EL 8846 ‘Green Swamp Hills’

ANNUAL REPORT
From 23 March 2008 to 22 March 2009

FINAL REPORT
From 23 March 2001 to 22 March 2009

NORTH EASTERN TANAMI PROJECT

Holder: Tanami Exploration NL
Operator: Deep Yellow Limited
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Date: July 2009
Email: admin@deepyellow.com.au
Target Commodities: Gold, Uranium
Datum/Zone: GDA94/Zone 52 (MGA)
250,000 mapsheet: The Granites
100,000 mapsheet: Ptilotus

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CONTENTS

1.0 Summary .................................................................................................................... 1

2.0 Introduction ............................................................................................................... 2

3.0 Tenure ..................................................................................................................... 2

4.0 Regional Geology ....................................................................................................... 3

  4.1 Local Geology ........................................................................................................ 4

5.0 Exploration Completed .............................................................................................. 4

  5.1 Year 1 .................................................................................................................. 4

  5.2 Year 2 ................................................................................................................... 5

  5.3 Year 3 .................................................................................................................. 5

  5.4 Year 4 .................................................................................................................. 5

  5.5 Year 5 .................................................................................................................. 5

  5.6 Year 6 .................................................................................................................. 5

  5.7 Year 7 .................................................................................................................. 5

  5.8 Year 8 .................................................................................................................. 5

6.0 Rehabilitation ............................................................................................................ 6

7.0 Bibliography ............................................................................................................... 6

TABLES

Table 1 Summary of Exploration
Table 2 Tenement Details

FIGURES

Figure 1 Project Location 1 : 2,000,000
Figure 2 Tenement Locality 1 : 250,000
Plate 1 Regional Geology 1 : 100,000
Plate 2 Aeromagnetic TMI 1 : 100,000

DIGITAL APPENDICES (supplied on CD)

FILE NAME DESCRIPTION

1.0 SUMMARY

Exploration Licence 8846 ‘Green Swamp Hills’ formed part of the North Eastern Tanami Project which lies within 60 kilometres ENE and SE of the Tanami Gold Mine, within the Tanami Desert (Figure 1). The North Eastern Tanami Project comprised Exploration Licences (EL) 8845, 8846, 9474 and 9475 (Figure 2). The tenements form a series of highly prospective ground holdings over the north-south trending belt of rocks associated with the Nanny Goat Creek Volcanic’s straddling the Suplejack Shear and were explored for gold and base metal.

EL 8846 ‘Green Swamp Hills’ was granted to AngloGold Ashanti Australia Limited (AngloGold) on 23 March 2001 for a period of six years. In the fifth year of tenure, the licence was included in a Sale and Purchase Agreement dated 23 June 2005, between Anglogold and Tanami Exploration NL (TENL). TENL is a wholly owned subsidiary of Tanami Gold NL, a publicly listed company.

Following a decision by TENL to relinquish EL8846, Deep Yellow Limited (DYL) acquired beneficial ownership of the tenement under an agreement dated 28 June 2005. However, registration of DYL’s interested was delayed pending execution of a Deed of Assignment between TENL and the Central Land Council in respect of the AngloGold Exploration Deed.

EL 8846 was renewed for a further two years and was allowed to expire on 22 March 2009.

This report summarises the exploration carried out on the originally granted 18 block area of the tenement (Figure 1) from 2001 to 2009. The exploration completed is summarised in Table 1. The maps and images resulting from the activities are shown as Plates or they are contained in the digitally appended annual report respectively.

