THE PROGRESS OF

THE MINERAL INDUSTRY

OF

TASMANIA,

FOR THE QUARTER ENDING 31st MARCH, 1901.

COMPILED BY

W. H. TWELVETREES, ESQ.,

GOVERNMENT GEOLOGIST.

BY ORDER OF

THE HONOURABLE EDWARD MULCAHY,



Casmania:

JOHN VAIL, GOVERNMENT PRINTER, HOBART.

1901.



PROGRESS OF THE MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 31st MARCH, 1901.

Launceston, 16th May, 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 31st March 1901, compared with the corresponding Quarter in 1900, and the previous Quarter ending 31st December, 1900:—

	During the Quarter ending 31st Mar., 1901.		During the Quarter ending 31st Mar., 1900.		During the Quarter ending. 31st Dec., 1900.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Gold won	12,443 58 2291 2257 ⁹ / ₂₅ 3650 3396 208 2 ¹ / ₄ 435 ³ / ₄ 36 ¹ / ₂ 15	£ 46,661 1255 39,120 209,958 50,049 2716 7280 121 52,517 37 79 10	11,726½ 120 2532¾ 1966½ 1066 11,284 340¾ 2 474½ 24½ 51	£ 43,974 497 30,940 178,316 159 1366 9027 13,087 69 30 62,681 1056 40	15,071½ 58¾ 4462 2457¼ 4041 652 12,356 10 585½ 3½ 22 20 5	
TOTAL VALUE	£	409,803	£	341,242	£	506,122

GOLD.

During the past quarter 8572 ounces of gold were obtained from quartz, 202 ounces from alluvial, and 3669 ounces by means of the cyanide and chlorination processes, valued at 46.661.

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, and the previous Quarter ending 31st December, 1900:—

	Gold obtained during the Quarter ending 31st March, 1901.				Totals corres-	Totals for Quarter	
A Not HORAN	Quartz.	Alluvial,	Cyanide & Chlorina- tion.	TOTAL.	ponding Quarter, 1900.	ending 31 Dec., 1900.	
D (1)	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	
Beaconsfield	5776		2733	8509	6737	6507	
Mathinna	2583		714	3297	41204	6962	
Mount Victoria, Warren-							
tinna, &c	36	80		116	31	488	
Lefroy	29		222	251	603	178	
Lisle and Golconda		100		100	150	229	
Mangana, Fingal, &c West Coast, Middlesex,	148			148	9	6891	
&c		22		22	76	18	
TOTALS	8572	202	3669	12,443			
Totals for corresponding Quarter, 1900	68441	383	4499		11,7261		
Totals for Quarter end- ing 31st Dec., 1900		2451	4302			15,0711	

BEACONSFIELD.—At the Tasmania Mine, during the quarter ending 31st March, 6050 tons of quartz were crushed for 5776 ozs. 9 dwts. gold; 2783 ozs. 13 dwts. gold were obtained by chlorine, making a total of 8559 ozs. 22 dwts. From the formation of the company, 428,735 tons of quartz have been crushed for 511,896 ozs. 14 dwts. 5 grs. gold. The dividends distributed since the commencement of the company amount to £739,071 15s. A crosscut N. for the reef has been opened out north at a depth of 1000 feet in the new shaft.

The Moonlight-cum-Wonder mine has received a further grant of £500 from the Government to assist with the sinking of the main shaft. From this shaft deep crosscuts will be driven to intersect the reefs. The total subsidy granted to the company.

for shaft-sinking, now amounts to £1000, and for crosscutting below 600 feet, £500. The shaft was down 708 feet at the end of March. The south crosscut was extended to 52 feet at that date.

LEFROY.—Exploratory work at the New Pinafore has been continued at the 1200-feet level without payable results, so far. The footwall in the western drive on No. 3 reef carries small bunches of likely-looking stone. Surface prospecting has also been carried on, and a north branch of Chums reef been stoped on at 40 feet, yielding a little gold from numerous small veins of stone. White Pinafore has an average width of stone 2 feet at No. 3 level, 272 feet from surface. At No. 1 level the stone was only 6 inches; at No. 2, 200 feet from surface, it averaged 12 inches; at No. 3 it was cut 2 feet 6 inches in width, 15 inches of which were carrying gold. This shoot cut out and a new make of clean stone has now come in, not yet payable, but showing every indication. By surface prospecting, gold has been traced for 200 feet east of main shaft. Prospecting shafts to the west of main shaft have also shown and produced gold on this property as far west as within 50 feet of the western boundary. A small Launceston syndicate has initiated prospecting near the old Industry at the Den. The party of cyanide workers at Sludge Creek has been engaged in satisfactory operations.

