TANAMI
EXPLORATION NL
ABN 45 063 213 598

FIRST
ANNUAL REPORT
EL 9837
DERWENT DOWNS

For Year Ending 27 October 2003

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

This report outlines the exploration carried out on Exploration Licence 9837 (Derwent Downs) for the first year of grant ending 27 October 2003. The tenement was granted to Tanami Exploration NL (TENL) on 26 October 2002. TENL is a wholly owned subsidiary of Tanami Gold N.L.

Exploration on the Derwent Downs tenement was limited to a regional desktop review that encompassed all of the TENL tenements in the Tanami-Arunta region. This review identified numerous exploration targets within the region, several of which lie within EL 9837. The tenement contains favourable geology that could potentially host mineralisation similar to that found in the Tanami district. Grant of access to the tenement from the traditional owners is yet to be negotiated.

Exploration of the tenement is severely hampered by thick sand cover. The cover completely conceals the basement rocks and renders any surface geochemical techniques ineffective.

2.0 INTRODUCTION

The Derwent Downs exploration licence (EL 9837) is located approximately 200 kilometres northwest of Alice Springs and 10km north of Papunya. The tenement was granted to Tanami Exploration NL on 28 October 2002. EL 9837 is accessed via the sealed Stuart Highway and Tanami Track, then unsealed roads 100km west from the Tanami Track, via Papunya. Access within the tenement is poor due to sand dunes. Station tracks provide what limited access is available. The tenement straddles the northern corner of the Hermannsburg and Mt Liebig 1:250,000 map sheets.

The application for the tenement was made in February 1996 on the grounds of favourable aeromagnetic features including major structures. No fieldwork was carried out during the first year of grant because an access agreement with the traditional owners is yet to be signed.

3.0 TENURE

Exploration Licence 9387 was granted over an area of 97 blocks on 28 October 2002.

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Blocks</th>
<th>Km²</th>
<th>Grant Date</th>
<th>Expiry</th>
<th>2003 Covenant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derwent Downs</td>
<td>97</td>
<td>290</td>
<td>28/10/02</td>
<td>29/10/08</td>
<td>$35,000</td>
</tr>
</tbody>
</table>

Negotiations with the traditional owners are currently underway in order to gain access to the tenement.

4.0 PREVIOUS WORK

No previous exploration has been conducted on EL 9837.

CRAE and AGIP conducted uranium exploration in the region during the 1970's. Several water bores were tested for radioactivity and some holes were drilled through the Ngalia Basin to the north of the tenement. No anomalous results were returned.

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5.0 GEOLOGY

The tenement lies within the Central Arunta Region comprising variably metamorphosed Proterozoic age sediments and granite intrusives. Aeromagnetic interpretation and isolated outcrops in the region suggest that the tenement is underlain by the Palaeoproterozoic Strangways Metamorphic Complex and the metasediments of the Lander Rock beds Group.

The Strangways metamorphic complex comprises felsic and mafic granulites, felsic metavolcanics, ortho-quartzite and calc-silicate rocks.

The Lander Package is the most widespread interpreted lithological package over the northern and western Arunta, and is dominated by interlayered pelites and psammites of turbiditic to shallow marine origin. The metamorphic grade is most commonly greenschist but localised rapid variations in grade up to granulite facies occur (Scrimgeour, 2003). The Lander Package appears to be equivalent to the Killi Killi Formation of the Tanami Group which hosts significant mineralisation in the Tanami region (Green, 2003).

Several major east-west trending and northwest-southeast trending major structures run through the tenement, the most significant being the Desert Bore Shear Zone. Potentially these structures and associated second-order splays could be a focus for mineralising fluids and hence be suitable exploration targets.

A blanket of Quaternary aeolian sand covers the entire tenement.

6.0 FIRST YEAR EXPLORATION PROGRAM

In early 2002 the tenement was included within an Arunta-wide bedrock geological interpretation and geophysical targeting exercise conducted by consultant geophysicist Dr Jayson Myers. The exercise drew on analogies between the Central Arunta region and the Eastern Succession of the Mt Isa region which hosts a number of major gold-copper and base metals deposits.

In early 2003 Contract Geologist Dr Nathan Jombwe reviewed the Myers targets, developed new targets and conducted a ranking exercise (Jombwe, 2003). A conceptual target was identified within the southern portion of EL 9837. This target was identified as a major structure that could potentially host epigenetic shear zone gold mineralisation.

