PARTIAL RELINQUISHMENT REPORT

EL 10158
MT RUBY

HARTS RANGE PROJECT

From 21 May 2002 to 20 May 2005

Author
C Rohde

July 2005

Distribution:
- Department of Business, Industry, & Resource Development (1)
- Central Land Council (1)
- Tanami Gold NL, Perth (1)

File: cr88dbirdRR2005_Mt Ruby
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1.0 SUMMARY

EL 10158 ‘Mt Ruby’ is located approximately 130 kilometres ENE of Alice Springs (Figure 1). The tenement was granted on 21 May 2002 to Tanami Exploration NL (TENL). After three years of tenure, the tenement was reduced in size pursuant to the requirements of section 26 of the NT Mining Act. Exploration on the relinquished portions of EL 10158 is the subject of this report.

During its first year of tenure, EL 10158 was the subject of a joint venture agreement between TGNL and Teck Cominco Australia Pty Ltd (Teck) and BHP-Billiton Pty Ltd (BHPB). Geodiscovery Pty Ltd managed the exploration for Teck-BHPB on the Albarta Area EL 10158.

Teck-BHPB carried out rockchip sampling (14 samples) and a ground magnetic survey (17.3 line kms) on the southern surrendered tenement portion. EL 10158 was also included in regional prospectivity studies, including an assessment of geophysical data. No elevated gold values were returned.

2.0 INTRODUCTION

EL 10158 is located approximately 130 kilometres ENE of Alice Springs (Figure 1) on the Ilogwa 1:250 000 map sheet (SF53-15). Access is east via the Ross Highway from Alice Springs and then via the Arltunga Tourist Track. Access through the tenement is limited to a few station tracks. An access road from Arltunga to the White Range goldmine, through the abandoned Atnarpa Station and a 4WD track to Ruby Gorge provide access to the northwest tenement area. Access to the south and central parts of the tenement is best achieved via station tracks north from Ringwood Station through to Ilogwa Bore and Albarta Bore (Kavanagh, 2003).

EL 10158 is explored as part of TENL's Harts Range Project. After three years of tenure, the northern and southern sections of the tenement were surrendered. Exploration during this period was carried out by Tanami Exploration NL (TENL) and Teck Cominco Australia Pty Ltd (Teck) and BHP-Billiton Pty Ltd (BHP). TENL is a wholly owned subsidiary of Tanami Gold NL (TGNL) which is a publicly listed company. Teck-BHBP carried out exploration in 2002 on the tenement under a Joint Venture agreement with TGNL.

This report describes exploration on the surrendered portions of EL 10158 from its grant date to the date of relinquishment on 20 May 2005.

3.0 TENURE

EL 10158 ‘Mt Ruby’ was granted to Tanami Exploration Limited on 21 May 2002. At the end of the third year of term, it was reduced in area pursuant to the requirements of section 26 of the NT Mining Act, see Table 1 and Figure 2.

Table 1: Tenement Details

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Tenement No</th>
<th>Blocks Granted</th>
<th>Blocks Relinquished</th>
<th>Blocks Retained</th>
<th>Grant Date</th>
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<tbody>
<tr>
<td>Mt Ruby</td>
<td>EL 10158</td>
<td>181</td>
<td>64</td>
<td>117</td>
<td>21 May 02</td>
<td>20 May 08</td>
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Figure 1

HARTS RANGE

PROJECT LOCALITY

ORIGINATOR:
C.Rohde

DATE:
July 2005

DRAWN:
C.Johnston

TANAMI GOLD NL

PLAN No: 47012_Tt_005
TANAMI GOLD NL

TENEMENT LOCATION PLAN

EL 10158

MGA Zone 53 (GDA94)

FIGURE 2

1 : 500,000

0 10 20 30 kilometres

EL 10158 Relinquishments

Harts Range Project

OrIGINATOR:
C.Rohde

DATE:
July 2005

DRAWN:
A. Weston

PLAN No: 47012_Tt_001
4.0 GEOLOGY

4.1 Regional Geology

The Harts Range project area lies within the Arunta region, which has a stratigraphic, igneous and tectonic history spanning the Palaeoproterozoic to the Palaeozoic. The geology of the tenement is dominated by the Strangways Metamorphic Complex and the Irindina Province.