LISLE.—The transport of the dredging plant is going on by rail and road. The company has a considerable area of ground, which has been tested by shallow shafts, with good results. Small parties have been working outside the company's boundaries, making good wages.

Golconda.—Small trial crushings from prospecting claims have been made, and have proved encouraging. An attempt is being made to re-float the old Enterprise Mine. The yield in former years reached £20,000 from a reef averaging 14 dwts. gold. This output was from above water-level. Capital is now sought to sink a main shaft and open out at a greater depth.

MOUNT VICTORIA.—The Alberton Company's battery engine has been removed to the Royal Ruby Tin Mine near St. Helens. The Mercury Tribute has been raising stone, and crushed 27 tons for 30 ozs. The Caxton is erecting a five-head battery.

MATHINNA.—At the New Golden Gate all the stopes have given their usual quantities of dividend-paying stone. The old City of Hobart has commenced working. Excavating has been started for the new shaft about 200 feet west of the old one.

The North Gate shaft is to be sunk another 100 feet.

The Volunteer is raising good stone from a north and south lode cut at the 150-feet level. Cross-cutting at 350 feet for the east and west lode is also going on. Battery race is being surveyed, tenders are invited for erection of battery and cyanide plant. The East Volunteer has purchased the Old Boy's leases north of and adjoining the Volunteer, and it is intended to shift the machinery from Lefroy, renovate the shaft, and crosscut at the 400-feet level. The Mabel has crushed 22 tons for 38 ozs. 13 dwts. gold. The West Golden Gate is driving adit from the west side of the hill, and has intersected the first of the four reefs. Hickson's has had a few small crushings, with various yields up to 1 oz. The stone has been raised from the shallower Thurley and Dimmock's is a new claim 31 miles N.E. of Mathinna, on the side of a small spur running down to the South Esk. A north and south lode has been stripped for a length of 50 feet, and is now being sunk on at the north end. It averages 20 inches in width, and shows gold freely.

The Miami is driving the bottom level, with occasional colours of gold. Good stone is being stoped above the 200-feet level.

The West Miami has put through a crushing.

Mangana.—At the Mangana Gold Reefs (New Sovereign) sinking to the 600-feet is still proceeding. At the Golden Entrance the main tunnel from the north is being driven. Good quality quartz has been stoped and bagged from No. 2 shaft.

FINGAL.—A parcel of 4 lbs. 10 ozs. of quartz taken from the cap of a lode discovered on the Fingal Reefs has been crushed and treated, returning 11 ozs. 13 dwts. gold to the ton. The concentrated pyrites assayed at the rate of 8 ozs. 13 dwts. 3 grs. to the ton.

Warrentinna.—On Bayley's leases nine men are employed sinking the shaft. Three other claims employ four men. A trial crushing of $5\frac{1}{2}$ tons of quartz from a claim called "Governor-General" yielded 6 ozs. 2 dwts. gold.

NORTH-WEST COAST.—The Bell Mount Company has been busily engaged constructing its races, and a start will soon be made to sluice.

The Whyte River Company's dredge, which sank some time ago, has been floated again, and the proprietors intend to take it down below the junction of the Rocky and Whyte rivers.

West Coast.—The King River Mine has been let on tribute to a small Queenstown syndicate, and a race is being cut (about a mile in length) preparatory to sluicing the ground en bloc.

Dish prospects of the decomposed rock have been good.

At Harris' Reward 20 tons of quartz have been crushed for 20 ozs. 12 dwts. gold. This was derived from the prospecting winze. Driving from the main shaft 80 feet deep will be resumed when the pumping machinery is erected, after completion of the bridge over the King River.

The Queen River Gold Dredging Company has successfully launched its pontoon, and the erection of the machinery is proceeding apace. The dredge is expected to be at work shortly. Prospects taken from various parts of the claim have given good

results.

