

MININD1912\_4

THE PROGRESS OF  
THE MINERAL INDUSTRY  
OF  
TASMANIA

FOR THE QUARTER ENDING 31st DECEMBER, 1912

COMPILED BY

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SECRETARY FOR MINES

BY ORDER OF

THE HONOURABLE EDWARD MULCAHY

MINISTER FOR MINES



Tasmania:

JOHN VAIL, GOVERNMENT PRINTER, HOBART

1913



PROGRESS OF THE  
MINERAL INDUSTRY OF TASMANIA

FOR THE QUARTER ENDING 31st DECEMBER, 1912.

Hobart, 13th February, 1913.

The following table shows, as far as can be ascertained, the quantities and values of metals and minerals raised during the quarter ending 31st December, 1912, as compared with the previous quarter ending 30th September, 1912 :—

	During the Quarter ending 31st December, 1912.		During the Quarter ending 30th September, 1912.	
	Quantity.	Value.	Quantity.	Value.
		£		£
* Gold won ..... oz.	7,774·746	33,025	8898·172	37,797
Silver-lead Ore produced tons	22,160·684	71,995	24,074·474	83,621
† Blister Copper produced ..	174	43,698	1832	162,450
Copper Ore and Copper produced..... ..	275	1633	524·6	4007
Tin Ore produced..... ..	1121·26	169,774	981·7	143,507
‡ Coal raised..... ..	12,763	5832	14,685	6744
Wolfram Ore produced... ..	23·2	2150	16	1504
Bismuth ..... ..	1·5	540	1·8	410
Osmiridium ..... .. oz.	142·66	1087	86·58	580
...	...	329,734	...	440,620

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

† Value of gold contents deducted.

‡ Value at pit's mouth.

## GOLD.

During the past quarter 2535 ozs. gold were obtained from quartz, 242·11 oz. from alluvial, 2408·35 oz. by means of the cyanide and chlorination processes, 1177 oz. from blister copper from the Mt. Lyell Mining and Railway Company Limited, and 1433 oz. from the silver-lead bullion from the Tasmanian Smelting Company's Works, Zeehan, valued at £33,025.

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 for 1911, and the previous quarter ending 30th September, 1912 :—

	Gold obtained during the Quarter ending 31st December, 1912.					TOTAL.	Totals corresponding Quarter, 1911.	Totals for Quarter ending 30th Sept., 1912.
	From Quartz.	Alluvial.	Cyanide & chlorination.	From Blister Copper.	From Silver-lead Bullion.			
	oz.	z	oz.	oz.	oz.	oz.	oz.	oz.
Beaconsfield	2535	...	2290	...	...	4825	4842	4843
Mathinna & Mangana.	...	...	118·35	...	...	118·35	81·65	47·4
Mt. Victoria	}	127·96	...	...	...	127·96	96·86	93·65
Warrentinna								
Mt. Cameron	...	...	...	...	...	...	...	...
Leiroy	...	...	...	...	...	...	...	...
Lisle	}	96·8	...	...	...	96·80	32	54
Lilydale								
Golconda	...	17·35	...	1177	1433	2627·35	76·65	3874·8
West Coast.	...	17·35	...	1177	1433	2627·35	76·65	3874·8
TOTALS	2535	242·11	2408·35	1177	1433	7795·46	...	...
Totals corresponding Quarter, 1911.....	3019·05	178·46	1931·65	...	...	...	5129·16	...
Totals for Quarter ending 30th Sept., 1912.....	2624·4	181·45	2266	2315	1526	...	...	8912·85

Value, £33,025 ; equal to 7774·746 oz. fine gold

BEACONSFIELD.—The quarter's statistics for the district are as follow :—

	Gold produced. oz.	Men employed.
Tasmania Mine .....	4825	441

*Tasmania Mine.*—Twelve thousand eight hundred and seventy-seven tons of quartz crushed, and 4825 oz. of gold obtained (by amalgamation and cyanide process), which makes a total of 982,587 tons quartz crushed, and 808,255 oz. of gold obtained since the mine was first started.

LEFROY.—The quarter's statistics are as follow :—

	Gold produced. oz.	Men employed.
Creek Cyanide .....	—	} 18
Gray .....	—	
Others .....	—	
Total .....	—	18

LISLE, GOLCONDA, &C.—96·8 ounces of gold have been won from these fields. Six men have been employed.

