NORTHERN TERRITORY
TANAMI PROJECT
ANNUAL REPORT FOR THE PERIOD
10 JANUARY 1997 TO 9 JANUARY 1998

TENEMENT: EL 8515 (PUTURLU)
TENEMENT HOLDER: SONS OF GWALIA LTD
OPERATOR: SONS OF GWALIA LTD
16 PARLIAMENT PLACE
WEST PERTH WA 6005
COMMODITY: GOLD
SHEET COVERED: MOUNT THEO
PREPARED BY: J WESTAWAY & M NUGUS
AUTHORISED BY: PRUZICKA

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CENTRAL LAND COUNCIL – ALICE SPRINGS (1)
REPORT NO: 0320-01
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>2</td>
</tr>
<tr>
<td>2 TENURE</td>
<td>2</td>
</tr>
<tr>
<td>3 PREVIOUS WORK</td>
<td>3</td>
</tr>
<tr>
<td>4 GEOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>5 WORK COMPLETED AND RESULTS</td>
<td>4</td>
</tr>
<tr>
<td>6 REFERENCES</td>
<td>4</td>
</tr>
</tbody>
</table>

## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Scale</th>
<th>Reference No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Location of Tenements in the Tanami Region</td>
<td>1:2,000,000</td>
<td>ta9801tel01</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Regolith Map</td>
<td>1:250,000</td>
<td>put9509gri01</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Magnetic Interpretation</td>
<td>1:250,000</td>
<td>put9710geo02</td>
</tr>
</tbody>
</table>

## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Puturlu – Tenement Details</td>
</tr>
</tbody>
</table>
SUMMARY
This report covers work carried out by Sons of Gwalia Ltd (SGW) on EL 8515 (Puturlu), in the Tanami Desert region of the Northern Territory, for the first year of tenure from 10/1/97 to 9/1/98. The area covered by EL 8515 is located on the 1:250,000 BMR geological sheet, Mt Theo (SF52-8).

The tenement was explored for gold mineralisation within Lower Proterozoic rocks, targeting the style of deposits occurring elsewhere in the district, such as the Granites, Callie and Tanami mines.

Work included a review of previous data as well as regolith and aeromagnetic interpretation.
1 INTRODUCTION

The Puturlu Project (EL 8515) lies about 450km north-west of Alice Springs immediately south of the Sons of Gwalia "Tanami 1" Project (Figure 1). The tenement lies within the Mt Theo 1:250,000 sheet (SF52-8).

Road access to the tenement is via the Stuart Highway and Tanami road, then approximately 10km along the Mt Theo Community access track.

The tenement lies entirely on Aboriginal Land, within the Central Desert Land Trust area. Consent to explore the land was granted by the Central Land Council (CLC) and Northern Territory Department of Mines and Energy in 1997. SGW's entry to the area is governed by a CLC Deed negotiated by SGW in 1993.

Vegetation in the area is predominantly spinifex sand plain, supporting low acacia, hakea and grevillea scrub and sporadic larger trees, predominantly eucalypt species.

Vehicular access is generally good for light 4WD vehicles, although staked tyres are a common occurrence. Monsoonal rains and >40°C temperatures throughout the summer months confine full-scale exploration activities to a 7-8 month field season, from approximately March to November.

2 TENURE

The Puturlu tenement is 100% owned by Sons of Gwalia Ltd. Work and access is subject to a Deed for Exploration with the Central Land Council, representing the Central Desert Land Trust. Tenement details are outlined in Table 1.

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Granted</th>
<th>Area (blocks)</th>
<th>Expenditure Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 8515</td>
<td>10/1/97</td>
<td>265</td>
<td>$58,000</td>
</tr>
</tbody>
</table>

2
3 PREVIOUS WORK

The tenement has been mapped by the Bureau of Mineral Resources as part of the Mt Theo 1:250,000 geological sheet (Stewart, 1976). The BMR also carried out regional gravity surveys in the late 1960’s and early 1970’s (Flavelle, 1965; Whitworth, 1970).

An airborne magnetic survey with 500m line-spacing was carried out by AGSO in 1993 over the Mt Theo sheet as part of a larger survey also incorporating the Mt Solitaire, Highland Rocks and The Granites sheets.

4 GEOLOGY

The Puturlu Project lies within the north-western end of the Lower Proterozoic Arunta Block.

To the north-west, the Arunta Block abuts the Lower Proterozoic Granites/Tanami block. The boundary between these two provinces appears to be controlled by a major east-west thrust zone in the south, whilst the eastern boundary appears to be more gradational. The Arunta Block is understood to have undergone more complex deformation and probably higher-grade metamorphism than the Granites/Tanami Block.

Gold mineralisation within the Granites Tanami Block is preferentially hosted by fine-grained, generally ferruginous sediments or mafic rocks, of the Mt Charles Beds. Mineralisation is also spatially related to granitoid intrusions. At both regional and mine scales, the mineralisation is associated with faults or shears and dilation zones within fold noses and axial plane structures.

Puturlu lies along the south-eastern extension of a major structural corridor called the Trans Tanami Fault Zone. This zone contains the Callie and Granites faults
which host mineralisation at The Granites and Callie mines. The Abrolhos and Barrow Prospects (Tanami 1) are also thought to occur in this zone.

Outcropping on the periphery of the tenement area are the lower Proterozoic Lander Rock Beds, which comprise meta-sandstone, aluminous gneiss, sub-greywacke and minor cordierite-andalusite hornfels (Plumb, 1990 and Shaw, 1990). The Lander Rock Beds are tentatively correlated with the prospective Mt Charles Beds.

5 WORK COMPLETED AND RESULTS

During the reporting period an interpretation of the regolith and underlying geology was completed using Landsat TM imagery, aeromagnetics and gravity data. Interpretative maps are presented as Figures 2 and 3.

Virtually the whole of the tenement is covered by aeolian sand and alluvium of the Yaloogarrie Creek Floodplain. Drainage channels in the area are capped with calcrite in some areas. The presence of this transported cover will preclude the use of any form of first pass surface geochemical exploration at Puturlu.

The tenement is interpreted to be underlain by Proterozoic granitoid, sandstone, schist and minor gneiss (Figure 3). Several lineaments or faults transect the tenement area, trending NW, WNW and NE. Some of these structural elements are along strike of the Abrolhos and Barrow prospects from the Tanami 1 project to the north, as well as the Callie and Granites gold mines.

6 REFERENCES


