FINAL REPORT

SEL 10319

Goat Creek

From 23 January 2001 to 10 August 2010

Holders: Australian Tenement Holdings Pty Ltd
Operator: Tanami (NT) Pty Ltd
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Date: October 2010
Contact: joe.rohde@tanami.com.au
Commodity: Gold
Datum/Zone: GDA94/Zone 52
250,000 Mapsheet: Tanami (SF52-15)
100,000 Mapsheet: Wilson Creek (4959)

Distribution:
- NT Department of Resources - digital
- Central Land Council - digital
- Tanami NT Pty Ltd, Perth - digital

File: jr36 DoR FS SEL 10319 Goat Creek 2010
1.0 SUMMARY

SEL 10319 was originally granted to the Central Desert Joint Venture partners – Otter Gold NL (Otter) and Acacia Resources Ltd on the 23rd January 2001. Otter was taken over by Newmont Asia Pacific in 2003. On 30 March 2010 SEL 10319 ‘Goat Creek was purchased by Tanami NT Pty Ltd (TNT) a wholly owned subsidiary of Tanami Gold NL from Australian Tenement Holdings Pty Ltd (ATH), a wholly owned subsidiary of Newmont Asia Pacific.

SEL10319 is situated some 70km north of the Tanami Mine (Figure 1).

In the last year of tenure no field activities took place due to the change in ownership.

Exploration during the nine years of tenure on the finally remaining area of the tenement consisted mainly of an IP survey, surface sampling and RAB drilling. It is summarised in Table 1.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>An IP survey was completed</td>
<td>At the Crusade prospect area six drill targets were generated</td>
</tr>
<tr>
<td>RAB drilling 2003</td>
<td>33 holes for 2243m</td>
</tr>
<tr>
<td>Rock chip Sampling 2002</td>
<td>16 samples</td>
</tr>
<tr>
<td>Geological Re-interpretation 2003</td>
<td></td>
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</table>

The best gold assay value of 23ppb associated with 330ppm As was returned from rock chip sample 655782. At the time of writing this report no data was available for the surface sampling.

Elevated gold and arsenic results were returned from the drill program, testing four of the six IP generated drill targets, in the Crusade prospect area. The best gold assay result was 0.358ppm from CRRB0005 and the best arsenic assay result returned was 687ppm in hole CRRB0018.

The RAB drilling encountered on average a 5m thick aeolian sands and minor clays cover overlaying the predominately rhyodacite and basalt bedrock lithologies.

2.0 INTRODUCTION

(from Eisenlohr, 2009)

SEL10319 is situated some 70km north of the Tanami Mine (Figure 2). The tenement is mostly covered by the Suplejack Pastoral Lease. Access to the tenement is by the Lajamanu Road then via Suplejack Station Tracks onto exploration and station tracks. Access to the area is difficult during the wet season (December to March).

3.0 TENURE

On 30 March 2010, TNT, a wholly owned subsidiary of Tanami Gold NL, purchased the SEL10319 from ATH, a wholly owned subsidiary of Newmont Asia Pacific, together with a number of tenements including the Mineral Leases comprising the Central Tanami mine site.
Tenement details for SEL 10319 are detailed below in Table 1.

Table 1  Tenement Details

<table>
<thead>
<tr>
<th>Tenement No.</th>
<th>Tenement Name</th>
<th>Blocks</th>
<th>Grant Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEL 10319</td>
<td>Goat Creek</td>
<td>80</td>
<td>23-Jan-01</td>
<td>10-Aug-2010</td>
</tr>
</tbody>
</table>

There was no provision for further renewal of SEL 10319 under the NT Mining Act (1978) and it therefore expired on 10 August 2010.

4.0 REGIONAL GEOLOGY

(from Eisenlohr, 2009)

The Granites – Tanami Block is bounded to the west by the Canning Basin, and to the east by the Wiso Basin and is considered to be one of the western most Palaeoproterozoic inliers of the Northern Australian Orogenic Province. The block is thought to have developed around the Barramundi Orogeny – major event 1845 – 1840 Ma (Blake et al., 1979).

The stratigraphy of the Tanami Region has been revised as a result of an intensive study recently completed by the NTGS (Hendrickx et al., 2000). The stratigraphy outlined by Blake et al (1979) has had some significant modifications.

The Archaean Billabong Complex and Browns Range Metamorphics are the oldest rocks in the area. Browns Range Metamorphics comprise granitic gneiss and muscovite schist intruded by fine-grained granite, thin granitic sills, aplite and pegmatite. The Billabong Complex comprises banded granitic gneiss, which are generally elongated and fault bound.

