EXPLORATION LICENCE 3488

STAR CREEK, NORTHERN TERRITORY

FINAL REPORT, 15TH NOVEMBER 1983
CONTENTS

1. GENERAL STATEMENT

2. TITLES

3. FIELD INVESTIGATIONS
   3.1 Survey of Aboriginal Sacred Sites
   3.2 Reconnaissance Loam Sampling
   3.3 B.M.R. Aeromagnetic Survey

4. RESULTS OF FIELD INVESTIGATIONS
   4.1 Loam Sampling

5. CONCLUSIONS

6. EXPENDITURE.

FIGURES

1. E.L. 3488 Star Creek, Northern Territory Location Map  A4-205

2. E.L. 3488 Star Creek, Northern Territory Location of Loam Sample Sites.  A2-336
EXPLORATION LICENCE 3488  
STAR CREEK, NORTHERN TERRITORY  
FINAL REPORT, 15TH NOVEMBER 1983

1. GENERAL STATEMENT

Exploration Licence 3488 was taken up primarily to test the diamond potential of the area. A subsidiary interest is the potential for base metal mineralisation.

Field work was carried out in August, 1982 when a programme of reconnaissance loam sampling was undertaken. These samples have now been processed and observed and no kimberlitic indicator minerals have been found. No further work is warranted and the licence was relinquished on 15th November 1983.

2. TITLES

Exploration Licence 3488 of 311.81 square miles was granted to BHP Minerals Limited on 19th April, 1982 for six years. Its location is shown on Figure 1. It was relinquished on 15th November 1983.

3. FIELD INVESTIGATIONS

3.1 Aboriginal Sacred Sites

As a result of discussions with the Central Land Council, a field officer visited the area early in August. Together with local traditional owners, he pointed out two sacred sites in the area of the exploration licence. These two areas did not coincide with any proposed sample locations within our exploration programme. During exploration, field staff did not go near these sites as requested by the Central Land Council and the traditional owners.

Cont./..
3.2 Reconnaissance Loam Sampling
Loaming was chosen as the exploration technique for this area, because it is not suitable for stream sampling. Topographically it has low relief with isolated gneiss hills and is poorly drained. The two major creeks are wide and sandy with relatively poor heavy mineral trap sites.

The area forms part of BHP's regional exploration programme covering several E.L.'s in the Reynolds Range. A reasonable number of station tracks and fence lines exist and it was decided to sample along these at an interval of one kilometre.

Exploration commenced in August 1982 and 202 reconnaissance loam samples were collected.

At each location an area of one square metre of undisturbed ground was sampled by collecting the top few millimetres of surface sediment. This residual surface material was then sieved through a 4mm screen to remove oversize vegetation. The samples collected varied in weight from 5 to 10 kg depending on the nature of the sediment. These samples were despatched to our Perth laboratory for kimberlitic mineral examination.

3.3 B.M.R. Aeromagnetic Survey
The published B.M.R. aeromagnetic data was examined for possible kimberlitic type anomalies. None were found that warranted any ground follow-up work.

4. RESULTS OF FIELD INVESTIGATIONS

4.1 Loam Sampling
The samples were processed at our Perth laboratory to produce a heavy mineral concentrate. The minus .5 mm plus .4mm fraction was then observed, in Adelaide, for kimberlitic indicator minerals. None were found in any of the 202 loam samples.
5. CONCLUSIONS

In view of these negative results and the similar absence of indicators in the adjacent Reynolds Range E.L.'s recently surrendered by BHP Minerals no further work was warranted. Therefore this E.L. was relinquished on 15th November, 1983.

6. EXPENDITURE

Expenditure debited to E.L. 3488 to 30th November, 1983 was:

- Wages and Salaries: 3,978
- Field Support: 4,954
- Vehicles: 3,353
- Equipment: 833
- Geochemistry: 2,397
- Tenement fees: 1,275
- Surveying: 17
- Consultants: 65
- Sundries: 24
- Services: 11,026
- Administration & Overheads: 2,792

Total: $ 30,714

This report is submitted to the Department of Mines and Energy as required by Condition 7 of Exploration Licence 3488.