RINGAROOMA.—102·95 ounces were obtained from this district by seven men.

*Alluvial Gold and Dredging Companies.*—Gold has been obtained by the following companies in streaming tin :—

	Standard Gold. oz.
South Mt. Cameron Dredge .....	...
South Mt. Cameron T.M. Co. ....	6·9
Briseis Co. ....	18·11
Total .....	25·01

MATHINNA AND MANGANA.—The quarter's statistics are as follow :—

	Gold produced. oz.	Men
.....	118·35	6

WEST COAST.—Mr. Inspector Curtain reports :—

*McDowell Prospecting Association, Linda.*—Mr. Michael Cunningham, manager, reports that operations have been carried on in the lower tunnel. Two men employed.

Mr. Ellison, registered goldbuyer at Linda, purchased 13·15 oz. of alluvial gold, five men being employed in its recovery. There are four men out at Conglomerate Creek and Flannigan's Flat.

The miners working for osmiridium in the Savage River district obtained 4·2 oz.

### TIN.

The statistics for this metal for the past quarter are as follow :—

	Ore won. tons.	Value. £	Men employed.	
			Europeans.	Chinese.
Northern and Southern Division	13·7	1915	41	...
North-Eastern Division .....	526·25	83,672	661	74
Eastern Division .....	108·65	16,824	314	32
North-Western Division .....	391	56,357	599	...
Western Division .....	81·66	11,006	292	...
Totals ....	<u>1121·26</u>	<u>169,774</u>	<u>1817</u>	<u>106</u>

### NORTH-WESTERN DIVISION.

The output has been as under :—

	Ore won. tons.	Men employed.
Mt. Bischoff .....	300	460
Mt. Bischoff Extended .....	43	85
Weir's Bischoff Surprise.....	6	6
Wombat .....	1	5
Ringtail.....	5·5	9
Waratah Alluvial .....	6	4
Mt. Cleveland (6 months) .....	29·5	30
Totals.....	<u>391</u>	<u>599</u>

## NORTH-EASTERN DIVISION.

## PIONEER AND GLADSTONE DISTRICTS:—

	Tin ore won. tons.	Men employed.	
		Europeans.	Chinese.
Pioneer Tin Mine .....	145	75	...
Aberroe .....	4·25	17	...
South Mt. Cameron .....	31·4	34	...
Garibaldi.....	4·5	12	1
Clifton Creek .....	43·1	26	...
Yee Gee .....	14·35	11	20
Other Claims .....	29·95	92	26
Totals.....	272·55	267	47

## RINGAROOMA DISTRICT:—

Federal .....	1·5	4	...
Bell's Hill.....	2·25	4	...
T. & W. Chorley .....	2·45	2	...
Other Claims .....	5·7	28	1
Totals.....	11·9	38	1

## DERBY DISTRICT:—

Briseis Tin Mines.....	133·85	140	...
Clyde .....	1·85	3	...
Waverley .....	4·25	7	...
Other Derby Claims .....	15·15	41	19
Totals .....	155·1	191	19

## BRANXHOLM DISTRICT:—

Arba Tin Mine .....	33·05	46	...
New Ruby Flat .....	20·05	18	...
Mt. Stronach .....	2·	4	...
Other Claims .....	6·75	45	7
Totals.....	61·85	113	7

## THE MINERAL INDUSTRY

## MOORINA DISTRICT:—

	Tin ore won. tons.	Men employed.	
		Europeans.	Chinese.
Wilberforce Pump Co. ....	4·05	8	...
Weld Tin Mine .....	8·6	15	...
Native Youth .....	1·55	5	...
New Banca.....	5·65	12	...
Other Moorina Claims .....	4	12	...
Totals .....	23·85	52	...
Straits Islands.....	1	...	...
<i>Totals for North-Eastern Division</i> .....	<u>526·25</u>	<u>661</u>	<u>74</u>

