. Bench, No. 1 Lode	Faint trace	9 dwts. 19 grs. per ton	1·36 %
No. 3. From H. Trench, 465 ft. S. of B. Bench, No. 1 Lode	Less than $\frac{1}{2}$ dwt. per ton	1 oz. 6 dwts. 3 grs. per ton	2·72 %
No. 4. From D. Bench, No. 2 Lode	Trace	1 oz. 12 dwts. 6 grs. per ton	4·42 %
No. 5. From D. Trench, 485 ft. S. of D. Bench, No. 2 Lode	Faint trace	16 dwts. 8 grs. per ton	3·06 %
No. 6. From A. Trench, No. 3 Lode	Faint trace	13 dwts. 1 gr. per ton	2·29 %
No. 7. From near B. Trench, No. 3 Lode	Nil	1 oz. 6 dwts. 3 grs. per ton	2·55 %
No. 8. From open cuts near Shaft, No. 3 Lode .	Faint trace	1 oz. 15 dwts. 22 grs. per ton	6·80 %

NORTH-WESTERN DISTRICT.—At the Magnet Mine rapid progress is being made with the tramway which is to connect the mine with the Emu Bay railway system. There now only remains a short distance to grub and about two miles of formation. The 30-lb. steel rails, the auxiliary locomotive, and trucks have been delivered. The large bridge over the Waratah River is practically finished, and plate-laying is in full swing. With the exception of sampling the ore-bodies, the mine is shut down, pending the completion of tram. A township has commenced to grow at the mine terminal; a large hotel is just about finished. The Company has afforded employment for a large staff of men, the last quarter's pay-sheet being nearly £1000 per fortnight.

The North Farrell Mine is at a standstill, pending the construction of tram-line to Boco Creek.

Work has proceeded at the Devon Mine on a moderate scale, payable ore being raised and consigned to the smelters at Dapto, N.S.W. The last parcel of 120 bags sent away in June assayed:—Gold, 4 dwts. 19 grs. per ton; silver, 79 ozs. 3 dwts. 9 grs. per ton; lead, 53·8 per cent.

COPPER.

Mount Lyell Mine.—The return of ore treated at the reduction works during the quarter ending 30th June is:—

	Tons.	cwts.	qrs.	lbs.
Company's ore.....	66,222	14	3	3
Purchased ores.....	18,334	11	0	25
Metal-bearing flux from South Tharsis Mine.....	4762	13	1	5
TOTAL.....	89,319	19	1	5

and the quantity and value of metals produced were:—2405 tons blister-copper, containing—

	£	s.	d.
Copper, 2375 tons, valued at.....	179,955	13	0
Silver, 149,382 ozs.	18,672	15	0
Gold, 5161 ozs.	21,934	5	0
	£220,562	13	0

The number of men employed was:—

At the Company's Mount Lyell Mine.....	430
At the Company's South Tharsis Mine.....	30
At the Company's Reduction Works.....	1225
At the Company's Railway.....	225
	1910

The overburden from all benches at the Mount Lyell Mine is being steadily removed. A new bench below the bottom one is about to be opened out. The mine looks well in the bottom levels.

North Mount Lyell Mine.—The usual output has been maintained, ore being sent away regularly to Kelly Basin for shipment, and to the Lyell smelters for reduction. An open cut has been started on the extension of the Lyell Tharsis ore-channel. Wherever the ore-bodies have been penetrated, they show features indicative of a prosperous future. From 30th June, 1900, to 12th June, 1901, the quantities of ore delivered under contract to the Mount Lyell Company totalled 30,083 tons, of average copper contents 7·76 per cent. In addition to this, 9243 tons have been shipped, containing 17·23 per cent. copper. Once the furnaces are ready to treat the output, sales of crude ore will be stopped. The erection of the smelters at Crotty is proceeding, and if the necessary ironwork comes to hand in time, the production of matte will most likely be started the ensuing quarter.

Mount Lyell Blocks.—The erection of the winding plant, which was purchased from the Volunteer Mine, at Lefroy, has been completed, and the main shaft sunk an additional 190 feet, totalling 430 feet. The ground at this point being heavy, it is intended to increase the depth and secure more favourable country before opening out. From the ore-body 2659 tons of ore, worth 8 per cent. copper, have been extracted. The present size of ore-body is 40 to 50 feet wide, and 70 to 90 feet long. With a downward extension of this, a large output may be anticipated. One hundred and twenty-five men are employed.

Lyell Tharsis Mine.—The exploratory work has been chiefly crosscutting and driving at the 100-foot level. From this level boring with a diamond-drill is going on to strike the ore-body 200 feet lower down. Good ore is being broken from the 100-feet. From the 50-foot level stopes and open-cut 3700 tons of crude ore, worth 4·5 per cent. copper, have been won. Altogether, the mine has a daily output of 60 to 70 tons. During the past half-year 7666 tons of ore (dry weight), worth 4·63 per cent. copper, have been sent to the Lyell furnaces.

Mount Lyell Comstock.—When this mine is connected with the North Lyell smelters, and the latter are ready to receive ore, it will put out regular quantities of mineral, estimated to run five per cent. copper. It is expected that the development work done will allow 300 to 500 tons per week to be broken for a good time to come. Up to the present over 2500 feet of driving, sinking, and crosscutting have been done. Three main tunnels

have been driven and five ore-bodies located. The greatest depth attained is 363 feet, and the mine can be worked to this depth without having to sink. Eighteen men are employed at present, but this number will be increased directly the output of ore begins. The estimated cost of the tramway to connect with the North Lyell railway is £10,000, and construction work will begin as soon as the Easements Bill passes Parliament. Eighteen men are employed.