The Mount Black Proprietary Company has decided to ascertain definitely the value of the mine, and the best means of treating the ore, before it proceeds further with opening up the lode.

TIN.

The Mount Bischoff West Company reports that it has tinstone in sight above No. 3 tunnel, of the value of £25,433, apart from its extensive alluvial deposits. The mill is to be worked by water-power, and is expected to treat 300 tons of ore per week.

The dry season has materially restricted the output of tin on

the East Coast during the past quarter.

At the Briseis Mine the removal of overburden has been con-

tinued, and good progress is being made with the race.

The Pioneer Tin Mine is being skilfully handled. It has just completed nine miles of race (5 feet in bottom by 6 feet on top by 2 feet), laid a 20-inch syphon-pipe 3000 feet across the Ringarooma Valley, and a pressure-pipe column 2600 feet long, 1600 feet being 26 inches diameter, and the remainder 20 inches. During the quarter about 40,000 cubic yards of drift have been pumped, and about 30 tons of tin ore produced. During the last seven months 62 tons of tin ore have been produced from 90,000 cubic yards of dirt. Machinery for the centrifugal dredging plant is now arriving. In addition to this, an hydraulic elevator, the largest in Tasmania, is being put down, which will take 20 cubic feet of water per second.

The Scotia alluvial mine at Gladstone is coming to the front. It consists of a terrace of wash north of the Ringarooma River, and at one time returned a good quantity of tin ore, but, becoming poor, was comparatively neglected until lately, when a good run of ore was found heading straight for the deep ground to the north. The ground ahead of the face is being tested by bores. An improved tail-race is being constructed, which will be shorter than the present one, and give greater depth in the face.

At the Crystal Hill, at Lottah, prospecting is going on well, and a large formation of tin-bearing stone being exposed. Samples from nine cuttings, for about 30 chains, have bulked 23 per cent. The 80 lbs. of samples are reported to be a fair

average of stone exposed.

At Mount Rex Mine the crosscuts in the No. 2 level are opening out well and exposing good stone. The work in connection with the battery is being pushed forward. The large dam is over 30 ft. from the bottom of the foundation. The ironwork for calcining-furnace has been received. The mine now possesses a 20-head battery, with stampers of 950 lbs., jiggs, classifier, and slime-tanks for first treatment of the ore; jiggs and classifiers for the second treatment after calcining. The main shaft is sunk east of the ore-body to a depth of 150 feet, which gives 82 feet of backs from No. 2 level to the floor of the chamber No. 1 level. The chamber, with the exception of a large central pillar, has been worked 70 feet every way, and 4000 tons of stone have been crushed from it, giving 251 tons tin ore. The ore has been proved down to No. 2 level by a winze from No. 1. Highly payable stone has lately been struck in No. 1 tunnel.

At the Australian a considerable quantity of overburden has been removed. Both faces are looking well, but water is scarce.

West Coast.—At Heemskirk Dwyer's tribute, on the Federation Tin Mining Company's western lease, has been doing well, having won a return of £783 6s. 2d. from 720 tons

lode-stuff treated at the company's battery.

From the Renison Bell Tin Mine a parcel of 5 tons ore-stuff has been treated in Melbourne with satisfactory results. This parcel comprised ore from the face at river, from the railway-cutting, and from the Iron Blow. Some interest has been recently taken to neighbouring sections also traversed by tin-lodes.

NORTH-WEST COAST.—The Shepherd and Murphy Mine has raised about 100 tons of ore during the past quarter, but the milling has been delayed by scarcity of water. The mine

employs 13 men, but the creek does not contain enough water in summer to drive the mill. A race has been surveyed from the Weaning Paddock Creek to bring in an adequate supply.

SILVER.

West Coast.—The quantity of silver-lead ore raised by the Zeehan mines this quarter is much under the output of the previous three months: but the decrease is believed to be due to only temporary causes. The output of the principal mines was as follows:—

British Zeehan	1047 to	ns, net val	ue £16,891
Zeehan-Montana	846	,, ,,	12,571
Western	586	,, ,,	6000
Mount Reid	734	" "	4800
Comet	330	,, ,,	2600
Silver King	325	,, ,,	2497
Silver Queen	254		1896

The usual steady productive and developmental work has been

carried on at all the above mines during the quarter.