## EASTERN DIVISION.

	Tin ore won. tons.	Men employed.	
		Europeans.	Chinese.
<i>Weldborough Mines.</i>			
Fancy Creek Co. ....	4·10	8	...
Other Claims .....	27·9	44	30
Totals.....	32	52	30
<i>Lottah and Blue Tier Mines.</i>			
Anchor Mine .....	47·15	144	...
Others .....	1	3	2
Totals.....	48·15	147	2
<i>St. Helens Mines.</i>			
McAuliff .....	2·10	2	...
M. Hartnett.....	1·55	2	...
J. C. Macmichael.....	·6	2	...
J. Smith.....	1·05	2	...
C. Miller .....	2·1	4	...
Others .....	3·6	23	...
Totals.....	11·	35	...
<i>Avoca Mines.</i>			
Desire .....	1·15	12	...
Gipp's Creek.....	2·15	10	...
South Esk .....	5·	6	...
Foster's .....	2·5	10	...
New Roy's Hill .....	1·15	4	...
Story's Creek.....	5·30	36	...
Totals.....	17·25	78	...
Schoutens .....	·25	2	...
<i>Totals for Eastern Division</i> .....	<u>108·65</u>	<u>314</u>	<u>32</u>

## NORTHERN AND SOUTHERN DIVISION.

	Tin ore won. tons.	Men employed. Europeans.
Shepherd and Murphy Mine...	13	33
Squib .....	—	5
Iris .....	0·7	3
	<u>13·7</u>	<u>41</u>

## WESTERN DIVISION.

	Tin ore won. tons.	Men employed. Europeans.
Boulder .....	10·75	30
Renison Bell .....	34	51
Montana Tin Syndicate .....	11·76	16
Others.....	25·15	105
Totals .....	<u>81·66</u>	<u>202</u>

The Agent-General (Sir John McCall) has communicated to the Hon. the Minister for Mines the following information respecting a process for extracting tin from tailings, &c., which he obtained in conversation with the patentee, Mr. Richards, who was introduced by Mr. Lempriere, who is to have the Australian rights.

It is a chemical process, and the patentee claims that he can produce metallic tin equal to full assay return at a cost of from 7s. to 8s. per ton of material treated. He mixes with ordinary battery tailings 5 per cent. of common salt ( $\text{NaCl}$ ), 5 per cent. of charcoal, and a small amount of bromine. Heat the mixture to 1600 F. for from three to five minutes.

Volatilise the whole of the tin into brick flues, passing through exhauster and scrubbers. The greater portion falls as a dry, white, powder ( $\text{Sn Cl}_2$ ), the balance as stannic chloride ( $\text{Sn Cl}_4$ ), which is easily soluble in water. The stannous chloride ( $\text{Sn Cl}_2$ ) dissolves in a very weak acid solution.

In neutral or alkaline solutions tin comes down as oxide of tin; by a number of simple processes the tin may be obtained from the oxide.

## SILVER.

WEST COAST.—The registered output of silver ore in the Western Division for the quarter ending 31st December, 1912, is given below :—

Zeehan Mines:	Ore.	Tons	Value.	Men.
Zeehan-Montana	galena .....	308·78	£6512	145
Zeehan-Western	„ .....	83·83	1717	30
Zeehan-Queen	flux .....	756	260	4
Ditto	galena .....	98	620	5
Mt. Zeehan (Tas.)	„ .....	80	1068	20
Ditto	flux and tailings...	1750	1209	
Oonah	pyrites .....	1134	710	30
South Comstock	„ .....	299	102	8
Block 10	galena .....	21	201	
Balstrups	„ .....	11·087	198	3
<i>Dundas Mines:</i>				
Adelaide	galena .....	305·5	1776	40
Hercules	sulphide.....	6896·0875	20,157	109
Zeehan-Dundas	galena .....	112	2814	34
Ring Valley	fahl ore .....	150	2200	16
Comet	gossan .....	3795	3164	28
<i>Rosebery Mines:</i>				
Tasmanian Copper	sulphide .....	100	525	6
Primrose	„ .....	2461·3	9845	27
Metals Extraction Co.	„ .....	...	...	75
<i>Mt. Farrell Mines:</i>				
N. Mt. Farrell	galena .....	543·4	6314	108
Sterling Valley	„ .....	20·5	194	18
<i>North Pieman:</i>				
Chester Mine	pyrites .....	2163	747	44
<i>Mt. Lyell:</i>				
Tasman & Crown Lyell Extd.	.....	...	...	...
<i>Sundries:</i>				
Dunkley Bros.	.....	...	...	88
Tasmanian Smelting Co.	.....	...	...	300
Others	.....	...	...	30
Total .....		21,088·4845	£60,333	1168