During the review process gold targets were identified based on the criteria that they occur on a first and/or second order structure, with the higher-ranking targets on structural jogs or intersecting structures. Targets were then further evaluated on the basis of supporting metallogeny and previous exploration. Coincident magnetic and gravity highs were identified as possible IOCG type targets.

7.0 FIRST YEAR EXPENDITURE SUMMARY

Table 2: EL 9837 Exploration Expenditure First Year of Grant

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>750</td>
</tr>
<tr>
<td>Drafting &amp; Computing</td>
<td>250</td>
</tr>
<tr>
<td>Geophysical &amp; Remote Sensing</td>
<td>500</td>
</tr>
<tr>
<td>Land maintenance</td>
<td>100</td>
</tr>
<tr>
<td>Administration and Overheads</td>
<td>250</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,850</strong></td>
</tr>
</tbody>
</table>

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8.0  SECOND YEAR EXPLORATION BUDGET

Table 3: EL 9837 Exploration Budget Second Year of Grant

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote Sensing Data Analysis</td>
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<tr>
<td>Drilling</td>
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<tr>
<td>Geochemical Analysis</td>
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</tr>
<tr>
<td>Drafting and Computing</td>
<td>1,000</td>
</tr>
<tr>
<td>Salaries and Wages</td>
<td>5,000</td>
</tr>
<tr>
<td>Camp and Field Costs</td>
<td>2,500</td>
</tr>
<tr>
<td>Vehicles/Fuel</td>
<td>1,500</td>
</tr>
<tr>
<td>Travel/Accommodation</td>
<td>3,000</td>
</tr>
<tr>
<td>Administration/Overheads</td>
<td>4,500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35,000</strong></td>
</tr>
</tbody>
</table>

During the second year of grant the primary aim will be to negotiate an exploration access agreement with the traditional owners to gain access to conduct first pass exploration. This will comprise wide-spaced drilling to test depth of cover and bedrock lithologies over conceptual structural and aeromagnetic targets.

9.0  REFERENCES


Explanatory Note:

Bedrock interpretation utilizing aeromagnetics, gravity, radiometrics and Landsat imagery tied into published geological fact maps (NTGS and AGSO).

Compilation includes NTGS bedrock interpretation of Granites-Tanami region and in-house TGNL bedrock interpretations by Ding PuQuan, Deng Qi, Jayson Meyers and Tim Smith between 2000 and 2002.

*amphibolite-granulite facies: quartzite, schist, gneiss & granofels
*felsic and mafic gneiss, granite, migmatite & amphibolite
*greenschist facies: meta pelite & quartzite dolerite sills
*siltstone, sandstone, conglomerate, basalt
*pelite schist, calc-rocks & quartzite
*quartzite, schist, meta-siltstone, felsic volcanics & volcaniclastics
*felsic volcaniclastics

**Lander Rock Beds**
*Low mag/low metamorphic grade
*Reynolds Range Group
**Low Archean Basement**
*High mag/high metamorphic grade

*Undiff. Archean Basement

**Arunta Region Sedimentary Basin Sequences**
*quartzite, schist, meta-siltstone, felsic volcanics & volcaniclastics
*sandstone, siltstone, BIF
*felsic volcaniclastics
*Pelites schist, calc-rocks & quartzite
*Lander Rock Beds
*Low mag/low metamorphic grade
*Reynolds Range Group
**Low Archean Basement**
*High mag/high metamorphic grade

**Northern/Central Arunta**
*Felsic
dolerite dykes
*Moes-Prot granitoid intrusions
**Meso-Prot granitoids**
*Neopro-Prot granitoids

**Tanami Region**
*Mafic Intrusive Complex
*Mordor Alkaline Complex
*Andrew Young Hills

**Index Minerals**
*Gossan
*Pyrite
*Chalcopyrite
*Nickel

**Trends lines and magnetic fabric**
*All geological contacts, including unconformities
*All faults, shears & thrusts

**Igneous Intrusions**
*Mafic
*Dolerite dykes
*Palaeproterozoic granitoid intrusions
**Mesoproterozoic**
granitoids
*Undifferentiated granitoids, probably Palaeproterozoic

**PLATE 1**