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COMMONWEALTH OF AUSTRALIA

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DEPARTMENT OF NATIONAL DEVELOPMENT  
BUREAU OF MINERAL RESOURCES  
GEOLOGY AND GEOPHYSICS

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**RECORDS:**

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1945/48

Report on Maintenance  
Spargo's Reward Gold Mine

by

N.H. Fisher

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DEPARTMENT OF SUPPLY AND SHIPPING.

MINERAL RESOURCES SURVEY.

REPORT ON MAINTENANCE.

SPARGO'S REWARD GOLD MINE.

REPORT NO. 1945/48.

Situation: 27 miles S.S.E. of Coolgardie on the main road to Norseman.

Capital of Company: Subscribed capital £96,564.

Value of Plant, Buildings and Stores: At July 1st, 1941, was approximately £27,500.

Representative: Spargo's Reward Gold Mine (1935) No Liability, C6 Paton and Morris, Pastoral House, St. George's Terrace, Perth.

Maintenance Commenced: December, 1942.

Average Amount per Calendar Month: (December 1944 - May 1945) £285.9:3. Prior to December 1944, the monthly amount was £202.

Men Employed on Maintenance:

|                 |     |     |           |
|-----------------|-----|-----|-----------|
| 1 Overseer      | ... | £40 | per month |
| 1 Winder Driver | ... | £33 | " "       |
| 1 Pumpman       | ... | £33 | " "       |
| 1 Carpenter     | ... | £34 | " "       |
| 1 Diesel Driver | ... | £33 | " "       |

Authority has also been given by the State Mines Department to employ one surface labourer at £30 per month.

Expenses for May, 1945:

|                                |     |            |
|--------------------------------|-----|------------|
| Wages                          | ... | £156. 0. 0 |
| Stores                         | ... | 19. 6. 2   |
| Fuel (Diesel oil, timber etc.) | ... | 50.13.10   |
| Accident Insurance             | ... | 18. 0. 0   |
| Fire Insurance                 | ... | 6. 0. 0 X  |
| Mine Workers' Relief Fund      |     | 10. 6      |
| Pay Roll Tax                   | ... | 1.17.10    |
| Administration                 | ... | 10. 0. 0 X |

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£262. 8. 4

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X Items marked 'X' are no longer allowable.

Usual Number of Men Employed: 66 men were employed in September 1941. Probably 60 to 70 men would be required to bring the mine into full production again.

Ore Reserves: At October 25th, 1941, the Manager estimated 9,500 tons of positive ore averaging 6 dwt. gold per ton and 49,000 tons probable ore averaging 5.5 dwt. gold per ton.

Average Monthly Throughout: During the twelve months ended June 30th, 1941, 22,219 tons of ore and 4,731 tons residues were treated, an average total of 2,345 tons per month.

**Plant:** The plant consists of a Bellis and Morcom diesel engine, compressor, generator, ore bin, jaw cracker, conveyor belt, ball mill, strake tables, classifier, 2 agitators, 2 thickeners, 4 clarifiers, 1 surge tank, Oliver filter, zinc boxes, water tanks, various engines, motors and other gear; also blacksmith and tool sharpening shop, office, store, change house, assay office, 5 staff houses, 8 men's huts.

**Mine:** The main lode strikes north-south and dips vertically. Another western lode has also been opened up on the lower levels, but not yet mined to any extent. The walls stand well. The ore is mostly mined out above the No. 3 Level, but is largely intact between No. 3 and No. 4. The prospects of additional ore below No. 4 Level seem good.

During the last year worked, 16,230 tons were mined for a return of 4,109 ozs. of gold. The total production has been 105,397 tons of ore for 26,318 ozs. of gold.

The mine makes 18,000 gallons of water per day, which is removed partly by bailing from the pump below No. 4 Level and partly by pumping from No. 3 Level.

**Requirements for Essential Maintenance:** The question of whether the mine should be kept unwatered depends largely on the length of time that is likely to be involved. Water was struck just below the No. 3 Level and it is not known to what height it would rise if the mine were allowed to fill up. If the mine is to be kept dewatered, the shaft has to be examined regularly and the ropes kept oiled and greased and the winder and power house maintained in working order. The levels can also be maintained if necessary. All the motors should be run once a week, the Oliver filter kept moist by keeping the tank full of water and turning by hand once daily. An account is to be kept of stores used.

The following non-recurring maintenance work has been carried out. The motors and all exposed moving parts have been covered with an iron hood. Repairs have been effected to the Oliver filter, to the pumps, to the McDonald engine (which drives the jaw cracker and Huntington Mill), to the Thompson Vacuum pump, to the Kelly and Lewis pump and to the winder. The fuel oil tank has been painted; agitators, thickeners, clarifiers and surge tanks have been tarred outside and painted with fuel oil inside.

The following work has also been approved by the Mines Department on the basis that labour is supplied under the Maintenance Scheme and all necessary materials are provided by the Company.

(1) Repair the boiler; the water space stays need renewing and several fire tubes are to be replaced. Because of the poor condition of the boiler, the maximum allowable pressure has been reduced by the Inspector of Machinery to 70 lbs. per sq. in. This work has not been done because it has not yet been possible to obtain a contractor to do the job.

(2) Overhaul the Bellis and Morcom engine and compressor. This is required as a standby unit and can be used to keep the mine dewatered by pumping if the boiler should break down and hold up bailing. At present it is used 3 or 4 days per week to pump water from the No. 3 Level.

(3) Repair 4" air main. This main runs underground from the Power House to the main shaft and has been corroded by mineralised water from the drain.

(4) Repair staff quarters. New hessian walls are needed.

(5) Cement interior of water tanks and other tanks which are in bad repair. This work is being done,

As far as maintenance is concerned, the plant is in good order with the exception of the above items.

Present Maintenance Programme: Winder driver bailing six days per week.

Diesel driver running engine 3 or 4 days a week to supply air for pump on No. 3 level.

Pumpman pumping No. 3 level 3 or 4 days per week. These two men are employed on surface and other maintenance work for the remainder of the time.

Carpenter repairing plant and houses.

Overseer on surface maintenance, cementing tanks, keeping accounts and obtaining stores from Coalgardie.

Recommendations: The water from No. 3 level should be allowed to run, or should be piped down the shaft and all dewatering done by bailing.

The boiler should be repaired as soon as possible.

The approval for employment of an extra hand should be withdrawn.

All hands should be put on to the repair work mentioned and the maintenance crew reduced to three men when that work has been completed to the satisfaction of the District Inspector of Mines.

An alternative is that the water be allowed to rise in the mine and that all hands be put on to the above repair work. If the water shows a tendency to rise above No. 3 level, it should be kept bailed to that level. If not, maintenance could be eventually reduced to the basis of a caretaker.

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(L. C. Olive)  
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2/8/45.