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EXPLORATION LICENCE 4675 TOPWELL

NORTHERN TERRITORY

FINAL REPORT - 26TH SEPTEMBER, 1985

HUCKITTA SF 53-11

R. J. TAYLOR,
ADELAIDE.

NOVEMBER 1985

CR 86/026A

NORTHERN TERRITORY
GEOLOGICAL SURVEY
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1. GENERAL STATEMENT

Exploration Licence 4675 was taken up to test the kimberlite potential of the area. An aeromagnetic anomaly, Ha, was selected from the BMR published aeromagnetics as being a potential kimberlite. A low level aeromagnetic survey was flown over a small area three by four kilometres. This was followed up by a ground magnetic survey. The data was re-assessed at this stage and it was decided that further exploration was not warranted and the licence was relinquished on 26th September, 1985.

2. TITLE

Exploration Licence 4675 over an area of 16 blocks was granted to BHP Minerals Ltd. on 22nd November, 1984 for a period of six years. The area was relinquished on 26th September, 1985. Its location is shown in Figure 1.

3. FIELD INVESTIGATIONS

3.1. Aeromagnetic Survey

This area was selected for kimberlite investigation after an examination of the BMR Huckitta 1:250,000 Aeromagnetic Map. A low level aeromagnetic survey was flown for BHP Minerals Limited by Aerodata Services Pty. Ltd. over an area of twelve square kilometres. The survey was flown at a height of 70 metres with 200 metre spacing between north-south flight lines. The total field magnetic contour map and stack profiles are shown on Figure 2.

3.2. Aboriginal Sacred Sites

The Sacred Sites Protection Authority and the Central Land Council were consulted with regard to sacred sites within the licence area. The Central Land Council advised that Land Claim No. 83, the Jervois Stock Route, crossed the northern part of the E.L. However, the anomaly was positioned to the south and we were advised by the C.L.C. that the anomaly location was clear of any sacred sites.
3.3. Groundmagnetic Survey

This anomaly, Ha, lies on the edge of a magnetically active area. It was located on the ground by three north-south ground magnetic lines varying in length from 1 to 1.6 km. Readings were taken every 10 metres using a Scintrex MP2 and an automatic base station magnetometer was used for diurnal corrections. The corrected ground magnetic contours and profiles are shown in Figure 2.

4. CONCLUSIONS

With the completion of the ground magnetics the kimberlite potential of this anomaly was re-assessed.

It was decided that further exploration was not warranted and the area was relinquished on 26th September, 1985.

5. EXPENDITURE

Expenditure debited to Exploration Licence 4675 was:

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$6,182