TANAMI

EXPLORATION NL

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FINAL REPORT

EL 23750

PLENTY DAM

HARTS RANGE PROJECT

From 25 Aug 2003 to 3 August 2004

Author
C Rohde

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Distribution:
- ❑ Department of Business, Industry & Resources Development (1)
- ❑ Central Land Council (1)
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1.0 SUMMARY

Tanami Gold NL (TGNL) identified the potential for Selwyn-style copper-gold and Coronation Hill-style gold-PGM mineralisation in the Harts Range region of Central Australia and so they acquired a significant tenement holding in the district. Tanami Exploration NL (TENL) is a wholly owned subsidiary of TGNL, a publicly listed company

Exploration Licence 23750 'Plenty Dam' formed part of TENL's Harts Range Project. The tenement was granted on 25 August 2003 to TENL and was surrendered on 3 August 2004.. This report describes the exploration carried out on EL 23750 from its grant to surrender date.

The Harts Range Project lies in Central Australia, with EL 23750 situated about 110 kilometres northeast of Alice Springs (**Figure 1**). The surrendered Exploration Licence is located on the 1:250,000 Alcoota SF53-10 geological sheet and is mostly underlain by high grade metamorphic rocks of the Harts Range Metamorphic Complex.

Exploration on the relinquished ground consisted of a regional assessment including a regional geological interpretation. A geological review identified no prospective geological targets on the tenement and it was recommended for relinquishment at the end of the first year of tenure.

2.0 INTRODUCTION

EL 23750 'Plenty Dam' was explored as part of the Harts Range Project and is centred approximately 110 kilometres northeast of Alice Springs (**Figure 1**). Access to the tenements is via the Stuart and Plenty Highways from Alice Springs and along station tracks (**Figure 2**).

Exploration on the Harts Range Project tenements was carried out by TENL, a wholly owned subsidiary of TGNL. TGNL is a publicly listed company and active explorer in the Tanami-Arunta Province.

Exploration targeted a range of commodities in various geological environments:

- Gold ± Cu ± PGE - hosted in epigenetic shear zones and brittle structures; regionally related to the Alice Springs Orogeny and locally to the Florence Creek Shear Zone.
- PGE's (Pt + Pd) - hosted within mafic-ultramafic plugs and major amphibolite units which may be metamorphosed mafic sills.
- Cu ± Zn ± Pb ± Ag ± Au - 'Oonagalabi-style' stratiform base metal mineralisation associated with anthophyllite and carbonate-rocks.

3.0 TENURE

This Final Report covers Exploration Licence 23750 (**Figure 2**), which was surrendered on 3 August 2004. TENL was the registered holder of the tenement, further tenement details are shown below in **Table 1**.

Table 1: Tenement Details

Tenement	Tenement	Blocks	Km²	Grant Date	Expiry	Covenant
Plenty Dam	EL 23750	23	73	25 Aug 03	24 Aug 09	$14,000

4.0 GEOLOGY

The tenements of the Harts Range Project lie within the Arunta Region, which has had a protracted and complicated history from the Palaeoproterozoic to the Mesozoic. The geology of the project area is dominated by the Harts Range and Strangways Metamorphic Complexes.

The Palaeoproterozoic Strangways Metamorphic complex comprises three discrete stratigraphic packages (Hussey et al 2003):

1. Sedimentary and volcanic (and intrusive?) rocks.
2. Pelite-dominated siliclastic units with some intercalated quartzite and calc-silicate units.
3. Marbles and calc silicate rocks.

The Ongeva package encompasses packages 1 and 2, whereas the Cadney package correlates with package 3. (Scrimgeour, 2003).

The Harts Range Metamorphic Complex (also known as the Irindina Province) comprises a Neoproterozoic to Cambrian succession, which was metamorphosed up to granulite-facies during the Ordovician Larapinta Event (Mawby et el 1999). The succession comprises pelites, calc-silicate rocks and layered amphibolites which were deposited into a very deep rift basin. The succession is interpreted to be part of the Centralian Superbasin (Maidment et al 2004) The Harts Range Metamorphic Complex is entirely fault bounded and was juxtaposed against the surrounding Strangways Complex during the Alice Springs Orogeny at 330-300 Ma (Mawby et el 1999).

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 geological interpretation of the district was compiled for TENL in April-May 2001 (Ding, 2001). A portion of this interpretation is presented as **Plate 1** with Landsat TM imagery shown on **Plate 2**.

The surrendered tenement is mainly underlain by gneisses of the Harts Range Metamorphic Complex, and are considered unprospective due to their high metamorphic grade. The only MODAT occurrence is the abandoned Undippa 11 muscovite occurrence near the eastern tenement boundary (**Plate 1**).

5.0 TENL EXPLORATION

The Harts Range tenement area was incorporated into the Company's Alice Springs regional mapping program in March-April 2001. The program covered an area of 10,000 km² centred on the Florence Creek Shear Zone and associated structures. A portion of the geological interpretation is shown on **Plate 1**.

A review of topography, geology, metallogeny and aeromagnetics, including field reconnaissance, was carried out in November – December 2003 over the Harts Range Project area. This work was previously reported in the First Combined Annual Report for the Harts Range Project (Rohde, 2004). Landsat Imagery is shown on **Plate 2** and Aeromag TMI and Residual Gravity on **Plate 3**.

EL 23750 'Plenty Dam' is interpreted to be underlain the Harts Range Metamorphic Complex, which comprises mainly pelitic and psammopelitic gneiss and amphibolite. No field work was carried out on the tenement. The geological review indicated that EL 23750 to be unprospective and no targets were defined on the tenement area. EL 23750 was recommended for relinquishment at the end of the first year of tenure.

6.0 EXPLORATION EXPENDITURE YEAR 1

Exploration costs for the period ending 3 August 2004 are summarised below in **Table 2**.

Table 2: EL 23750 Exploration Expenditure Year 1

Item	Expenditure
Salaries and Wages	350
Drafting and Computing	175
Vehicles and Fuel	75
Field Costs	30
Administration	95
Total	**$725**

7.0 REHABILITATION

No ground disturbing work was conducted on EL 23750 and therefore no rehabilitation is required.

8.0 BIBLIOGRAPHY

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