The British-Zeehan still employs 120 miners, and there are besides about 45 tributors working on various parts of the company's leases. The company in the quarter produced 522 tons of first class ore and 1441 tons of second class, which, on treatment by concentration, produced 260 tons of concentrates, making a total of 782 tons of saleable ore, containing 87,233 ozs. silver, and 494 tons of lead, of a net value of £13,797. The tributors raised 235 tons of firsts and 144 tons of seconds, which, on treatment, produced 30 tons of concentrates, making a total of 265 tons of saleable ore, containing 19,871 ozs. silver and 162 tons lead, of a net value of £3094.

At the Montana 4294 tons of second class ore were treated by the concentrators, producing 448 tons of saleable ore, containing 35,586 ozs. silver and 782 tons of lead, of a gross value of £7850. 398 tons of first-class ore were raised, containing 41,144 ozs. silver and 258 tons of lead, of a gross value of £8549. The mine employs about 200 men. The main shaft is

being sunk from the 400 ft. or No. 4 level.

The Western Consolidated has, during the quarter, continued developmental work, and has employed, on an average, about 24 men. Nine tons of ore, assaying 55 ozs. silver, 60 per cent. lead, and 2 per cent. copper per ton, were sent from the mine, the gross value of which is about £14 per ton. Work has been principally confined to sinking No. 5 shaft. Driving north and south on the course of the lode, and stoping, will soon be started.

The main tribute on the Silver Queen ceased work towards the end of the quarter, and, save for a few small tribute parties, the mine is practically idle again. During the quarter an average of 100 men were employed. 254 tons of ore were raised, containing 12,837 ozs. silver and 122 tons of lead, of a net value of of £1896.

The Colonel North mine has continued sinking the main shaft, and the tributors on the Spray lode have started a low tunnel to intersect the lode below the oxidised zone. Only $3\frac{1}{2}$ tons of ore, assaying $47\frac{1}{2}$ ozs. silver, $55\frac{1}{2}$ per cent. lead per ton, and worth £46, were sent away during the quarter. Twenty men were

employed, on the average.

The tributors on the Silver King sent to the Tasmanian Smelting Company during the quarter 325 tons of ore, containing 9790 ozs. silver and 164 tons of lead, realising £2497. In addition, 500 tons of second class ore was raised and stacked at the mine, awaiting treatment. The concentrators at Fahey's tribute have been run with satisfactory results. Sinking is to be resumed from the No. 3 or 200 ft. level.

Good milling ore is being won from the Bell, where a hopper,

with a capacity of 200 tons, is in course of erection.

The Oonah, owing to non-success at No. 6 level, is now on tribute. Eleven parties of tributors are at work.

It is anticipated that Section 3604, formerly the King Extended, will shortly be floated with a good working capital.

The Western mine has, during the half-year to 31st March, raised 12,570 tons, of which 422 tons were firsts and the balance seconds, from which 804 tons of concentrates were obtained, containing, by mine assays, 400 tons of lead and 63,341 ozs. silver, being one ton of concentrates from 15.1 tons of ore. The working costs have averaged £1 12s. 3d. per ton of ore, including delivery of the marketable ore to Zeehan. This mine has produced since its commencement 37,000 tons marketable silverlead ore, containing by assay 3,599,344 ozs. silver and 19,717 tons lead, of a total net value of £466,659 10s There has been a decrease this half-year in the output of marketable ore by 439 tons, but an improvement is hoped for in the coming half-year. The ore reserve at the main shaft remains the same, and the fact that some first class ore was met with at No. 8 level increases the likelihood of good ore being found at depth. Good stoping ground is expected to be opened up above No. 5 level. general manager reports that over 16,000 tons of good ore still remains at Simson's shaft, and the output from that part is steadily increasing. The stopes are in good condition, and a little improvement in the metal market (of which signs are

noticeable) will revive the prospects of this mine, which the directors state has paid £102,000, or 34s. per share, in dividends, and has expended further, about £375,000, of which over £253,000 was paid as wages, without, until now, making

any call on its shareholders.

