

P-6004-5

THE ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA, LIMITED.
West Coast Department

COONAH MINE, ZEEHAN
(J.S. Minro, Lessee)

SOME NOTES ON THE LODE OCCURRENCES AND THEIR PROSPECTIVE VALUE TO THIS COMPANY.

The only available information relating to this mine is that given in reports on the Zeehan District by Government Geologists Waller (1904) and Twelvetrees & Ward (1910). The descriptions given in both reports are general and they are lacking in detail.

Workings are shallow and the shaft has been sunk to 450 ft. Six levels were opened from it and all levels explored, to some extent, the two main lode occurrences which were:-

- (a) The galena lode
- (b) The stannite lode

GALENA LODE:

This lode was worked down to No. 5 level (322 ft. below the collar of the shaft). The lowest, or No. 6 Level (422 ft. below collar of shaft) failed to disclose payable ore.

This ore-body appears to have been a typical Zeehan lode of the pyrite-galena type; Shoots of good ore occurring on the lode at intervals in the upper section, diminishing in size and frequency with depth.

The prospect of undisclosed ore existing in the lode appears to be no better than for the many other lodes of similar character and occurrence in this field.

STANNITE LODE:

This lode is to the west of and approximately parallel to the galena lode. Both lodes dip to the east, the stannite at a flatter angle than the galena lode. This leads Twelvetrees & Ward to suggest that they will junction about 150 ft. below the No. 6 Level.

The principal minerals present in the stannite lode are pyrite, stannite and chalcopyrite with small quantities of bismuthinite, tetrahedrite, wolframite, galena and jamesonite. The lode contents vary considerably and its constituents are frequently arranged in distinct bands parallel to the walls. The bands of stannite varying in thickness up to 2½ ft. in shoots 80 to 160 ft. in length.

This lode is said to have improved in depth. Twelvrees & Ward describe the lowest (No. 6) level as follows:-

"At Level No. 6 a nice lode continues along the north drive but it is not quite so good as it is in No. 5, although the rise 20 ft. up was better than in No. 5. At the end of the drive the lode is behind (the wall?) on the west side. This has been penetrated and found to consist of solid stannite for a width of 2 ft. The south drive from the crosscut carries a lode of pyrite, chalcopyrite and stannite, the latter a few inches wide."

A plan shows the south and north drives at No. 6 Level to be approximately 75 ft. and 150 ft. in length respectively. The report does not indicate whether the ore was continuous over these lengths.

Twelvrees & Ward state that at the date (1910) of their report they were informed that 17,000 to 18,000 tons of ore were calculated as being available. Production probably ceased about the end of this year.

A bulk analysis of Oonah Ore as mined in 1910 is given as:-

Ag.	...	22 ozs. per ton
Cu.	...	5.5%
Sn.	...	4.5%
Bi.	...	0.4-0.45%
Pb.	...	26-27%
S.	...	29%
SiO ₂	...	22-27%
Al ₂ O ₃	...	4-5%

Ore as mined was hand picked to improve the grade of parcels for sale. The values of a parcel of 70 tons sold in 1903 is given as

Ag.	...	63 ozs. per ton
Cu.	...	10.7%
Sn.	...	9.2%

This parcel would be won from a shallower horizon than that from which the "Ore as Mined" sample (quoted above) was obtained. It is doubtful whether hand sorting would improve the grade to the extent indicated by the values of the two samples given above and the indication may be that values are decreasing with depth.

SUMMARY:

For the purpose of records, the terms of the "Option" over a lease of 26 acres, embracing the Oonah Mine workings, offered to this Company (verbally to the Superintendent) by the Lessee, Mr. J.H.S. Minro of Burnie, are briefly stated, as follows:-

The lease is offered to this Company for a sum of £1,200. The period of the option to purchase is limited to six months from the 30th June, 1947. The Company to pay lease rents for the period of the option (i.e. six months) and expend on the lease a sum of money as would fulfil requirements of the labour covenants for twelve months. This would amount to £152.

The data available is insufficient to reliably assess the value of this property as a "prospect". It seems probable that a few thousand tons of ore remain to be mined above the lowest level and also that some ore continues below this level. As the workings are under water, no check on the ore remaining can be made without dewatering the mine and reconditioning the shaft and levels. This would be a costly undertaking and beyond our present capacity of labour, etc., for outside investigations.

It is possible that diamond drill bores could be put down to test the stannite lode below the existing lowest level, but having in mind the difficulties being experienced with the bores at present being put down in the Zeehan field, it seems unlikely that reliable results would be obtained.

The metallurgical problem of treating stannite ores has, I believe, yet to be solved. This difficulty, together with those enumerated above, does not, in my opinion, make this proposition attractive to us at the present time.

Supt.

Rosshery, 16.4.47

Conak - Atammite Lode.

Average widths & values at 1126 level.
 taken from every place located by
 A. J. Munro.

North Drive

Distance in ft + cut.	Av. width ins.	Av. Values Aggr. Cu% Zn%	Remarks
to 50'	13	20.2 4.3 2.6	This shoot out out 9' 5q + cut.
to 133'	27	3.4	Other values & Aggr.
to 300	28	19 4.1 1.6	
<u>South Drive</u>			
5 to 40'	8 1/2	13 5.1 1.7	
7 to 54 (offered)	6 1/2	14 8.0 7.0	
to 80'	8 1/2	23 7 4	

H. J. Burns

23/4/47.

