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Report on Maintenance

Ora Banda Amalgamated No Liability

by

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DEPARTMENT OF SUPPLY AND SHIPPING.

MINERAL RESOURCES SURVEY.

REPORT ON MAINTENANCE

ORA BANDA AMALGAMATED NO LIABILITY.

Report No. 1945/39.

Situation - Grant's Patch, 18 miles West of Broad Arrow, which is 20 miles by rail North of Kalgoorlie.

Representative - J. A. Maloney, Palace Chambers, Maritana Street, Kalgoorlie.

Capital - £100,000, dividends paid £95,000 (according to Mine Manager).

Maintenance commenced - January, 1944.

Average per calendar month - (Six months to June 1945) £370.

Basis of maintenance - Five men employed.

- 1 Supervisor at £40.0.0. per month.
- 2 Winder Drivers at 28/5 per shift.
- 1 Maintenance man at 25/1 per shift.
- 1 maintenance fitter at 29/- per shift.

Expenses for 4 week period - 16/5/45 to 12/6/45

Wages..	.. .. .	£180.13.11.
Stores (mainly fuel oil)	.. .. .	27.18. 5.
Boiler Firewood (supplied by contract)	.. .. .	40.12. 6.
Water (by Government Meter)	.. .. .	21. 7. 0.
Fire Insurance	.. .. .	6.13. 0. X
Accident Insurance	.. .. .	23.12. 3.
Pay Roll Tax	.. .. .	3. 6. 8.
Third Party Insurance on Motor Truck.	.. .. .	1. 0. 0. X
		£305. 9. 9.
Plus 10% allowed for Administration..	.. .. .	30.11. 0. X
		£336. 0. 9.

On revised basis items marked X would not be allowed, and total for period would be £297.16.9. It is however considered necessary that maintenance charges on one motor vehicle are allowable on this mine, as it is situated 18 miles from the railway.

Usual Number of Men Employed - 50-70 (85 maximum).

Men required to resume operations at full scale - 50.

Ore Reserves - 9,200 tons, 7.1 dwts. per ton.

Average monthly throughput at full production - 2,000 tons.

Plant - 10 head battery, engines, pumps, classifier, tube mill, cyanide tanks, thickeners, Oliver filter, gold extraction plant, fitting shop, oil filter, blacksmith's shop - All in good order and well cared for.

Assay office, mine office and store, sundry dwellings; two shafts with headframes, steam engines and winders; two diesel engines and compressors; tool-sharpening and blacksmith's shops; pumps and various mining equipment.

Mine - The property comprises two mines of approximately the same

dimensions, on the same line of lode. These are known as Nicholson's and MacKenzie's, and the main shafts are approximately 1,000 feet apart. The mill is situated about a quarter of a mile West of Nicholson's shaft, and the ore was carted by lorry from both shafts to the plant. The total output from both mines is 161,532 tons for a return of 65,360 ounces of gold.

Nicholson's Shaft is down 576 feet and the bottom level (No. 6) is at 557 feet depth. Six levels ranging in length from 350 to 700 feet have to be maintained. Ore reserves in this mine comprise 2,300 tons (Company's estimate), average value 10 dwts. distributed in small blocks, mainly in upper levels of mine. Ore on bottom level is stated to be 312 feet in length, 4 feet average width, grade 10 dwts. per ton. Only exploration below is a winze in 12 dwt. ore for 30 feet depth.

Possible reserves below bottom level are estimated, by Manager, at 10,000 tons per 100 feet of depth. Prospects of attaining this appear reasonably good.

This mine is reported to make 32,000 gallons of water per day, and requires bailing six days per week, five hours per day. Water rises 2-3 feet above plat over weekend.

