ANNUAL REPORT FOR THE PERIOD ENDING 13th DECEMBER 1984.

OPEN FILE

G.R. Orridge
J.W. Shields
March 1985

NORTHERN TERRITORY GEOLOGICAL SURVEY CR 85/134
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SUMMARY

Work carried out during 1982-1983 indicated that some of the area was not prospective for gold. Accordingly, this part of the area was relinquished, and exploration was directed at the remaining area, where favourable stratigraphy and structure were present.

Field work consisted of geological mapping and gold determinations by panning. Two geologists and two prospectors were employed in this work.

INTRODUCTION

Exploration licence 3671 was granted to G.R. Orridge and J.W. Shields on 14th December 1982. The area for the first year consisted of 136 blocks (approximately 437 square kilometres). During the second year the area consisted of 78 blocks (351 square kilometres).

Exploration objectives for the second year were the same as for the first year i.e. stratabound gold mineralisation, associated with iron rich sediments in the Koolpin and Mount Bonnie Formations, and analogous to known deposits at Pig Hole, Mount Bonnie, Golden Dyke, Cosmo Howley and Enterprise in the main Cullen Mineral Field.

Following the 1983-1984 work programme, the area of the Exploration licence was reduced to 21 blocks (68 square kilometres) after field evaluation with negative results.
WORK CARRIED OUT.

The objective of the 1983-84 programme was to investigate as many of the seven areas delineated in the previous year as possible. These seven areas are shown on figure 2. They represent areas of best potential for gold mineralisation as defined in the first annual report for Exploration Licence 3671.

The first phase of exploration for the year was to briefly examine each of the seven areas and decide on which areas to investigate first. This brief look revealed that outcrop within the areas of interest is fairly sparse and that laterite and rubble cover is fairly widespread.

It was decided to investigate areas closest to the Mount Bundey Granite first and work progressively to the east.

The second phase of exploration involved examining what outcrop was present in an area and comparing it with the interpreted geology (figure 2). Aerial photographs at a scale of 1:80 000 were used in this phase. It was found that in the areas examined that the geology as interpreted was substantially correct and that the criteria used for choosing the area were present.

Once this was established, the third phase of exploration was initiated, and involved taking samples of loam, eluvial and alluvial material and panning them. Over 30 samples from each of the most westerly areas were panned with negative results.

Accordingly, these areas have been relinquished on renewal of the exploration licence.

PROPOSED EXPLORATION 1985

The remaining areas having potentially favourable stratigraphy and structure will be progressively tested in 1985, using the same techniques used in 1984. In addition, pitting and testing of the laterite and beneath the rubble is envisaged.

It is anticipated that expenditures on this work will be as follows:
<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geological Field and Office Work</td>
<td>$9,800</td>
</tr>
<tr>
<td>Technical Assistant Wages</td>
<td>1,800</td>
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<tr>
<td>Vehicle and Fuel costs</td>
<td>1,750</td>
</tr>
<tr>
<td>Drafting and Typing services</td>
<td>200</td>
</tr>
<tr>
<td>Analytical Work</td>
<td>300</td>
</tr>
<tr>
<td>Field &amp; Office consumables</td>
<td>100</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$13,950</strong></td>
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**EXPENDITURE**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Geological Office &amp; Field Work</td>
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<tr>
<td>Vehicle Costs &amp; Fuel</td>
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<td>Technical Assistants Wages</td>
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<td>Typing &amp; Consumables</td>
<td>151</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$14,073</strong></td>
</tr>
</tbody>
</table>

This expenditure was incurred from the office of Geonorth, which is based in Darwin, N.T.
G.R. Orridge,
J.W. Shields,
c/o Geonorth,
P.O. Box 168,
DARWIN N.T. 5794
30/4/85

The Director,
Northern Territory Geological Survey,
G.P.O. Box 2901,
DARWIN N.T. 5794.

Dear Sir,

Reference is made to your letter EL3671 AJH/MB:099 requesting details of locations of panned samples referred to in the annual report for E.L. 3671.

The sampling method used was the "standard" one as described by E.H. MacDonald in his book entitled "Alluvial Mining, the geology, technology and economics of placers." 1983, published by Chapman and Hall.

Large panning dishes were used with a volume of material approximating 1/200th of a cubic metre.

Please find attached an overlay to figure 2 of the report showing sample locations and distinguishing between the types of sample.

Yours faithfully,

[Signature]

G.R. Orridge
J.W. Shields.
OVERLAY TO Figure 2: "GEOLOGICAL INTERPRETATION AND AREA HELD DURING 1983-84" of report entitled: "EXPLORATION LICENCE 3671, ANNABURROO, DARWIN 1:250 000 SHEET AREA N.T. ANNUAL REPORT FOR THE PERIOD ENDING 13th DECEMBER 1984." By G.R. Orridge and J.W. Shields March 1985, SHOWING SAMPLE LOCATIONS.

SCALE: 1:50 000