

REPORT ON REPRESENTATIONS THAT A GOVERNMENT
BATTERY SHOULD BE ERECTED AT MATHINNA

In accordance with departmental instructions, a visit was paid to Mathinna, and Messrs. C.R. Cox and A.E. Lowe were interviewed in connection with their representations that a Government battery should be erected at Mathinna. At first, Mr. Cox did not appear interested in the matter but became interested later and stated that he considered that there should be a Government battery and that it should be located on Black Horse Creek and at the southern end of the town. Mr. Lowe stated that a battery should be erected in the region near the City of Melbourne and Lady Mary mines, 2 miles north-west from Mathinna. No other person made any representation to me, and it is obvious that there is no general movement to have a battery installed at Mathinna. Further, it will be noted that Messrs. Cox and Lowe have totally different ideas as to where the battery should be.

The present position regarding batteries at Mathinna and adjacent fields is that :-

- (1) Brock Bros. own a private battery which is installed on the Old Boys mines. A few parcels of gold-bearing quartz have been treated for other people during the past few years.
- (2) There is a dismantled battery at the New Golden Gate mine, part of which may have been removed, so that it cannot be regarded as serviceable for treating quartz.
- (3) There is at Fingal a 3-head Riverside prospecting battery belonging to the Mines Department.
- (4) There is at Mangana a 3-head Riverside prospecting battery belonging to the Mines Department.

The question of putting a battery at Mathinna depends mainly on the present and possible future mining activities on that field. The past and present activities can be discussed from several aspects, and some observations can be made as to possible future activities.

At the present time the leases held on the Mathinna chart (which embraces the Mathinna field) are ten in number and comprise 52M/40, 10958/M, 38M/39, 54M/40, 23M/39, 10998/M, 1201/G, 10726/M, 81M/39, and 79M/39. At present, no underground work is being conducted on any of these leases. Apart, possibly from any small-scale prospecting by individuals, the only activity in gold production is at the Golden Gate mine where the old slime dumps are being cyanided, and at the Old Boys mine, where Mr. Moses is installing plant to cyanide the sands from the Old Boys battery.

Only one lease is held on the Tower Hill chart to the south. No leases are held on the Dan Rivulet chart to the north, but six leases are held on the South Mount Victoria chart farther to the north. No mining activity was being conducted on any of these leases.

The production of gold from Mathinna for each year for the 11 years in the 1930-1940 period is given on the attached table. The total production (including some from Mangana) was 1,113 ozs. of gold. Of this, 282 ozs. of the Golden Gate production was from cyanidation of residues and tailings, while a considerable proportion of the production from sundry claims was from alluvial deposits. The total production of gold from reefs was, therefore, approximately 600 ozs. The amount of quartz from which this was obtained is not completely recorded, but it would probably not exceed 1,000 tons. The average annual production for the 11 years has, therefore, been approximately 55 ozs. from, say, 100 tons of quartz.

The future prospects of the field are discussed in K.J. Finucene's report (Bulletin No. 43) of 1933 and there has been no development of any importance since that date. There are no developed ore-reserves and reserves would have to be sought by exploratory and developmental work. It might of course, be possible to obtain a few tons of quartz of profitable grade but it is doubtful if any one could guarantee to supply 100 or even 50 tons from Mathinna at the present time.

As far as the Dan Rivulet field is concerned, a few tons of quartz of profitable grade might be obtained from the City of Melbourne, but no one could guarantee that even 5 tons could be mined. The Lady Mary dump was supposed to average 8 or 9 dwt. per ton, but a sample taken from all over the dump gave an assay result of 0.4 dwt. of gold per ton. This field suffers from lack of transport facilities and a road would have to be constructed before any battery could be installed.

The production over the past 11 years and the present position re ore-reserves prove that there is no justification for the erection of a battery at Mathinna. At the same time there are two other aspects which might be considered. Firstly, there is as much justification for a battery at Mathinna as there is for one at Mangana, and more justification than there is for one at Fingal. However, a matter of principle would not justify the expenditure of purchasing a battery for, or transferring one to Mathinna, and for erecting and housing it at Mathinna, if the battery would not be used owing to lack of supplies of quartz at Mathinna. Secondly, the question arises as to whether a battery at Mathinna would stimulate exploratory and developmental work and result in the production of supplies of quartz of profitable grade. It is almost impossible to answer such a question but as there have been batteries at Mathinna, Mangana and Fingal during recent years, and only small amounts of quartz have been produced, it would appear unlikely that any such stimulation would occur. The only difference that would exist in conditions between recent years and those if a battery were installed, would be that there would not be the transport charges from Mathinna to Mangana and Fingal (there would be no difference in transport costs to the battery of Brock Bros. and any Government battery at Mathinna). The matter could be readily tested if the Department undertook to pay transport costs to the batteries at Mangana and Fingal during the ensuing 12 months.

It is, therefore, recommended that:

- (1) There is no justification for the erection of a battery at Mathinna at the present time.
- (2) The Department should undertake to pay, for a period of 12 months, the cost of road transport on any parcels of quartz of profitable grade sent

from Mathinna to, and treated at, the Government batteries at Mangana and Fingal. The miners at Mathinna would then be in the same position as if a battery existed at Mathinna.

- (3) The position be reviewed at the end of 12 months, and the matter of a battery at Mathinna be decided by the amount of quartz of profitable grade mined at Mathinna and treated at the Government batteries at Mangana and Fingal or at Brock Bros. battery at Mathinna during that period.

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The Mines Department,
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12th November, 1941.

RETURN SHOWING QUANTITY AND VALUE OF GOLD PRODUCED FROM MATHINNA DISTRICT 1/1/30 TO 31/12/40

YEAR	GOLDEN GATE		OLD BOYS (BROCK)		JUBILÉE		F. MILLER		ENTERPRISE		SUNDRY CLAIMS x		TOTAL	
	Gold (oz.)	Value £	Gold (oz.)	Value £	Gold (oz.)	Value £	Gold (oz.)	Value £	Gold (oz.)	Value £	Gold (oz.)	Value £	Gold (oz.)	Value £
1930	56.57	240									16.14	70	73.01	310
1931	152.06	671	105.44	561							9.91	50	267.41	1282
1932	37.04	233									84.14	489	121.18	722
1933	90.52+	553			2.72	16					57.41	361	150.65	930
1934	76.53 ø	535									40.53	278	117.06	813
1935	87.64 ø	624	4.30	31							31.98	226	123.92	881
1936	5.23 ø	37	4.17	29							43.82	307	53.22	373
1937	22.36 ø	158	14.86	105							17.09	122	54.31	385
1938			27.316	191							24.796	181	52.112	372
1939							3.19	25			31.615	244	34.805	269
1940					8.461	71			14.63	123	42.789	359	65.880	553
TOTALS	527.950	£3051	156.086	£917	11.161	£87	3.19	£25	14.63	£123	400.520	£2687	1113.557	£6890

ø From cyanidation of battery tailings.

x Includes some returns from Mangana and includes alluvial gold.

+ From residues and debris.

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