ZEEHAN DISTRICT.—*Zeehan-Montana Mine.*—Mr. John Craze, manager, reports :—The exploratory work at present is being conducted on No. 4 lode, Nos. 4, 5, and 6 levels. This is on a new make of ore found south of the middle slide. Rises have been put through from No. 6 to No. 4 levels, and good ventilation established. Stopping is being carried on at Nos. 2, 3, 4, 5, and 6 levels on Nos. 2 and 4 lodes. No. 6 lode.—Tunnel has been re-opened and repaired for a length of 244ft., and stopping is now being conducted on silver-bearing gossan ore.

*Zeehan-Western.*—Mr. John Craze, manager, reports :—No. 1 Shaft.—At this part of the mine we are engaged extending the No. 3 tunnel westerly to prospect the ground west of the main lodes, and particularly to cut No. 5 lode at the south boundary shaft. The south drive on No. 3 lode is being extended. Lode very small and poor. Stopping operations are being carried on at Nos. 1, 2, and 3. lodes, Nos. 1 and 2 levels.

MT. READ DISTRICT.—*Hercules Mine.*—Mr. C. H. Moxon, manager, reports :—I have nothing of especial interest to report. All works are being conducted smoothly and with safety, and the ordinary routine production is being maintained.

*Ring Valley Mine.*—Mr. John Moyle, agent, reports :—Have extended a drive from the level of the underhand stope north of shaft, 130 feet level, 22 feet, making total distance 144 feet. Lode poor. Have also taken out a stope 40 feet long over back of north drive. Lode 4 inches wide of copper pyrites. An intermediate drive has been put in north between the 50 feet and 130 feet levels, 63 feet. A little fahl ore has been won from this drive. Lode, however, is very patchy. A drive has also been put in south at the same level; total distance of drive, 30 feet. Lode, 4 inches of rich fahl ore. The ore in this drive continued for 20 feet long, the remaining 10 feet being poor. Work now in progress. Stopping over back of south intermediate lode; 4 inches wide of fair-grade fahl ore. Have also started a leading stope along back of drive, 130 feet level from shaft. North lode 2 feet wide, and poor at present, but likely to improve when stope is advanced further north. The ore being mined from here is antimony.

ROSEBERY DISTRICT.—*Tasmanian Copper Mine.*—Mr. George Barker, manager, reports :—The Tasmanian Metal Extraction Company will take ore at the rate of 150 tons per week for the first three months for treatment, and after that period I hope to be in full swing.

*Primrose Mine.*—Mr. George Barker, manager, reports :—Stopping out ore is the only work in progress. The lode is very regular, and the ore is of good grade.

MT. FARRELL DISTRICT.—*North Mt. Farrell Mine.*—Mr. L. C. H. Woodroffe, manager, reports : During the quarter ended December 31, 1912, 3426 tons of crude ore were mined and treated, resulting in the production of 543.4 tons of marketable ore. The bulk of the supplies have been drawn from the bottom level—No. 5—where a substantial tonnage of milling ore remains to be extracted. Development work has been retarded through scarcity of labour. The chief work of this nature carried out has been the completion of shaft sinking,

the cutting of plats, and crosscutting at No. 6 level. This level is 130 feet below the lowest adit level. The main—No. 3—lode has recently been cut at this level at 34 feet east from the shaft, and where intersected by the crosscut consists of a formation 6 feet wide, carrying 3½ feet of fair quality milling ore.

*Tasmanian Smelting Company.*—Mr. H. Harris, manager, reports:—Ore bought during the quarter, 13,640 tons, containing 1319 tons lead, 176,683 ozs. silver, 1450 oz. gold. Exported 1490 tons bullion, containing 1436 tons lead, 165,461 ozs. silver, 1433 oz gold.