Uonah - Starvick Lodge

Assays from No 6 Level

North Drive 0-50' N of centre of + cut
(This shaded out out of 50' + cut)

Depth	Ag	Cu	Sn				
20"	31.7	6.1	0.8	=	2	63.4	12.2 1.6
18"	11.0	2.5	0.5		2	22.0	5.0 1.0
8"	12.3	14.3	1.1		2	24.6	8.6 2.2
9"	26.1	3.2	4.0		1	26.1	3.2 4.0
10"	12	2.8	1.8		1	16.0	2.8 1.3
6"	28	3.1	3.3		3	84.0	9.3 9.9
5"	16.3	10.8	7.8		2/3	10.8	7.2 5.2
	12.5	4.4	3.2		1	12.5	4.4 3.2
	21.5	5.8	6.1		1	21.5	5.8 6.1
	6.5	5.2	5.1		1/3	2.2	1.7 1.7

14 = 783.1 60.2 36.2

13 ins - Av assay Ag 20.2% Cu 4.3% Sn 2.6%

North Drive - 62' to 133' N of + of + cut

Cu	Sn		Cu	Sn
1.6		18"	7.2	
8.5		18"	4.2	
3.9		46"	4.1	
1.8		60"	2.5	1.0
4.5	2.7	36"	4.1	1.8
3.0	1.0	36"	2.0	
2.8	1.4	33"	2.8	
		36"	1.8	

Ag 13.4% Cu 2.7% Sn 2.7%

with Drains - 150' to 300' north of S. of + out.

<u>in.</u>	<u>Ag.</u>	<u>Co.</u>	<u>S.</u>				
44	30	7.0	2.9 - 4 -	120	28.0	11.6	
21	33	8.9	7.2 - 3 -	99	26.7	21.6	
44	36	7.3	4.1 - 4 -	144	29.2	16.4	
6	21	3.1	0.6 - 4 -	84	12.4	2.4	
8	14.5	2.8	1.8 - 3 -	43.5	8.4	5.4	
12	12	3.0	0.9 - 4 -	48	12.0	3.6	
13	13	2.4	1.1 - 5 -	65	12.0	5.5	
9	9	2.6	1.5 - 2 -	14	5.2	3.0	
8	8	3.4	2.1 - 1 -	8	3.4	2.1	
1.7	0.4	0.3	0.3 - 3 -	5.1	1.2	0.9	
16	4.1	1.0	1.0 - 4 -	64	16.4	4.0	
13	4.0	0.8	0.8 - 5 -	65	20.0	1.0	
27	4.8	1.8	1.8 - 8 -	216	38.4	14.4	
15	3.0	0.8	0.8 - 7 -	105	21.0	5.6	
18	3.8	1.0	1.0 - 8 -	144	30.4	8.0	
45	6.8	4.1	4.1 - 8 -	370	52.8	32.8	
16.5	3.6	1.7	1.7 - 9 -	148.5	32.4	15.3	
15.5	3.3	1.5	1.5 - 7 -	108.5	23.1	10.5	
9	2.4	1.1	1.1 - 5 -	45	12.0	5.5	
17	3.8	1.2	1.2 - 4 -	68	15.2	4.8	
29	5.6	2.0	2.0 - 6 -	174	33.6	12.0	
45	7.9	2.1	2.1 - 4 -	180	31.6	8.4	
22	5.4	1.2	1.2 - 3 -	66	16.2	3.6	
12	3.5	1.5	1.5 - 4 -	48	14.0	6.0	

115 2432.6 495.6 204.4
 " " " 96 " 9

(3)

<u>Ag.</u>	<u>Cu</u>	<u>Sw</u>				
			115	2432.6	495.6	204.4
8	2.6	1.0	- 4 -	32	10.4	4.0
13	3.7	1.4	- 4 -	52	14.8	5.6
15	7.0	1.0	- 2 -	30	14.0	2.0
12	1.9	1.2	- 2 -	24	3.8	2.4
8	2.0	0.7	- 4 -	32	8.0	2.8
10	2.0	1.0	- 4 -	40	8.0	4.0
			135	2642.6	554.6	225.2

North Drive - 150-300' N of ϕ of ϕ + cut
width = 2.8 ins. - Av. Value, Ag. 19% Cu 4.1% Sw 1.6%

South Drive - 15' to 40' S of ϕ of ϕ + cut

<u>width</u>	<u>Ag</u>	<u>Cu</u>	<u>Sw</u>	
12.4	5.7	1.8		Av. width = 8 1/2 ins. Av. Value = Ag 13% Cu 5.1% Sw 1.7%
8.5	6.9	1.4		
11.4	6.0	1.6		
24.1	5.5	2.8		
8.5	1.5	0.9		
<u>64.9</u>	<u>25.6</u>	<u>8.5</u>		

South Drive - 47' to 54' S of ϕ of ϕ + cut.

18.3	10.6	8.8		Av. width = 6 1/2 ins Av. Value - Ag 14% Cu 8% Sw 7%
9.8	6.5	5.5		
<u>28.1</u>	<u>16.5</u>	<u>14.3</u>		

South River - 7 1/2' - 80' S 17 1/2' E + out

Depth	Aq	Co	Sw	Bv
7'	17.4	6.1	4.9	
"	29	8.0	3.2	1.06
	<u>46.4</u>	<u>14.1</u>	<u>8.1</u>	

Av. width = 8 1/2' in
 Av. values - Aq 23%
 Co 7%
 Sw 4%