



TANAMI EXPLORATION N.L.

ABN 45 063 213 598

COMBINED

FINAL REPORT

EL 9804 'Waite River'

28 October 2002 to 27 September 2007

and

EL 9806 'Delmore Downs'

18 November 2002 to 17 October 2007

ALCOOTA PROJECT

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FILE	DESC
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AL_WASG3_SURF_2007S	Surface Sampling

1.0 SUMMARY

Tanami Exploration NL (TENL) identified the potential for Tanami-style gold, iron oxide copper-gold (IOCG) and Tennant Creek-style copper-gold mineralisation in the Alcoota district of the northern Arunta region in 1997 and acquired a significant tenement package to form the Alcoota Project. TENL is a wholly owned subsidiary of Tanami Gold NL (TGNL), a publicly listed company.

The Alcoota Project lies approximately 160 kilometres northeast of Alice Springs in the Arunta region of the North Australian Craton (**Figure 1**). Access is provided via the Stuart, Plenty and Sandover Highways.

EL 9804 and EL 9806 form part of the Alcoota Project and were granted on 28 October and 18 November 2002 respectively. After five years of tenure the remaining tenement portions of both tenements were surrendered (**Figure 2**).

Exploration consisted of a regional assessment of the Alcoota project area, including a field reconnaissance trip in November–December, 2003. The assessment included evaluation of topography, geology, metallogeny, MODAT occurrences, previous exploration and aeromagnetism in conjunction with the field reconnaissance.

A total of 9 rock chip samples were taken on the remaining 5th year tenement portions. No significant gold values were returned.

2.0 INTRODUCTION

The Alcoota Project comprised nine granted Exploration Licences in the Alcoota district that were acquired to test for Tanami-style gold, iron oxide copper-gold (IOCG) and Tennant Creek-style copper-gold mineralisation.

EL 9804 and EL 9806 were surrendered in September and October 2007 respectively, after compulsory partial surrenders in 2004 and 2005. Exploration on the remaining area of both Exploration Licences is the subject of this report.

EL 9804 and EL 9806 are located approximately 160 kilometres northeast of Alice Springs (**Figure 1**). Access to the tenement is via the Stuart, Plenty and Sandover Highways. An extensive network of established roads and station tracks provides further access throughout the tenement area.

3.0 TENURE

EL 9804 and EL 9806 were granted to TENL in 2002. After five years the tenements were surrendered (**Figure 2**). Previous relinquishments are shown in **Table 1** together with tenement details.

Table 1: Tenement Details

Tenement	Tenement No.	Blocks Granted	Blocks Relinq 2004	Blocks Relinq 2005	Blocks Relinq 2006	Blocks Relinq 2007	Grant Date
Waite River	EL 9804	144	54	72	-	18	18-Oct-02
Delmore Downs	EL 9806	202	-	76	34	92	18-Nov-02

For the purposes of conducting initial reconnaissance exploration on the Alcoota Project, a 'self clearing' program was granted by the Central Land Council (CLC) in October 2003, whereby TENL could conduct a geological appraisal of the tenements and wide-spaced non-systematic surface sampling to assess overall prospectivity and define an area of greatest interest. Areas of cultural significance recorded by the Aboriginal Areas Protection Authority (AAPA) were avoided.

4.0 GEOLOGY

The Alcoota Project lies within the northern Arunta region of the North Australian Craton and comprises deformed and metamorphosed Palaeoproterozoic to Mesoproterozoic volcano-sedimentary successions which have been intruded by mafic and granitic bodies. EL 9804 and EL 9806 are located on the 1:250,000 sheet Alcoota (SF53-10) and 1:100,000 sheet Utopia.

The Northern Territory Geological Survey (NTGS) Alcoota 1:250,000 geological mapping show a substantial amount of outcrop. Unfortunately, most of the exposed geology comprises unprospective granitic and gneissic units or Tertiary –aged sedimentary cover belonging to the Waite Formation.

The bedrock geology of the region is summarised by TENL's interpretative Tanami-Arunta mapping, shown in **Plate 1**. This mapping suggests that the Narwietooma Metamorphics underlie most of **EL 9804** and **EL 9806**, while Palaeoproterozoic granitoid intrusions are interpreted in the northern and southern tenement portion.

5.0 TENL EXPLORATION

In 2002, the Alcoota tenements were included in an Arunta-wide geophysical interpretation conducted by TGNL consultant geologists Dr Jayson Myers and Dr Nathan Jombwe (Jombwe, 2003). TMI and residual gravity is shown on **Figure 3**.

A regional review of topography, geology, metallogeny and aeromagnetism, including field reconnaissance with rock chip sampling, was carried out by Dr Jim Anderson in November–December 2003.

No MODAT occurrences for gold or base metals are present on the expired tenements.

A total of 9 rock chip samples were taken from both tenements (**Figure 4**) from outcrops of the Narwietooma Metamorphics. Samples ALK030-032 were collected near the northern tenement boundary of **EL 9804** and ALK070-72, 079 and ALK086-87 from **EL 9806**. Digital sample and assay data are included in the Appendix.

All samples were analysed for Au, Cu, Pb, Zn, Ag, As and Bi by ALS using multi acid digestion and AAS with a 1 ppb detection limit for Au. The best values were 2 ppb gold from Alk032, 138pppm As from ASK087, 139ppm Cu, as well as 199ppm Zn from ALK086. Otherwise no elevated values were returned from the rock chip sampling.

6.0 FINAL EXPENDITURE

Expenditure for Exploration Licences 9804 and 9806 with respect to the fifth and final year of tenure is shown in **Tables 2** and **3** below:

Table 2 – EL9804: Expenditure from 28 October 2006 to 27 September 2007

Cost Element	EL9804 \$
Salaries and Wages	1,967
Consultants/Contractors	0
Drafting and Computing	53
Camp and Field Costs	11
Vehicles/Fuel	70
Freight/Storage	26
Travel/Accommodation/ Communications	35
Administration/Overheads	324
Total	\$2,486

Table 3 – EL9806: Expenditure from 18 November 2006 to 17 October 2007

Cost Element	EL9806 \$
Salaries and Wages	1,624
Consultants/Contractors	121
Drafting and Computing	98
Camp and Field Costs	7
Vehicles/Fuel	234
Freight/Storage	31
Travel/Accommodation/Communications	35
Administration/Overheads	322
Total	\$2,472

7.0 BIBLIOGRAPHY

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