ANNUAL REPORT ON
EXPLORATION LICENCE 5088
FOR THE PERIOD 16.1.88 TO 15.1.89

Compiled by: J. Freyberg
Geopeko
January, 1989
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FIGURES

TF 3621 LOCATION OF PROSPECT
1. **INTRODUCTION**

EL 5088 was granted to Geopeko (A Division of Peko Wallsend Operations Limited) on 16.1.87 and covers an area of 56 blocks located approximately 80 kms south east of Tennant Creek (TF 3621).

This is the second Annual Report and outlines exploration activity undertaken by Geopeko from 16.1.88 to 15.1.89, and exploration proposals for the third licence year.

2. **TOPOGRAPHY**

The licence area forms part of a plain, with rare clay pans and no distinct outcrop. There are no permanent waterholes or mapable drainage channels in EL 5088.

Spinifex is the predominant vegetation of the area, with lesser turpentine, ghost gum, snappy gum and tea tree. Access is via a 4-wheel drive track from Gosse River, eastwards through EL 5024, to the north west corner of EL 5088. No other tracks exist in the area.

3. **EXPLORATION HISTORY / PHILOSOPHY**

High level geophysical surveys were conducted by the Bureau of Mineral Resources in 1956 and 1960. Exploration over the area, between 1983 and 1986, was carried out by Aberfoyle Exploration Pty Ltd and C.R.A. Exploration (EL 4254 and EL 3537 respectively) with no success.

Geopeko's exploration philosophy has been identifying magnetite/hepatite bodies by firstly aeromagnetics and the then ground magnetic surveys.
4. WORK UNDERTAKEN DURING THE SECOND LICENCE YEAR

The difficulty of access into the lease area combined with the unfavourable results from other drill holes at Gosse River, resulted in little work being undertaken on the licence area.

Three anomalies in EL 5024, at Gosse River, were drilled and there was no economic mineralisation. The lithologies intersected at Gosse River consists of metamorphics that are dissimilar to the sediments of the Warramunga Formation. As it is the Warramunga Formation which hosts the mineralised ironstones at Tennant Creek, the exploration philosophy for the whole Gosse River area had to be re-evaluated. The re-evaluation of the Gosse River area including EL 5088, resulted in no further drilling or ground geophysics being conducted in the area.

5. EXPENDITURE

Total expenditure on EL 5088 during the second licence year was $1,691. The covenant for the lease was $24,000. The shortfall in expenditure was a result of the re-evaluation of the geology and mineralisation of the Gosse River field. A variation of covenant is thus requested. A breakdown of costs is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenditure($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td></td>
</tr>
<tr>
<td>- Geologist</td>
<td>417</td>
</tr>
<tr>
<td>- Drafting</td>
<td>459</td>
</tr>
<tr>
<td>Wages</td>
<td></td>
</tr>
<tr>
<td>- Field Assistants</td>
<td>62</td>
</tr>
<tr>
<td>- Other</td>
<td>26</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>964</td>
</tr>
<tr>
<td>Base Support Costs</td>
<td>437</td>
</tr>
<tr>
<td>Management</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td>727</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$1,691</td>
</tr>
</tbody>
</table>
6. PROPOSED EXPLORATION PROGRAM FOR THE THIRD LICENCE YEAR

a) Location and evaluation, by ground traverses, the magnetic anomalies at:
   1. AMG Coordinates: 486 000E / 7799 500N
   2. AMG Coordinates: 493 000E / 7800 800N
   Based on this information, further anomalies may be located.

b) Reverse Circulation drilling of at least two prospects which cover significant magnetic anomalies (approximately 300m).

c) A R.A.B. drilling program, in conjunction with low level analytical determinations, to identify areas of mineralisation associated with both ironstone and metamorphosed intrusive bodies (approximately 1,000 m).

d) Downhole geophysical surveys.

e) Further compilation of an interpretive geological map.