The Palaeoproterozoic Strangways Metamorphic complex is made up of three stratigraphic packages:

1. Sedimentary and volcanic (and intrusive?) rocks.
2. Pelite dominated siliclastic package with some intercalated quartzite and calc-silicate units.
3. Upper package dominated by marbles and calc-silicate rocks (Hussey et al 2003). The Ongeva package encompasses package 1 and 2 while the Cadney package correlates with the third stratigraphic unit. (Scrimgeour, 2003).

The Irindina Province, including the Harts Range Group, represents a Neoproterozoic to Cambrian succession that was metamorphosed during the Ordovician Larapinta Event (Mawby et al 1999). This succession is entirely fault bounded, and was juxtaposed against the surrounding Strangways Complex during the Alice Springs Orogeny at 450-440 Ma (Mawby et al 1999). The Irindina package consists of a succession of pelites, calc-silicate rocks and layered amphibolites that are interpreted to reflect rift sediments containing variably reworked volcanics (Scrimgeour, 2003).

The tenements of the Harts Range Project were initially acquired to cover possible strike extensions of the Oonagalabi Cu-Pb deposit and the Riddoch Amphibolite. A regional interpretation of the district was compiled for TENL by Dr Ding Puquan in April-May 2001 (Ding, 2001). A portion of this interpretation is presented as Plate 1. TMI magnetics are shown on Plate 2.

4.2 Local Geology

The Illogwa Creek 1: 250,000 geological map indicates that the geology of EL 10158 is split by a 4 km wide belt of retrograde greenschist facies schists known as the Illogwa Shear Zone. North of the shear zone are high grade metamorphics of the Harts Range Group and south of the shear zone are the high grade Albarta metamorphics. Outcrop is extensive in the area.

TGNL’s interpretative Tanami-Arunta mapping (Plate 1) broadly agrees with the published mapping, with the important addition of a trans-Tanami structure crossing the Albarta metamorphics to the south of the Illogwa Shear Zone (Rohde, 2004).

The northern surrendered tenement portion is interpreted to be underlain by high metamorphic lithologies of the Entia Gneiss Complex of the Strangways Metamorphic Complex and gneisses of the Irindina Complex. The southern relinquished tenement area is underlain by gneiss of the Arltunga Gneiss Complex.

5.0 TENL / BHP Exploration

Initial exploration was carried out by Geodiscovery on behalf of Teck and BHPB. Geodiscovery identified the principal target of Broken Hill-type Pb-Zn-Ag mineralisation hosted by quartzofeldspathic
gneiss and pelitic metasediments, plus the potential for Iron Oxide Copper Gold mineralization associated with the emplacement of the Atneequa Granite.

The southeastern part of EL 10158 is characterized by intense magnetic features which were the focus of the initial field programme. A ground magnetic survey comprising five traverses was undertaken and geological observations were made where applicable. A total of about 17.3 line kilometers of ground magnetics were completed (Plate 3). Rockchip samples were collected of magnetite-bearing lithologies. A total of 14 samples were taken from the relinquished tenement area (Plate 3).

Samples were assayed by Genalysis for Au by AAS (ppb level) and As, Ag, Bi, Cd, Co, Cu, Mo, Ni, Pb, Sb, W and Zn by OES after aqua regis digestion. Sample details and assay results are included in the digital Appendix.

Geological mapping showed that the linear magnetic responses are due to magnetite-bearing calc-silicates and banded iron formations on the margins of the Atneequa Granite. There is no evidence of any Broken Hill-type or Iron Oxide Copper Gold alteration assemblages. No significant base metal or gold values were returned from the program and Teck-BHPB withdrew from the joint venture in January 2003.

Subsequently, TENL completed only regional work on the surrendered portions of EL 10158, see Plate 1 and 2. Based on the high metamorphic lithologies and Teck-BHPB's exploration results, the northern and southern portion of EL 10158 was recommended for surrender.

6.0 REHABILITATION

No ground disturbing work was conducted and therefore no rehabilitation is required.

7.0 BIBLIOGRAPHY

McLean, N. and Walters, S. 2003 Report on the exploration activities on EL's 9528, 9529, 9774, 10158, 10302, 10401, 22446, 22923 and EL Applications 23630 and 23650, Tanami Gold JV, Central Arunta Project, Northern Territory.

Ding, P. & James, P.R., 1985 Structural evolution of the Harts Range area and its implications for the development of the Arunta Block, Central Australia. Precambrian Research, 27, 251-276.

Ding, Puquan 2001 Pre-Cenozoic solid geology map of the Strangways Range to Harts Range area, Explanatory Note. Unpublished TGNL in-house report.