McKenzie's Shaft is 715 feet deep and bottom level (No. 7) is 710 feet deep. Five levels ranging in length from 500 to 700 feet have to be maintained. Ore reserves in this mine amount to 6,900 tons (Manager's estimate) of an average value of 6.2 dwts. per ton, of which 5,200 tons, between Nos. 7 and 6 levels, averages 5 dwts. per ton. This grade has not been payable in the past unless high grade ore is available from other sections of the mine to increase the average grade.

Dimensions of ore on the bottom level are, length 240 feet, width 4 feet, average grade 5 dwts. gold per ton.

No work has been done below the bottom level and as values have decreased with depth in this mine, and the grade of the ore on the No. 7 level is low, the prospects of developing important reserves of payable ore below the present bottom level, cannot be considered good, although it is reported that the ore in the end of the level when driving was stopped, was improving in grade, and is said to have averaged 9 dwts. gold per ton over the last 50 feet.

This mine makes comparatively little water, which is pumped from the Nos. 3, 4 and 5 levels, twice a week by air-driven pumps, and from the bottom of the shaft once a month.

Remarks - The following table, taken from a report by R.A. Hobson, W.A. Mines Department Geologist, illustrates production by this company and recoverable grade of ore:-

<u>Period.</u>	<u>Ore Treated,</u> <u>Tons (2240 lbs.)</u>	<u>Gold Obtained,</u> <u>Fine Ozs.</u>	<u>Recovered Grade</u> <u>dwts. per ton.</u>
1936	13193	7284	11.0
1937	16495	8309	10.1
1938	18730	8700	9.3
1939	18955	8020	8.5
1940	23775	8330	7.0
1941	24065	6649	5.5
1942	20745	5262	5.1
1943 (to Oct.)	13150	3266	5.0

There is little ore developed in the mine and the main reserves which could be prepared for stoping in a short time, are the 5,200 tons of 5 dwt. ore in McKenzie's section, which is not payable on its own. Sinking to another level and extensive

development work will be necessary at both mines before production can be resumed. This state of affairs is due to the fact that the mine carried on operations for a considerable period with insufficient manpower, and could not allocate any labour to development work.

Requirements for essential maintenance -

1. Both mines be kept unwatered to prevent water sluicing filling out of stopes onto levels, and to minimise risk of falls.
2. Levels required for working be kept in repair.
3. Maintenance of working plant required for unwatering, and general maintenance of other plant.

Present maintenance programme - Nicholson's shaft is bailed every day except Sunday. This involves getting up steam each morning.

McKenzie's shaft workings are pumped out twice a week. This involves running diesel engines and compressor to work air pumps.

5 levels in McKenzie's and 6 in Nicholson's are maintained and picked up where necessary.

Both shafts are inspected once a week.

Water has to be pumped from Government 42-mile dam twice a week.

Weekly Maintenance -

Winding Driver - Bailing six days one week, five the next.

Diesel Driver - Runs diesel four hours Monday and Thursday to pump out McKenzie's shaft. Relieves Winding Driver on day off. Remainder of time on maintenance work underground, firewood and odd jobs.

Maintenance Man - Pumping McKenzie's shaft four hours Monday and Thursday. Remainder of time on mine maintenance and repairs.

Fitter - Tuesday and Friday pumping water from 42-mile dam. Saturday patrols pipelines and effects any necessary repairs. Rest of time on general repairs and maintenance.

Overseer - General supervision and maintenance. Looking after stores, pay and monthly reports.

Conclusions and Recommendations - Maintenance requirements are heavier at this property, considering the monthly throughput, largely because there are two separate mines. It is considered that the mine is in sufficiently good condition that it can be kept maintained by four men, and that the services of the maintenance man could be dispensed with.

If repairs to any of the levels, too extensive to be carried out by the available staff, should become necessary, the Inspector of Mines should be empowered to approve of the employment of casual labour to assist in carrying out the necessary work.

No petrol was seen in the list of stores used, but it is considered that an allowance of petrol adequate to maintain supplies to the mine, should be permissible maintenance charge.

Date..... (Commonwealth Geologist?)

Date..... (District Inspector of Mines).