Table 1: Summary of Exploration

<table>
<thead>
<tr>
<th>Activity</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Compilation and Review</td>
<td>2001</td>
</tr>
<tr>
<td>Regolith and Landform Mapping</td>
<td>2001</td>
</tr>
<tr>
<td>Aerial Geophysical Survey</td>
<td>2001</td>
</tr>
<tr>
<td>Aerial Photography</td>
<td>2001</td>
</tr>
<tr>
<td>Spot and TM Imagery</td>
<td>2001</td>
</tr>
<tr>
<td>Geophysical data was reprocessed and analysed</td>
<td>2002</td>
</tr>
<tr>
<td>Geological Re-interpretation</td>
<td>2006</td>
</tr>
<tr>
<td>Geophysical Data Re-compile</td>
<td>2006</td>
</tr>
</tbody>
</table>

The tenement was allowed to expire due to delays in obtaining access for uranium exploration.
2.0 INTRODUCTION

(from Large, P., Spurway, C., 2002 and Sewell, D., Dorsett-Bain, H., Murphy, J., 2004)

Exploration Licences, EL8845, EL8846, EL9474 and EL9475 form the North Eastern Tanami Project area. The project comprised 102 graticules and was within 60 kilometres ENE and SE of the Tanami Gold Mine within the Tanami Desert. The tenements form a series of highly prospective holdings over the north-south-trending belt of rocks associated with the Nanny Goat Creek Volcanic's straddling the Suplejack Shear.

Access from Alice Springs is provided by the unsealed Tanami Track, which traverses the southern portion of the tenement group. The area is affected annually by access restrictions, extremely high temperatures (in excess of 50°C), and high seasonal rainfall associated with the northern monsoon season, which typically extends from late November to the middle of April. Access into the Tanami is via the Tanami Track (gravel), which is closed every year for varying lengths of time (usually up to four months) by the Hall's Creek and Alice Springs Shire Councils due to flooding.

The vegetation over the project area varies considerably from wide-open, Spinifex studded plains to low desert scrubland. The area has a characteristically subdued topography with limited low breakaway hills and sub-cropping areas. The majority of the area lies beneath a veneer of aeolian sediments. Deep palaeo-drainage systems, comprising fluvial, lacustrine and aeolian sediments, are known to transect some of the tenements.

This report covers all exploration on EL 8846 carried out between the date of grant, 23 March 2001, and the surrender date 22 March 2009.

3.0 TENURE

EL 8846 ‘Green Swamp Hills’ was granted to AngloGold on 23 March 2001 for a period of six years. In the fifth year of tenure, the licence was included in a Sale and Purchase Agreement dated 23 June 2005, between Anglogold and TENL, a wholly owned subsidiary of Tanami Gold NL, a publicly listed company.

Following a decision by TENL to relinquish EL8846, Deep Yellow Limited (DYL) acquired beneficial ownership of the tenement under an agreement dated 28 June 2005. However, registration of DYL’s interest was delayed pending execution of a Deed of Assignment between TENL and the Central Land Council in respect of the AngloGold Exploration Deed.

EL 8846 was renewed for a further two years and was allowed to expire on 22 March 2009. Access to explore the tenement required a new Deed for Exploration as the original Deed did not allow exploration for uranium.

Tenement details are shown in Table 2.

Table 2: Tenement Details

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Tenement No</th>
<th>Blocks Granted</th>
<th>Grant Date</th>
<th>Expiry Date</th>
</tr>
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<tbody>
<tr>
<td>Green Swamp Hills</td>
<td>EL 8846</td>
<td>18</td>
<td>23 Mar 2001</td>
<td>22 Mar 2009</td>
</tr>
</tbody>
</table>
4.0 REGIONAL GEOLOGY

(Sewell et al, 2004))

The project area is in the Granites - Tanami Block that forms the basement to the surrounding Birrindudu Basin (Blake et al. 1979). To the west are the Halls Creek Mobile Zone and the Canning Basin; whilst to the east and south are the Wiso Basin and the Arunta Block (which is possibly of similar age and a stratigraphic equivalent to the Granites - Tanami Block). The Granites - Tanami Block contains the Tanami Complex, which hosts the mineralisation at the Tanami and Granites gold mines.