Lying unconformably above the Archaean basement is the Palaeoproterozoic McFarlane Peak Group. These rocks are characterised by a thick sequence of mafic volcanic, volcaniclastic and clastic sedimentary rocks, which possess a distinctive magnetic and gravity signature. This package of rocks is structurally complex and is considered to have a tectonic contact with the overlying Tanami Group.

The Archaean basement is subdivided into three formations:
- Twigg Formation: purple siltstone with minor sandstone and chert.
- Killi Killi Formation: turbiditic sandstone.
- Dead Bullock Formation: siltstone, mudstone, chert and banded iron formation.

The Dead Bullock Formation occurs at the base of the Tanami Group and is dominated by fine-grained sedimentary rocks. The rocks outcrop at Dead Bullock Soak, Lightning Ridge and Officer Hill. At the Granites the rocks have been metamorphosed to amphibolite facies to form andalusite, garnet and hornblende bearing schists. The Dead Bullock formation is host to significant gold mineralisation at the Granites and Dead Bullock Soak.

The Killi-Killi Formation conformably overlies the Dead Bullock Formation and is the most extensive formation in the group. The sequence of turbidites includes micaceous greywacke, quartzwacke, and lithic greywacke, quartz arenite and lithic arenite, interbedded with siltstone, mudstone and occasional thin chert beds. Detrital mica is a characteristic feature. The Killi-Killi is metamorphosed to lower greenschist facies and is interpreted to be up to 4km thick.

The Twigg formation is confined to a narrow package of rocks immediately west of the Tanami Mine corridor. It comprises a sequence of interbedded purple siltstone with thin-bedded chert and minor medium bedded greywacke.
The Pargee Sandstone unconformably overlies the Tanami Group and is exposed on the western side of the Coomarie Dome extending into Western Australia. The Pargee Sandstone comprises thick-bedded quartz arenite, lithic arenite and conglomerate with pebbly sandstone and conglomerate at the base.

The Mount Charles Formation comprises an intercalated package of basalts and turbiditic sediments, which occur on the western side of the Frankenia Dome. The Mount Charles Formation is host to structurally controlled vein hosted gold mineralisation in the Tanami Mine Corridor. Sediments include sandstone, mudstone, carbonaceous mudstones and intraclast conglomerate. Basalts are predominantly massive units with pillow basalts and basaltic breccias also evident.

The Mt Winnecke Group is also interpreted to lie unconformably over the Tanami Group and is divided into two units - siliciclastic sediments and felsic volcanics. The Nanny Goat Volcanics are characterised by extrusive volcanic rocks including quartz-feldspar ignimbrite, feldspar ignimbrite, rhyolite lava, basalt and minor siliciclastic sediments.

The Birrindudu group comprises 3 units with Gardiner Sandstone at the base, overlain by Talbot Well Formation and Coomarie Sandstone. The Suplejack Down sandstone is interpreted to belong to this group but is relationship is unclear. The Birrindudu group lie unconformably over the Browns Range Metamorphics, MacFarlane Peak Group, Tanami Group, Pargee Sandstone, Nanny Goat Creek Volcanics and Mount Winnecke Group.

Cenozoic laterite, silcrete, calcrete, and Quaternary debris cover 60 – 70% of the Tanami Desert. The Quaternary sediments are generally unconsolidated, representing the most recent phase of erosion and deposition of sands, gravels and lithic fragments.

4.1 Local Geology

(from Eisenlohr, 2009)

Geologically, the lease is predominantly part of the Coomarie Dome, which extends down to the Tanami Mine region. The Coomarie Dome has intruded Tanami Complex rocks (including Mt Charles Beds, Nanny Goat Creek Beds and Nongra Creek Beds). It is thought that inliers/roof pendants may exist within some portions of the lease. Covering these is a series of Upper Proterozoic Birrindudu Group Sediments (including Gardiner Sandstone, Talbot Well Formation and Coomarie Sandstone). To the east of the lease the majority of the younger Cambrian Antrim Plateau Volcanics lie (these consist of Tholeiitic basalt, minor tuffaceous sandstone, and lithic arenite). Previous experience and brief helicopter reconnaissance has suggested that not all the mapped Antrim Plateau Volcanics are as such and may be Tanami Complex in origin. Obvious outcropping geology is restricted to the Birrindudu Group Sediments.