## NORTH-WESTERN DIVISION.

	Tons.	Value.	Men.
Magnet Mine.....	943	£10,578	180

## NORTHERN AND SOUTHERN DIVISION.

	Tons.	Value.	Men.
Round Hill Mine .....	129·2	£1084	12

## COPPER.

*Mt. Lyell Mine.*—Mr. Robert Sticht, general manager, reports:—Ores and metal-bearing fluxes treated at Reduction Works:—

	Dry Weight.			
	tons.	cwt.	qr.	lb.
Mt. Lyell Mine ore .....	28,546	9	1	22
North Lyell Mine ore .....	4263	13	2	19
Metal-bearing flux from Lyell Tharsis Mine...	12,335	4	2	1
	45,145	7	2	14

Number of Men employed:—

At the Company's Mt. Lyell Mine .....	392
"    "    North Lyell Mine.....	93
"    "    Crotty Leases .....	22
"    "    Lyell Tharsis Mine .....	46
"    "    Lyell Comstock Mine.....	29
"    "    Reduction Works.....	582
"    "    Railway Department—Mt. Lyell Railway .....	764
"    "    North Lyell Railway...	132
	17
	149
Total.....	1495

Quantity and value of metal produced :—

Blister copper, 474 tons, containing—

Copper, 467 tons, valued at.....	£37,827	0	0
Silver, fine, 48,283 oz., valued at.....	5870	8	2
Gold, fine, 1177 oz., valued at .....	5002	5	0
Total .....	£48,699	13	2

NOTE.—The above figures show a decrease of 23·985 tons of ore from the Mount Lyell Mine, and 27·818 tons from the North Lyell Mine, and a decrease in the value of the metal produced of £123,589 18s. 10d., as compared with the quarter ending 30th September, 1912. This is accounted for by the fact that during nearly the whole of the quarter the mines were practically idle owing to the lamentable disaster which occurred at the North Lyell Mine on the 12th October, through a fire occurring in the pump-house at the 700-feet level. Nearly 100 men were entombed, 42 of whom succumbed to the poisonous fumes of carbon monoxide gas. In order to extinguish the fire the mine had to be flooded with water.

The Inspector of Mines, Queenstown, reports as follows :—

*Lyell Blocks Copper Mine.*—Mr. Ferguson reports that his work has been confined to sinking the main shaft, which has been deepened 30 feet, and now totals 1050 feet from the surface. At the 1000-foot level a 14-foot chamber has been cut out, and a crosscut driven 37 feet to the western boundary that separates those workings from that of the Mt. Lyell Mining and Railway Company's North Lyell Mine, with 24 men.

*Late Lake Jukes Proprietary Mine, or Section 4019.*—Mr. James Souter, the present lessee, reports that work was commenced on the 11th of November, and directed to putting the camp in order, and opening a surface face on a pyritic body over No. 2 adit, in addition to clearing up the latter, and repairing its truck-road preparatory to driving south, in order to get under the ore body proved by the winze from No. 1 adit. Three men have been regularly employed.

NORTH-WESTERN DIVISION.

	Tons.	£	Men employed.
Murray's Reward (Balfour)...	261	1308	31
Others (estimated) (Balfour)	...	...	100
Jasper Co. (Heazlewood).....	14	325	10
Totals .....	275	1633	141

NORTHERN AND SOUTHERN DIVISION.

	Tons.	£	Men employed.
Mt. Mueller Mine .....	...	...	8

## COAL.

The output this quarter was 12,763 tons, against 14,685 tons the previous quarter. The output of the respective collieries was as follows :—

Colliery.	Tons raised.	Value at mine. £	Men employed.
Cornwall Colliery .....	5165	2324	65
Mt. Nicholas „ .....	7077	3185	60
Enterprise „ .....	...	...	...
Spreyton „ .....	274	178	7
York Plains „ .....	147	95	3
Illamatha „ .....	30	15	2
Catamaran „ .....	...	...	...
Mt. Cygnet „ .....	70	35	2
Totals .....	<u>12,763</u>	<u>£5832</u>	<u>139</u>

## SHALE.

Two men were employed at the Railton-Latrobe shale oil works.