7. PROPOSED EXPENDITURE

The proposed expenditure for the exploration program for the third tenure year is $42,000.oo. A breakdown of the costs is as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenditure($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>8,000</td>
</tr>
<tr>
<td>Vehicles</td>
<td>3,000</td>
</tr>
<tr>
<td>Field Supplies</td>
<td>2,500</td>
</tr>
<tr>
<td>Instrument Hire</td>
<td>1,000</td>
</tr>
<tr>
<td>Drilling - Reverse Circulation</td>
<td>10,000</td>
</tr>
<tr>
<td>- R.A.B.</td>
<td>10,000</td>
</tr>
<tr>
<td>Analytical Costs</td>
<td>2,500</td>
</tr>
<tr>
<td>Administration</td>
<td>5,000</td>
</tr>
</tbody>
</table>

$ 42,000
REPORT TITLE  
ANNUAL REPORT ON EXPLORATION LICENCE 5088 FOR THE 
PERIOD 16.1.88 TO 15.1.89

AUTHOR(S)  
J. H. FREYBERG

PUBLISHER  
GEOPEKO (A DIVISION OF PEKO WALLSEND OPERATIONS LIMITED)

PLACE OF PUB'N  
TENNANT CREEK

DATE OF PUB'N  JANUARY, 1989

NO. AND PAGES OF APPENDICES

* NO.'S OF  
(1) PHOTOS  
(2) DIAGRAMS  
(3) TABLES

ACCOMPANIMENTS  
(4) PLANS  
(5) GRAPHS  
(6) LOGS

LICENCE NO.(S)  
EL 5088

PROJECT YEAR(S)  1988 TO 1989

LICENCEE(S)  
PEKO WALLSEND OPERATIONS LIMITED

OPERATOR(S)  
GEOPEKO

1:1 000 000 map name(s) and No.(s)

1: 250 000 map name(s) and No.(s)  TENNANT CREEK SE 53-14

1: 100 000 map name(s) and No.(s)  GOSSE RIVER - 5858

1: 50 000 map name(s) and No.(s)

PROSPECT NAME

** SITE LOCATION  
LAT:  
LONG:  
EAST:  
NORTH:  

*** TECTONIC UNIT  
TENNANT CREEK BLOCK

MAJOR TERM  
X METALS  
NONMETALS  
PETROLEUM  
OTHER

**** MINOR TERMS  

DRILLING  
□ DIAMOND  
□ PERCUSSION  
□ AUGER  
□ ROTARY

COMMODITIES  
□ U  
□ Au  
□ Ag  
□ RESISTIVITY  
□ Cu  
□ Pb  
□ Zn  
□ GRAVITY  
□ Sn  
□ W  
□ Dmd  
□ Geophysical Anom  
□ Bi  
□ Other

OTHER TERMS:

NOTES

ABSTRACT ATTACHED

DEPARTMENTAL USE ONLY

REPORT NO  
TEXT LOCATION

SECURITY  
ENTRY NO
ORGANISATION: GEOPEKO (A DIVISION OF PEKO WALLSEND OPERATIONS LIMITED)

PROSPECT: E.L. 5088

TITLE: ANNUAL REPORT ON EXPLORATION LICENCE 5088
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AUTHOR 1: FREYBERG INITIALS: J. H.

AUTHOR 2: INITIALS:

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PAGES:

SUBJECTS: RE-EVALUATION

COMMODITIES: Au, Cu, Bi

LOCALITY: GOSSE RIVER MAP REF NO: 5858

MAP REF NAME: GOSSE RIVER

ABSTRACT (200 WORDS OR LESS)

THE FAILURE TO INTERSECT WARRAMUNGA GROUP SEDIMENTS IN THE GOSSE RIVER
AREA (EL 5024), RESULTED IN THE RE-EVALUATION OF THE EXPLORATION
PHILOSOPHY FOR THE AREA. AS A RESULT LITTLE DIRECT WORK WAS CONDUCTED
IN E.L. 5088 BETWEEN 16.1.88 TO 15.1.89.