The Nanny Goat Creek Beds are Archaean to Lower Proterozoic rocks, stratigraphically equivalent to the Mount Charles Beds outcropping near the Tanami Mine to the south. Both of these rock units form part of the Tanami Complex.

The Nanny Goat Creek Beds are described as predominantly volcanic rocks consisting of ignimbritic acid porphyry, amygdaloidal non-porphyritic basaltic lavas with intrusive patchy porphyritic basalt and tuff. The subordinate rocks are metasedimentary greywacke, shale and siltstone.

The Nanny Goat Creek Beds host the Crusade gold mineralisation. The mineralisation occurs along a regional shear zone that juxtaposes two units from the Nanny Goat Creek Beds; namely a dacite to the west and a basalt to the east. The majority of the mineralisation is hosted within the footwall basaltic rocks. Structure evident in the Gardiner Sandstone (Carpentarian) can be easily recognised on a
regional basis and transferred to the Nanny Goat Creek Beds. With this in mind, two structural trends (N – S and NW – SE) are evident.

The Mineral Lease (Crusade Prospect area) consists of outcropping Nanny Goat Creek Beds. The rocks are generally steeply dipping with cleavage often parallel to bedding, adding to the structural complexity. Complex folding and faulting is evident and detailed mapping is required to more fully understand this area.

Geological interpretation of the Crusade mineralised system shows it to be composed of approximately 20 separate quartz veins which are closely associated with the lithological contact between the basalt and the dacite. These veins have a variable dip (50-85º) to the west and are suspected to have been produced as a result of reverse thrusting (ie. dip slip with a small component of strike slip) along the lithological contact. There is also a slight northerly plunge apparent within the core of the mineralisation, which is associated with a flattening of the vein dip.

5.0 EXPLORATION COMPLETED

All drillhole locations are shown on Figure 3 and all sample and assay data are included in the digital appendix. At the time of writing this report the data records for the surface sampling was not available. All annual reports (Muir 2002, 2003, 2004 and Eisenlohr 2009) are listed in the bibliography.

5.1 Year 1  23 January 2001 to 22 January 2002

No field exploration was carried out in the first year of tenure. Work complete involved the assessment and ranking of geochemical targets. A component of re-analysis of remotely sensed data was completed.

5.2 Year 2  04 May 2002 to 03 May 2003

Exploration in the second year of tenure consisted of 16 rock chip samples at the Crusade prospect area. Soil sampling was carried out in previously relinquished areas of the tenement. The maximum gold assay result for the rock chip samples was 23ppb and the best arsenic value was 330ppm. At the time of writing this report the data of the surface sampling was not available neither as hard copy nor digital.

5.3 Year 3  04 May 2003 to 03 May 2004

A regional mapping program as part of a wider structural study was undertaken. 66 soil samples followed up on the 2002 soil program. No records of the data are available. An IP survey of the Crusade prospect area generated six drill targets away from the historically drilled areas. Four targets were followed up with four north-west south-east RAB drill traverses. The 33 RAB holes for 2243m were between 48m – 81m deep. Samples were assayed for Au, Ag, As and Cu.

CRRB0017 and CRRB0018, located 1.2km north of the Crusade prospect, returned the best results with elevated As levels between 200ppm – 300ppm (maximum 687ppm As in CRRB0018). The maximum gold assay value of 0.358ppm came from CRRB0005. On average a 5m thick aeolian sands and minor clays cover overlays the predominately rhyodacite and basalt bedrock lithologies.

5.4 Year 4  04 May 2004 to 03 May 2005

No field exploration was carried out in the fourth year of tenure.
FIGURE 3

SEL 10319
DRILLHOLE LOCATIONS

1 : 50,000

MGA Zone 52 (GDA94) kilometres

PLAN No: CTP_6_001

ORIGINATOR: J. Rohde
DATE: Oct 2010
DRAWN: M.H. Bailey
5.5 Year 5
No field exploration was carried out in the fifth year of tenure.

5.6 Year 6
No field exploration was carried out in the sixth year of tenure.

5.7 Year 7
No field exploration was carried out in the seventh year of tenure.

5.8 Year 8 11 August 2008 to 09 August 2009
No field exploration was carried out in the eighth year of tenure.

5.9 Year 9 11 August 2009 to 09 August 2010
No field exploration was carried out in the final ninth year of tenure due to the change in owner ship.
6.0 BIBLIOGRAPHY


