DEPARTMENT OF MINES
SOUTH AUSTRALIA

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GEOLOGICAL SURVEY

MINING BRANCH

ORAPARINNA BARYTES MINE

by

L.L. Mansfield
Inspector of Mines & Quarries

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DEPARTMENT OF MINES
SOUTH AUSTRALIA

CRAPARINNA BARYTES MINE

ABSTRACT

A two day visit was made and the mine and surface workings were inspected and the future development was discussed with the manager whose estimates of tonnages are quoted.

SITUATION

The mine is situated about 10 miles NE of Craparinna Head Station and 66 miles NNE of Hawker, County of Taunton.

PREVIOUS REPORTS

Mining - Mining Review 73 p. 69, 1941 (Cornelius)
" " 75 p. 68, 1942 (Cornelius)
" " 76 p. 97, 1943 (")
" " 82 pp. 121-127, 1946 (Mansfield)
" " 86 pp. 113-114, 1947 (")
" " 87 pp. 203-204, 1948 (")
" " 91 pp. 200-201, 1951 (")

Geology - Mining Review 82 pp. 82-89, 1946 (Broadhurst)
" " 102 pp. 84-100, 1955 (Gibson)
" " 113 pp. 10-15, 1960 (Nixon)

Metallurgical -
Mining Review 100 pp. 103-113, 1954 (Jackson)

PRODUCTION

This has been from broken ore in stopes and from the dumps, the total tonnage recovered from the dumps to date has been 26,000 tons. The estimate of barytes on dumps is 60,000 tons.

No. 3 level 1. lode stope has been nearly beaten out on Western end between Co-ords 5100N and 5230N a distance of approximately 300' although there is still about 50' of backs at 5370N, thinning to the 25' level pillar at 5230N.

The Branch lode off 1C and to the East of 1C has been driven on for 178' from station 305 and is being stoped.

At approximate Co-ords 5230N a rise was put up through the level pillar to No. 2 level, the timber above No. 2 level at 12 chute shot out and the broken ore in 1C stope allowed to shrink through the beaten out section of 1C stope No. 3 level where it is trucked to the plant.

DEVELOPMENT

Since the last visit the following development has been done.

No. 2 Level A X-cut of 12' has been put out to seek the possible new lode as recommended by Gibson but with negative results.

No. 3 Level As mentioned above 178' of driving has been done on the branch lode and about a 100' length has been stoped.

The X-cut to the West has been extended a further 36', this time the direction has been altered to about 90° from 1C lode in an endeavour to cut 1A lode on this horizon, and it is expected that another 20' of X-cutting will do this.

ORE RESERVES

Broken Ore in stopes

No. 3 level	1C	6,720 tons	
	1B	15,000 tons	
No. 2 level	1A	10,000 tons	(can be trucked to No. 1 Winze)
	1C	2,500 tons	
	1C Nth. End.	30,000 tons.	

The total of dump and broken ore reserves is thus 124,000 tons but there is little chance of checking the quantities as the stopes are inaccessible above No. 2 level.

DEVELOPMENT REQUIRED

Company policy is opposed to development and to the non technical board no doubt the 124,000 tons estimated as broken ore and in dumps seems impressive but they do not understan that some stopes will have to be used to pass the ore from the undeveloped lodes above down to the adit level and that if these stopes are left empty the walls will collapse rendering such operations impossible.

Had a vigorous development policy been adopted at the inception of activities the lode pattern would have been fully known and the development and stoping properly planned on subsequent levels.

No. 1 Level

1A lode has been steped above No. 1 level up to fault D. The Manager is loth to pull any ore from this section as he realises access has to be gained to the ore beyond the fault. An examination of the outcrop shows that the lode can be driven on at a horizon about 40' above No. 1 level. The drive would have to be taken through the fault and the spoil tipped into the stope. No estimate of reserves can be made but it could be many thousands of tons.

No. 2 Level

1A Lode. Nothing has been done on further development on this lode, admittedly the barytes is much broken up in the face but further driving is warranted.

1B Lode. There has been no further development on this body in either direction despite numerous recommendations by the writer and geologists.

No. 3 Level

1A lode. A strong body of ore has been encountered at the Northern end of the workings. This could be 1A lode but to keep the trucking grades constant it would be better to drive on this body when intersected by the westerly cross-cut.

GENERAL

As anticipated roofing bolts were not successful in holding the walls and a system of pillars and stulls is being used with a degree of success in steping above No. 3 level.

The acquisition of an electric storage battery locomotive ex Radium Hill has eased the trucking position.

CONCLUSIONS

The mine is an important producer of barytes of all grades but is sadly lacking in development. There is a possibility of immense reserves which could be proved by a few hundred feet of development. This should be done before further ore is drawn from the stopes.

Mansfield

L. L. Mansfield
INSPECTOR OF MINES & QUARRIES

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