ANNUAL AND FINAL REPORT
EXPLORATION LICENCE 6474
WATTS CREEK NORTH
ROSEQUARTZ MINING NL
LIST OF CONTENTS

1. SUMMARY
2. INTRODUCTION
3. GEOLOGY
4. WORK CARRIED OUT
5. EXPENDITURE

LIST OF FIGURES

- Figure 1 - Tenement Map
- Figure 2 - Regional Geology
1. **SUMMARY**

Exploration Licence 6474 was granted to Rosequartz Mining NL on 9th June, 1989 for a period of three (3) years.

It was proposed to carry out detailed geological mapping over the area in order to define structural targets within the Wildman Siltstone and overlying Koolpin Formation. Further surface sampling was also proposed over areas of gossan or vein quartz.

Due to funding restrictions imposed on Rosequartz Mining NL shortly after the grant of this licence the carrying out of the programme was deferred pending an assessment of the viability of the company’s various properties.

A literature and geological review was undertaken of this area and the decision was made to surrender the licence. The licence was surrendered on 17th July, 1990.

2. **INTRODUCTION**

Exploration Licence 6474 consisting of three blocks is located on the Union Reef 1:50,000 mining tenement map and is located approximately 30 km due north of Pine Creek (see figure 1).

Access is east from the Mt. Wells tin mine via graded tracks for 13 kilometres, or north from Pine Creek along the Frances Creek mine then via exploration and graded pastoral tracks for 16 kilometres.

Topography comprises a series of northwest striking ridges and valleys with approximately 80 metres local relief, which reflect the local geological structure and lithologies.

3. **GEOLOGY**

The geology of the Pine Creek Basin has been well documented by the BMR eg Wallace et al (1985), Needham et al (1980).

The Lower Proterozoic sequence was deposited by alternating shallow marine and continental environments in an intracratonic basin setting. Following intrusion by conformable dolerite sills, a major period of deformation and regional metamorphism associated with batholithic and syntectonic granite intrusion produced a series of tight, upright, northwest trending anticlines (See Table 1).

EL 6474 is located within the Upper Wildman Siltstone/Koolpin Formation/Gerowie Tuff stratigraphic interval. Structural trends define a series of tight northwest trending synclines and anticlines.
4. **WORK CARRIED OUT**

When funding restrictions were imposed on Rosequartz Mining NL during the latter half of 1989 all proposed field work was deferred.

A literature review and geological re-assessment of this area was undertaken and it was considered that the area was "offline" with the main Watts Creek gold mineralisation. Accordingly the decision was made to surrender the licence.

5. **EXPENDITURE**

During the term of the licence expenditure totalled $2,100.00.
<table>
<thead>
<tr>
<th>GROUP</th>
<th>FORMATION</th>
<th>MEMBER</th>
<th>LITHOLOGIES</th>
<th>THICKNESS (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finniss</td>
<td>Burrell Ck</td>
<td></td>
<td>Greywacke, siltstone, mudstone, rare chert, iron formation and conglomerate.</td>
<td>3000</td>
</tr>
<tr>
<td>River</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South</td>
<td>Mt Bonnie</td>
<td>Upper</td>
<td>Mudstone, siltstone, chert, iron formation.</td>
<td>100-250</td>
</tr>
<tr>
<td>Alligator</td>
<td></td>
<td>Lower</td>
<td>Greywacke, mudstone, siltstone, chert, carbonaceous mudstone, rare conglomerate.</td>
<td>50-100</td>
</tr>
<tr>
<td>Gerowie</td>
<td>Tuff</td>
<td></td>
<td>Chert, mudstone, siltstone.</td>
<td>200-400</td>
</tr>
<tr>
<td>Koolpin</td>
<td></td>
<td>Upper</td>
<td>Carbonaceous mudstone, mudstone, siltstone.</td>
<td>50-150</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Middle</td>
<td>Iron formation, mudstone, carbonaceous mudstone, siltstone.</td>
<td>30-100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lower</td>
<td>Carbonaceous mudstone, mudstone, siltstone, limestone.</td>
<td>0-250</td>
</tr>
<tr>
<td>Mount</td>
<td>Wildman Siltstone</td>
<td></td>
<td>Mudstone, phyllite, siltstone, carbonaceous mudstone, sandstone.</td>
<td>200-400</td>
</tr>
<tr>
<td>Partridge</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mundoglie</td>
<td>Sandstone</td>
<td></td>
<td>Quartzite, arkose, pebble conglomerate, mudstone, siltstone.</td>
<td>500</td>
</tr>
</tbody>
</table>

NB: Thickness, as above, are for Type Areas only.