The South Comstock Mine has been purchased by an English syndicate. The Comstock Tribute Association has been carrying on work at the Comstock. The intention of the Government to establish tramway connection with the Comstock district has had the effect of directing attention to this field. The Tenth Legion to the 30th March had advanced its tunnel into the magnetite formation 44ft.

The Tasmanian Smelting Company has been given a two months' option to purchase the Mariposa sections, and has put on about a dozen men to open up and test the value of the lodes.

At Dundas the Comet sent away for the quarter 330 tons of ore of a gross value of £12 15s. 6d. per ton. The total contents were 13,860 ozs. silver and 178 tons of lead. The mine employs an average of 63 men. No mine, other than the Comet, in the vicinity of Dundas is doing much work, though there are a fair number of men prospecting in various parts of the district. The Tasmanian Smelting Company has acquired the tribute of the Great South Comet, recently held by Waters and party. Some claims at the Carbine Hill are coming into prominence, viz., Quinn's, Lucas', and Hodge's sections, where lodes of galena and fahl ore were uncovered some years ago, and are now receiving attention again. The Fahl Ore Company has decided to suspend operations for the winter months.

The Svengali Silver Mining Company recently sent a parcel of 2 tons 3 cwts. 2 qrs. 7 lbs. argentiferous copper ore to the Wallaroo Smeting Company of South Australia, and it returned 6.4 per cent. of copper and 85 ozs. silver per ton, the total value

of the parcel being £30 15s. 7d.

At the Mount Reid Mine the principal work done has been the breaking out of the ore at the various benches. The mine sent to the Tasmanian Smelting Company during the quarter 734 tons of ore, containing $290\frac{1}{2}$ ozs. gold, 16,210 ozs. silver, 93 tons of lead, $5\frac{3}{4}$ tons copper, and 186 tons of zinc, the gross value of which is £13,879. The company employs about 32 men. It is intended to drive a deep tunnel on the western side of the property to intersect the ore-body.

NORTH-WESTERN DISTRICT.—At the Mt. Farrell Mine a 10-inch vein of galena was intersected in the No. 2 adit. This has been driven on north for 27 feet, and galena is now freely

disseminated through two feet of the formation. A little fahl ore is in some of it.

At the North Farrell Mine the last 100 tons sampled returned £16 10s. per ton gross. Two hundred tons of firsts are now bagged, but, as it would take several months to pack this to the Pieman, the company has ceased stoping till its tramway is completed. The survey of the route is nearly complete, and the rolling stock is expected shortly at Devonport, where it will be stored until the line is ready to receive it. The concentrating ore cannot be profitably dealt with till dressing floors are erected.

Magnet Silver Mine. - For the half-year ending 28th February, 624 tons of high-grade ore were raised and bagged, of which 566 tons were exported; gross value £6565. Since the start, 2648 tons of ore have been shipped to 28th February, containing 233,880 ozs. of silver, 593 tons lead, approximately, 300 ozs. gold, and 725 tons of iron and manganese oxides; gross value, £31,285. The mining manager estimates the quantity of seconds at surface as over 11,000 tons. Dealing with the ore in sight as a whole, it is estimated that the developments for the past half-year have added 4000 tons to the reserves, making a total of 64,000 tons to be raised upon the completion of the railway to Waratah. This quantity is expected to realise £5 a ton gross, and to yield a good profit after paying mining, transport, and smelting costs. The shipments of first class ore for the half year contained from $85\frac{1}{2}$ to 89 ozs. silver, 22.1 to 22.5 per cent. lead, 4 to 9 grs. gold per ton, and 30 per cent. excess of iron oxide. Shipments of the high grade ore have been suspended, it being more profitable to wait till the company's tramway is ready to receive the entire output of the mine. A discovery of ore has been made, outcropping near the south boundary of the 20-acre block. It can be cut underground at a depth of 190 feet, the level of No. 3.

The North Magnet tunnel has been driven 178 feet for the half year, a total of 638 feet. The lode channel was intersected at 630 feet, and driven upon south 87 feet. The drive shows a little galena, and is being coutinued south towards the Magnet Mine. Its extension in the Magnet property will constitute the No. 5 level of that mine, giving 90 feet depth below the No. 4.