The Tanami Complex is of Early Proterozoic age and comprises meta-sediments and meta-volcanics, which are steeply dipping with a bedding parallel cleavage. Poor exposure and structural complexity have precluded a full understanding of the stratigraphy. The NTGS has remapped the eastern portion of the inlier and erected a stratigraphy, which is broadly correlatable with the Pine Creek and Hall's Creek inliers. Economic gold mineralisation is found in a variety of host rocks, and appears to be related at least partly to geochemical properties of those rocks, rather than a particular stratigraphic age. At Dead Bullock Soak, the Callie deposit, gold is hosted in a weakly carbonaceous siltstone sequence, the Dead Bullock Formation. At the Tanami Mine gold is hosted by rocks deposited in a younger basin. These comprise a series of pillow basalts and greywackes of the Mount Charles Formation. In the western Tanami on AngloGold tenements, mineralisation is hosted by a sequence of weakly carbonaceous shales, siltstones, micaceous greywackes and sandstones, which have been tentatively assigned to the Killi Killi Formation by AngloGold. The Killi Killi Formation is slightly younger than the Dead Bullock Formation but is part of the same basin fill sequence. The Killi Killi Formation is thought to represent late stage, passive margin basin fill sedimentation. Late Proterozoic and early Carpentarian granites intrude the Tanami Complex. Most of the known gold mineralisation is spatially related to these granites, although a genetic relationship has not yet been proven.

Cainozoic surficial overburden comprises laterite, calcrete and vein quartz rubble. In addition there is a thin veneer of Quaternary aeolian and alluvial sand. Palaeodrainage channels are well developed in the western Tanami, filled by lacustrine clays and sheetwash sedimentation. Silcrete is locally developed. Where tested by drilling they have a maximum depth of around 40m, but may be deeper elsewhere. These commonly follow the prospective structural grain and inhibit exploration.

Structurally the Block is very complex with multiple phases of deformation and faulting. Two main types of folding have been identified in the Killi Killi Beds. Broad northerly-plunging anticlines and synclines are recognised and east-southeast-trending zones of smaller chevron folds with steep limbs. The chevron folds cut across the broad folds indicating at least two phases of deformation. Both phases have been disrupted by the intrusion of granite. D1 and D2 involve progressive deformation about NW-SE to E-W trending axes. Dextral strike slip reactivation of the Trans Tanami fault during D3 or late D2 resulted in rotation and re-folding of previously folded units to a N-S orientation.

NW-WNW trending strike slip/dip-slip faults (D3) are very prominent and are commonly associated with intense shearing and quartz veining. The structures are possibly related to deep-seated structures in the metamorphic-granitoid Archaean basement, which to the NW define the margin of the Canning Basin on the Lennard Shelf. NE to ENE and N-trending faults are also common and can be related to phases of basin extension and compression during regional tectonism.

The NTGS has identified seven stages of deformation, with the gold mineralisation relatively late and related to a D6 event. Recent dating by AGSO/NTGS of mineralisation also indicates late stage mineralisation. AngloGold has erected a simpler, but broadly similar structural model, with three major
deformation events, with mineralisation related to late D2 deformation. Much of the dextral faulting on NW-WNW Trans-Tanami Faults is thought to post-date mineralisation.

4.1 Local Geology

A major drainage system runs across tenement EL 8846, from northeast to southwest. Aeromagnetic interpretation suggests the occurrence of granite with a low magnetic signature within the SE portion of the tenement. Further interpretation suggests the granite has intruded into magnetically unresponsive sediments of the Killi Killi Formation, exhibiting a minor hornfels aureole. No penetrative exploration has been completed to establish the validity of this interpretation.

5.0 EXPLORATION COMPLETED

All (three) annual reports of the project (Large, P., Spurway, C., 2002, Spurway, C., 2003 and Sewell, D., Dorsett-Bain, H., Murphy, J., 2004) are listed in the bibliography. The 2002 annual report containing most of the information is digitally appended.

5.1 Year 1 23 March 2001 to 22 March 2002

Anglogold first conducted exploration within the tenement group during 2001 with all activities and results detailed in Large, P., Spurway, C., 2002.

