EXPLORATION LICENCE 218
MUNMALARY, NORTHERN TERRITORY
ANNUAL REPORT
for
the year ended 27th May, 1974.
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EXPLORATION LICENCE 218 MUNMALARY, NORTHERN TERRITORY


1. GENERAL STATEMENT

Dampier Mining Company Limited began exploration of Exploration Licence 218 on 13th October, 1973 under an agreement with the titleholder Peko Mines N.L. and E.Z. Company of Australia Ltd.

Field work included airborne geophysics, ground magnetic gravity and radiometric traversing, and outcrop mapping.

Field work was suspended on the 18th November. Collation and assessment of results commenced as data became available.

2. FIELD INVESTIGATIONS

2.1. Ground Traversing

2.1.1. Surveying

A total of 32.5 kilometres in four lines (1, 2, 3 & 4) was grid surveyed by chain and compass.

Stations were pegged at 50 metre intervals and levelled at 100 metre intervals.

2.1.2. Gravity Traverses

Gravity readings were read at 100 metre intervals on all lines giving a total of 325 stations. Bouguer gravity profiles were calculated and plotted.

2.1.3. Magnetic Traverses

Magnetics were read along 2 and 3 (13.0km) at 25 metre stations using a Geometrics G816 proton magnetometer measuring total field.

2.1.4. Scintillometer Traverses

A Scintrex BGS-12 scintillometer was read on lines 2 and 3 (13.0km) at 25 metre spacings.
2.2. **Airborne Survey**

A contract airborne magnetic and spectrometer survey was carried out over the licence by Aero Services (Australia) Pty Ltd during November 1973.

The survey was flown on east west traverses at a mean terrain clearance of 90 metres and a line spacing of 200 metres. The airborne system consisted of a magnetometer accurate to \( \pm 1 \) gamma and a spectrometer based on a 1100 cubic inch NaI crystal. Analogue spectrometer records were adjusted on line for Compton Scatter. A total of 1420 line kilometres were flown.

2.3. **Geological Mapping**

Mapping was confined to roads and to the geophysical traverses.

3. **RESULTS**

3.1. **Ground Traversing**

The results of gravity, magnetic and scintillometer traversing and the location of these traverses are shown on Figures 1 and 2.

3.2. **Airborne Survey**

Results of the airborne magnetic and spectrometer survey are shown on figures 3 and 4 which comprise magnetic contour and uranium channel contour maps.

No areas strongly anomalous in uranium were outlined.

3.3. **Geological Mapping**

No outcrops of any significance were located by the brief mapping done.
4. PERSONNEL

The following personnel were employed on work connected with Exploration Licence 218 by Dampier Mining Company Limited.

1 senior research geophysicist
2 geophysicists
1 senior geologist
1 geologist
1 field supervisor
1 field assistant

Contractors
1 aerial survey crew
1 surveying crew
1 gravity crew.

5. EXPENDITURE

Expenditure debited to Exploration Licence 218 by Dampier Mining Company Limited to 31st May, 1974 is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and Salaries</td>
<td>$2,880</td>
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<tr>
<td>Messing and Accommodation</td>
<td>685</td>
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<tr>
<td>Fares and Mobilisation</td>
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<td>Transport</td>
<td>1,208</td>
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<td>Aircraft Charter</td>
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<td>Contract Geophysical Services</td>
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<td>Contract Plant Services</td>
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<td>Sample Analysis</td>
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<tr>
<td>Capital Items</td>
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<tr>
<td>Vehicles</td>
<td>760</td>
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<tr>
<td>Miscellaneous</td>
<td>1,035</td>
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<td><strong>Total</strong></td>
<td>$30,325</td>
</tr>
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Expenditure by Geopako during the period 30-5-73 to 31-8-73 $1,578.

Total expenditure on Exploration Licence 218 during the year ended 31st May, 1974 is $31,903.
This map accompanies an application dated .......... on behalf of Geopeko Limited.

Area applied for retention.

Map photo copied from Alligator River 5D53-1

1:250,000 scale

THE BROKEN HILL PROPRIETARY CO. LTD.
APPLICATION FOR REDUCTION & RENEWAL
E.L. 218, MUNMALARY AREA, N.T.

CENTRE MELBOURNE

DATE 27-3-75

DRAWING NO. A4:1582

KILOMETRES

0 5 10 15