The Devon Silver Mine has, during the quarter, yielded 18 tons of ore, which realised £258. This mine has suffered much from difficulty of access. Owing to this it is impossible to convey machinery to it, and the cost of packing out the ore to Sheffield amounts to about £5 per ton. It has, nevertheless, been sending out regular shipments of ore since May, 1899. In all 172 tons

have been shipped, realising £2153 11s. 11d., excluding cost of packing, &c. The average assay value of the ore has been as follows:—Lead, 55.9 per cent.; silver, 85 ozs. 10 dwts. per ton; gold, 5 dwts. 4 grs. per ton.

COPPER.

Mount Lyell Mine.—Nothing new has happened during the quarter beyond cutting ore at No. 7 level. A tender has been let for sinking a shaft from the No. 5 level. The Royal Tharsis has been acquired, and will furnish the big mine with large quantities of fluxing ore for years to come. It is understood that ore-stuff will not be sent out until arrangements have been made to do so without interfering with the tramway which carries the fluxes from the South Tharsis. Some 1500 tons weekly are being received at the furnaces from the North Lyell, Lyell Tharsis, and Lyell Blocks. The yield of blister copper for the quarter was as follows:—

 Ore, Tons.
 Blister Copper containing Copper.
 Silver.
 Gold.

 57,155
 2169
 2143
 145,246
 5579

During the same period 20,219 tons of purchased ore were treated. The company's timber-supply tramways have been considerably extended; one especially, which runs out to Mount Huxley, and is now within about 1½ miles of the Jukes Consols Mine, at the northern foot of Mount Jukes. Large quantities of pine are brought in by this tramway for delivery to the company's saw-mill.

NORTH MOUNT LYELL MINE.— Over 300 men are employed regularly, and great activity prevails. The No. 2 ore-bench is producing very rich erubescite ore. The huge eastern ore-body has improved, and large quantities of ore are still being despatched from it to the Mount Lyell Company's smelters. At the bornite body a bench has been opened down to No. 3 level of the mine, and high-grade ore is being broken and sent to Kelly Basin for shipment. The branch line of railway from Linda Valley to Gormanston is nearly completed, and a start will shortly be made with the erection of the station buildings. It is expected that the company will complete its first nest of smelters during this year. The construction of the loop-line to connect with the new smelting site is being proceeded with prior to the erection of the smelters.

MOUNT LYELL BLOCKS.—This mine may now be classed as the third of importance on the field, for it has out-distanced the

Lyell Tharsis, owing to the even richness of its ores. All through the past quarter a steady output of about 50 tons per day has been maintained, the ore being worth 8 to 10 per cent. copper. The main shaft is down 240 feet. The plant, which is now nearly erected, is capable of working to a depth of at least 1000 feet. The state of the road from the Gap to North Lyell is such that the company cannot get its ten-ton boiler to the mine, though it has offered as much as £100 for the job.

At the Lyell Tharsis steady work has been continued all through the quarter. Latterly, the mine has been showing an improvement, especially at the north end of the open cut. From the stopes and open cuts from 50 to 100 tons have been

despatched daily to the Mount Lyell smelters.

At the Crown Lyell the exploratory north-west drive at No. 3 level is being extended, and is now in 383 feet. It has been decided to crosscut W. from this drive.

At the Western Tharsis satisfactory exploratory work on a

small scale is going on.

The Anaconda tunnel, over 600 feet, has cut the so-called contact wall, and face shows schist with copper and iron pyrites. A drive is to be put in off the tunnel in a southerly direction.

Since the end of the quarter some seven or eight properties on the field have relinquished work, and others are carrying on operations with very few men.

MOUNT JUKES AND DARWIN.—At the Jukes Proprietary steady driving is being continued, No. 2 tunnel now being over 500 feet in length. A copper formation has been struck, assaying about 5 per cent. copper. No. 1 tunnel is also being continued, and copper pyrites showing. Nine hands are employed on this mine.

The Jukes Consols Mine has driven a deep tunnel 140 feet, and proved about 55 feet of ore-bearing country, in passing through which a 2-feet vein of rich ore was met with, having opened out at that depth (45 feet) from only 1 inch at surface. Average samples gave the following returns:—Copper, 16:37 per cent.; silver, 0:95 oz. per ton; and gold, 0:02oz Another assay for copper only, gave 15:57 per cent. Samples of the surface ore assayed 11 per cent. copper, 2ozs. silver, 10dwts. gold per ton.