## BISMUTH.

The output of bismuth during the quarter was as follows:—

	Tons.	£	Men.
Shepherd and Murphy Mine .....	1·4	500	...
Lady Barron Mine .....	0·1	40	...
Totals .....	<u>1·5</u>	<u>540</u>	<u>...</u>

## WOLFRAM.

The output of wolfram during the quarter was as follows:—

	Tons.	£	Men.
Avoca Mines.....	14·1	1410	*
Shepherd and Murphy Mine .....	6·1	610	*
Iris Mine .....	0·3	30	*
Lady Barron Mine .....	2·7	100	5
Totals .....	<u>23·2</u>	<u>2150</u>	<u>5</u>

\* Shown in tin returns.

## OSMIRIDIUM.

The output of osmiridium during the quarter was as follows:—

	ozs.	£	Men.
Savage River District .....	142·66	1087	100

The following return shows the average number of men employed in or about the mines during the quarter ending 31st December, 1912:—

District.	Europeans.	Chinese.	Total.
Northern and Southern .....	547	...	547
North-Eastern .....	668	74	742
Eastern .....	445	32	477
North-Western .....	920	...	920
Western .....	2903	...	2903
Total .....	5483	106	5589

Value of mineral output per man:—£58 19s. 11·27d.

Dividends paid by mining companies during quarter ending 31st December, 1912:—

	£	s.	d.	£	s.	d.
From Copper Mines:—						
Mt. Lyell Mining & Railway Co. Ltd. ....	...	...	...	Nil		
From Tin Mines:—						
Mt. Bischoff Tin Mining Co. ....	21,000	0	0			
Pioneer Tin Mining Co. Ltd. ....	14,108	0	0			
Arba Tin Mining Co. N.L. ....	1500	0	0			
Briseis Tin and General Mining Co. Ltd. ...	11,250	0	0			
Aberroe Tin Mining Co. ....	519	0	0			
South Mt. Cameron Tin Mining Co. ....	2400	0	0			
New Ruby Flat .....	609	0	0			
Montana Tin Mine .....	840	0	0			
S. & M. Syndicate Ltd. ....	3500	0	0			
				55,726	0	0
From Coal Mines—						
Cornwall Coal Co. ....	...			906	0	0
Total .....				£56,632	0	0

## APPENDIX I.

Geological Survey Office,

Launceston, Tasmania,

January 2, 1913.

DEAR SIR,

Having just returned from making geological examinations of the localities of Wynyard and Preolenna, I beg to submit the following epitome of the conclusions reached. My full report will follow as soon as it can be completed, but I am able to make the following definite statements:—

*Wynyard.*—After a careful examination of the country at Wynyard and in its immediate vicinity, it is apparent that no coal-bearing strata exist there.

Pre-Cambrian rocks are represented, which never carry coal seams. Tertiary strata are abundant, but these carry no real coal, merely lignite or brown coal, which is valueless for fuel purposes. Permo-carboniferous strata are certainly in evidence, but the coal-bearing series of this system are wholly missing, the only members present being the basal conglomerates, which geologically are lower than the coal horizon. The Mesozoic system, which carries the East Coast coal seams, is entirely absent.

What have been mistaken for indications of the existence of coal seams are simply loose pieces of coal met with in post-holes and river banks, and in the Tertiary strata. These have in all likelihood been derived from the seams of coal which occur in the hinterland, as if coal measures ever existed around the site of the township they have long since been removed by denudation.

I cannot, therefore, recommend the expenditure of any money for boring in this locality, as there is not the slightest chance of coal seams being found.

*Preolenna Coal Sections.*—The coal mining sections held at the present time are five in number, viz.:—4970-M (320 acres), 4967-M (320 acres), 5704-M (320 acres), chartered in the name of W. D. Weston, and 5964-M, 5965-M (both 240 acres) in the name of A. L. M. Graue. These comprise a total area of 1440 acres. There is another section, 4969-M, at present vacant, which, after being encroached upon by agricultural settlements, has now dwindled from an original 306 acres to 167 acres.

These sections are at present reached by road from Wynyard in a southerly direction for 19 miles. Nine miles of this road is metalled

but the remaining 10 miles are formed but not metalled. A spring-cart can, however, now go right to the mine workings, and with continued dry weather a bullock team may be got through.

There is certainly coal here of first-class quality. There are a large number of outcrops extending for over two miles in a north-easterly direction, and apparently for a considerable distance westerly in the direction of their dip.