Prior to the commencement of field based exploration a program of data compilation and review was completed. All data was entered into AngloGold's GIS database and all available open file information was collated. The review revealed that no company in recent recorded history had held the area covered by EL 8846.

Regolith and landform mapping was completed within the North East Tanami Project areas as part of a research program jointly funded by CRCLeme, AGSO, AngloGold (Acacia), Otter Gold and Normandy-NFM. As part of this work, Landsat TM data was reprocessed for the entire Tanami region. A series of GIS maps were produced showing:

- The Distribution of major landforms and the relative proportions of each landform type
- Digital elevation models
- Palaeo-drainage features
- Induration styles
- Distribution of Regolith Materials

UTS Geophysics was contracted to conduct a low level airborne geophysical (aeromagnetic and radiometric) survey across the Mt Charles East (EL 9475), Lake Buck (EL 8845), Farrands Hill (EL 9474) and Green Swamp Hills (EL 8846) tenements in July 2000. The surveys were flown at 50m line spacing, in a 090-270 orientation with a mean terrain clearance of 30 metres. A total of 1,304 line kilometres were flown in the Green Swamp Hills area. Interpretations in the Green Swamp Hills area provide indeterminate structural features.

Whelans completed an aerial photographic survey for AngloGold across all of the tenements within the North Eastern Project Area. Colour 1:25, 000 scale infrared photography was completed along five traverses through the Mount Charles East area and along four traverses through the Green Swamp Hills area.
The TM and Spot Imagery covering all of the North Eastern Project Area were purchased from AUSLIG. This information was part of that used in the CRCLeme Project.

5.2 Year 2 23 March 2002 to 22 March 2003
(from Spurway, C., 2003)

In the second year of tenure all available geophysical data was reprocessed and a structural analysis completed for the Tanami province including the North Eastern Tanami Project. A number of structural domains were interpreted from this work and each domain was assigned prospectivity for gold mineralisation. A number of prospective aeromagnetic targets had been interpreted in EL8846.

5.3 Year 3 23 March 2003 to 22 March 2004
No field work was carried out in the third year of tenure.

5.4 Year 4 23 March 2004 to 22 March 2005
No field work was carried out in the forth year of tenure.

5.5 Year 5 23 March 2005 to 22 March 2006
In the fifth year of tenure EL8846 was included in a Sale and Purchase Agreement dated 23 June 2005, between Anglogold and TENL. Although the licence was included in a regional Tanami-Arunta geological review by TENL, on-ground exploration was awaiting execution of a Deed of Covenant with the Central Land Council. No field exploration was carried out in the fifth year of tenure.

5.6 Year 6 23 March 2006 to 22 March 2007
In 2002 and 2006 TGNL geologists completed a regional geological synthesis incorporating elements of each previous interpretation and conducted a reconnaissance trip. A portion of the 2002 interpretation is presented as (Plate 1). The 2006 synthesis did not change the underlying interpreted geology for EL8846. TGNL integrated previous aeromagnetic TMI data in a comprehensive compilation of which a proportion is shown on Plate 2. Following this review, the tenement’s gold prospectivity was down graded and the tenement was transferred to DYL.

5.7 Year 7 2 23 March 2007 to 22 March 2008
Registration of the transfer to DYL was delayed pending registration of the prior transfer from Anglogold to TENL; which had been delayed due to the requirement for a Deed of Covenant between TENL, Anglogold and the Central Land Council. The Deed for Exploration under which EL8846 was granted did not allow exploration for uranium; therefore DYL was unable to conduct on ground exploration.

5.6 Year 8 23 March 2008 to 22 March 2009
No field exploration was carried out in the eighth year of tenure by DYL. EL 8846 was allowed to expire on 22 March 2009 because of the delays in gaining access for uranium exploration.
6.0 REHABILITATION

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

7.0 BIBLIOGRAPHY


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