At the Jukes Comstock, the crosscut west in red felsite shows fair copper pyrites. On the eastern formation the crosscut is also in felsite, with a little native copper: 8 men are employed

on the Comstock.

At Lake Jukes they are driving north from the adit, and the face of the drive is impregnated with copper glance and carbon-

ate: 8 men employed.

At Mt. Darwin Proprietary the tunnel is in 460 feet in quartzitic schist, and the south drive off-tunnel, 80 feet in same schist: 8 men are employed.

MOUNT READ.—The Hercules Company has delivered over 1000 tons gossan and sulphide ore to the order of the Smelting Company of Australia, Limited. On the first parcel of gossan ore, 245 tons 6 cwts. 2 grs. 17 lbs., the assay return was—silver, 27 ozs. 17 dwts. 1 gr.; gold, 10 dwts. 19 grs.; lead, 6 per cent.; iron, 32.4 per cent.; manganese, 8 per cent. Its silica per centage was 26.6. The net return was £989 10s. 5d., after deducting all costs, excepting 6s. 6d. railway carriage to Zeehan. actual profit to the company is about £3 per ton. The first shipment of sulphide ore was 137 tons 11 cwts. 2 qrs. 6 lbs. net, and the assay-silver, 24 ozs. 12 dwts. 7 grs.; gold, 10 dwts. 19 grs.; lead, 14 per cent.; zinc, 27.6 per cent. This has given a clear return to the company, less the 6s. 6d. railway carriage and mining costs of £370 4s. The shipments have demonstrated that this ore leaves a substantial margin of profit. The following particulars of the conditions of ore sales are of interest:-Delivery of the ore is taken at Zeehan; all the Hercules Company has to do is to mine, bag, and to deliver to that town. The returning charge on the gossan is 32s. per ton, which comprises railway carriage to Burnie, freight Burnie to Sydney, carriage Sydney to Dapto, and smelting charges. On the sulphide ore it is 52s. per ton. All the silver is paid for, the gold less 1 dwt., the lead less half a unit for wet assay and 10 units for smelting loss, and £3 per ton for realisation charges Three-pence a unit is paid for excess of iron and manganese oxide. In this instance it amounted to 3s. 2d. per ton: an important factor. Five units of water are allowed in the gossan. The penalty for zinc is 9d. per unit over 10 per cent. in the sulphidic ores. The price of lead is regulated by the market value of Spanish soft lead.

Now that the demand has set in for the sulphide, the local Smelting Company is negotiating for a large parcel. Occasionally very rich ore is met with at this mine, the sulphide going up to 4 ozs. gold, and the gossan as far as 7 ozs., but the precious

metal contents are very variable.

Work is to be resumed at No.5 level in the copper-bearing zone. An offer has been received on behalf of an English syndicate to erect large works for the treatment of the refractory zinc-lead ores up to an outlay of £50,000 on a half-profit basis.

COAL.

During the quarter 3396 tons of coal were raised, against

11,284 tons in the corresponding quarter of 1900.

Work was suspended for ten weeks at the Cornwall and Nicholas collieries consequent upon a strike, but a settlement has been arrived at recently, and the output resumed. Prior to the strike at the Cornwall, work was carried on steadily, and the leading headings were driven into a field of good coal, with little or no trouble in regard to faults.

MISCELLANEOUS.

Asbestos.—The Australasian Company's Mine has shipped $36\frac{1}{2}$ tons during the quarter. Prospecting has been carried on at various points in the Company's sections.

Monazite.—Prospecting is still continuing on Mt. Stronach claim.

Return showing the average number of men employed in or about the mines during the quarter ending 31st March 1901:—

District.	European.	Chinese.	Total.
North and South	872		872
North-West	300	13 10	300
North-East	434	130	564
East	643	61	704
West	3934		3934
The second of the second of the	6183	191	6374

Value of the mineral output per man employed, £64 5s. $10\frac{1}{4}d$.

The Dividends paid during the quarter were :-

		£	3.	d.	
From	Copper Mines	27,500	0	0	
"	Gold Mines	7800	0	0	
20 000	Tin Mines	21, 0 00 nil.	0	0	
	TOTAL	£56,300	0	0	