I cannot say with certainty how many seams really exist until I correlate the whole of my data, but there are certainly two 2-foot seams of excellent coal, opened up by means of a shaft 50 feet deep and a tunnel 206 feet long, which, in my opinion, would pay for working, provided a tramway were available for transport to Wynyard. In addition there is a 15-inch seam between the two former seams, which would also pay for working under similar conditions.

There are other seams at present undeveloped, but a fair tonnage would be available from the three seams alone.

The extension of the seams westwards is a matter about which, in the writer's opinion, there is very little doubt, but to conclusively prove it I would recommend that the owners put down three bores, one in the northern portion of Section 4967-M, one in the north-eastern corner of 4970-M, and the third on the north side line of 5965-M. These bores would settle the question definitely.

The coal seams also probably extend still further west to the southern side of the Campbell Range, and this area is decidedly worth prospecting.

Assuming the continuance of the coal seams a mile west of the outcrops, which in my opinion is quite legitimate, there would be available from the two 2-foot seams more than a couple of million of tons of coal which would command a high market price.

Over £2000 from first to last have been expended in prospecting and opening up the property, but the absence of tramway facilities has hitherto been a bar to the raising of coal.

There is a very large expanse of excellent milling timber in this district which awaits means of transit to render it available. Stringy bark of gigantic size occurs in extensive belts; celery-top pine, blackwood, and myrtle are also present in large quantities.

A tramway constructed from Wynyard to section 4967-M, for which a route of good grade has been indicated (between 13 and 14 miles in length), which will be shown on the maps to accompany my full report, would make this coal and timber available.

The full report I hope to be able to submit to you within three weeks.

I have the honour, &c.,

LOFTUS HILLS, M.Sc.,  
Assist. Govt. Geologist.

## APPENDIX II.

State Mining Engineer's Office,  
Zeehan, 4th January, 1913.

*Report I.*

The following is the report for the work done during the month of December, 1912:—

*General.*—A room for offices was placed at our disposal by the Commissioner at the Courthouse, Zeehan, and this has been equipped with office furniture, and will be used as headquarters for all the work to be carried out.

*Zeehan Prospecting.*—Only one party was started here during the month. Their work has consisted in trenching across the main course of the lode in the southern portion of the Florence property. The lodes in this property were cut off or displaced by a fault to the south, the line of which bears about N. 68° W., and the object of the work is to pick up the lode south of this fault. In all 861 feet of trenching to bed-rock were completed, but so far this work has been without favourable result.

Arrangements have been made to put several parties on to the work around Zeehan with the new year.

*Prospecting Parties.*—The time was too short before the holidays to start any parties, but arrangements have been made to have parties at work early in the new year—(1) North of the Pieman at Renison Bell, (2) south of Mt. Zeehan, (3) west of Mt. Darwin, (4) towards Point Hibbs.

The country that is being opened up by a track cut from Crotty towards the Frenchman's Cap was examined, but it was decided not to send a party out here until the Franklin River was bridged. This bridge should be completed about February next.

*State Battery*—An examination has been made of the country between Renison Bell and X River, and it has been found possible to connect up the various mining properties at these two places to a central point, where a battery can be erected. A report has been furnished on this matter dealing with the whole question of the erection of a State battery.

*Old Tracks.*—Arrangements have been made to open up an old track from Darwin to the Andrew River, and this will be done by two men, who will also prospect the route.

*Point Hibbs Track.*—A good start has been made on this track, which will open up the Point Hibbs copper country, and also serve as the commencement of the track from Macquarie Heads to Port Davey. Double Cove, distant 12 miles from Strahan, and about half way down the southern shore of Macquarie Harbour, was taken as the base of operations, and since this work will be of a permanent nature, a small jetty has been thrown out, and a hut and store erected on the shore close to it.

Double Cove is a small inlet offering complete shelter in any weather to boats up to 8 feet draught, and capable, at a moderate cost, of being made a perfect little harbour for larger craft.

From this base an exploratory track has been carried back some three miles, which, with a few diversions, can be made into an efficient pack-track. This track should reach the sea in a total distance of about five miles, and will then be extended south along the coast. Ultimately it will be continued to Port Davey, and equipped with telephone line by the Federal authorities.

HARTWELL CONDER, State Mining Engineer.

The Secretary for Mines, Hobart.