Tasman and Crown Lyell Extended.—This mine adjoins the Comstock. Exploratory work is actively proceeding by driving and trenching. A singular feature is that, in addition to the copper ore-body cut in the upper tunnel, a galena lode, about seven feet wide, was struck further in. A lower tunnel is being driven to come under both the copper and galena. It is now in 400 feet, and is expected to reach the cupriferous body at about 1100 feet in, and the galena lode at 1250 feet. If one or other of these lodes live down, the output of the mine will be considerable, as there are from 200 to 300 feet of ground between the two tunnels. Eleven men are employed.

The Tasman Lyell Copper Company has driven 140 feet, and done 200 feet of trenching with 10 workmen.

The Consolidated, Anaconda, Peaks, and others in this eastern group have continued prospecting, and in each case success is expected. On the opposite fall the Western Tharsis has kept two faces going, but so far no appreciable discovery has been made; and this applies also to the Prince Lyell and the copper mines of Mount Lyell West. The men employed total 24.

At the South Mount Lyell the main shaft is down 118 feet below the 600-foot level, at which point work ceased on the 28th June, when 24 workmen were discharged.

The Great Mount Lyell Copper Company.—Within two years this company has erected mine and assay offices, driven 3600 feet, cut seven miles of tracks, and several chains of trenching. At present a shaft is being sunk on a branch of Conglomerate Creek, and two prospecting adits are kept going on other portions of the property. Twenty-five men are employed.

Mounts Jukes and Darwin.—At the Jukes Proprietary Mine the No 2 tunnel has entered the ore-body (of good copper ore) at 410 feet below the outcrop at the surface. The formation cut some time before reaching this ore was a seam of rich copper pyrites, which is widening out as the drive on it proceeds. The present cutting of the ore-body is important, and will prove

useful as a guide for other mines in this quartz-felsite or quartz-porphry belt of rock.

At Jukes Consols the main tunnel has been driven 180 feet in hard quartz-felsite, but for the last three feet has been in baryta.

On Mount Darwin the Darwin Proprietary tunnel cross-cuts the country for 460 feet. A drive south has been put in ten feet behind the end and extended 100 feet. An ore-band, which has been followed, has lately improved to good quality. The same band has been driven upon north from the tunnel 60 feet, and has been of good quality all the way. This is encouraging and ought to stimulate work on the other sections in the vicinity.

NORTH-EASTERN DISTRICT.—During the past half-year, at the Eastern Proprietary Mine, the company has broken first-class ore from the neighbourhood of the 400-feet point in the main adit. One hundred and ninety-seven tons were shipped to Dapto, averaging 15 per cent. of copper and 12 ozs. silver, and yielding a net profit of £800. A large cupriferous quartzite formation west of the main lode has been prospected from the main adit, and at 160 feet a one-foot vein of gossan and kaolin, carrying copper, was traversed. Clean country was reached at 203 feet. A winze at 160 feet was sunk 15 feet, when it reached the ground water-level, where the copper contents improved to $\frac{3}{4}$ per cent. Deeper work cannot be carried on in this mine without sinking a main shaft.

At Anderson's Reward, the Den, near Lefroy, No. 3 tunnel near the top of the range has been completed to 80 feet. Copper stains showing at 140-feet level, now driving W.: no gold visible.

COAL.

During the quarter, 12,750 tons of coal were raised, against 12,484 tons in the corresponding quarter of last year.

Some land has recently been taken up on the East Coast for coal-mining, and a series of bores with the diamond-drill are being put down by the Government at Llandaff and other places north of Swansea, to test the coal measure sandstones of that coast.

In the south of the Island the Mt. Cygnet Coal Mine is being actively worked, and the coal is in good demand. Seams of coal at Recherche are also attracting attention.

A discovery of coal seams has been made near the junction of the Inglis and Calder rivers, which promises to be of importance. The coal is a cannel variety. A sample of it,

analysed by the Government Analyst (Mr. W. F. Ward), yielded the following result :—

	Per cent.
Fixed Carbon.....	50·0
Ash	5·4
Gases, &c., lost at red heat.....	41·4
Sulphur.....	1·8
Moisture, lost at 212° F.....	1·4
	<hr/>
	100·0
	<hr/>

Mr. Ward adds that the coke formed by this coal is firm and coherent. The proportion of sulphur is rather high, but the coal is otherwise of excellent quality.

The Farm Cove Coal Mining Company has been boring near Coal Head, Macquarie Harbour. The strata have been bored through to a depth of 315 feet. At 210 feet a seam 2 ft. 6 in. thick was passed through. Sandstone, shale, and small seams of coal were passed through lower down, and at present they are in fire-clay.

MISCELLANEOUS.

Bismuth.—Prospecting work has been carried on at the Mount Ramsay Reward Claim, and active mining for bismuth (and gold) will start in a few weeks. It is proposed to continue the old drive and sink on the hornblende matrix. A highly remunerative price has been offered for the first ten tons of metallic bismuth. The metal occurs here in the native state, and the gold in association with pyrites.

Monazite.—Prospecting at Mount Stronach has been discontinued. The quality of the mineral is stated to have been satisfactory, but it has not yet been found in sufficient quantity.

Return showing the average number of men employed in or about the mines during the quarter ending 30th June, 1901 :—

District.	European.	Chinese.	Total.
North and South	715	...	715
North-East	572	150	722
East	733	64	797
North-West	259	...	259
West	4933	...	4933
	<hr/>	<hr/>	<hr/>
	7212	214	7426

Value of the mineral output per man employed, £62 12s. 7½d.

The dividends paid during the quarter were:—

	£	s.	d.
From Copper Mines	27,500	0	0
„ Gold „	11,600	0	0
„ Tin „	18,000	0	0
„ Silver „	5515	15	4
„ Coal „	1208	8	8
Total	<u>£63,824</u>	<u>4</u>	<u>0</u>