



TANAMI

(NT) PTY LTD

ABN 58 141 658 933

GROUP ANNUAL REPORT GR 160-10

**Exploration Licences
9763, 10355, 10411, 22229, 22378, 23342**

Cave Hill Project

From 24 July 2012 to 23 July 2013

Holders: Tanami (NT) Pty Ltd
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Date: September 2013
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Commodity: Gold
Datum/Zone: GDA94/Zone 52
250,000 Mapsheet: The Granites (SF52-03)
100,000 Mapsheet: Frankenia (4857)

Distribution:

- o NT Department of Mines & Energy - digital
- o Central Land Council - - digital
- o Tanami Gold NL - digital

File: NT DME GAR 2013_Cave Hill

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1.0 SUMMARY

Exploration Licences 9763, 10355, 10411, 22229, 22378 and 23342 form the Cave Hill Project, which is located approximately 650 km northwest of Alice Springs (**Figure 1**). On 30 March 2010, Tanami (NT) Pty Ltd (TNT), a wholly owned subsidiary of Tanami Gold NL, purchased the tenements from Otter Gold NL (Otter) a wholly owned subsidiary of Newmont Asia Pacific. TNT is exploring the project area for gold.

In the year ending 23 July 2013 a soil sampling geochemical survey was undertaken over the entire tenement holdings, infilling the 2011 1000m spaced program down to 500m sample spacing (**Figure 2**). A total of 352 soil, 57 lag and 9 rock chip samples were taken (**Table 2**).

Gold anomalism occurs in EL22229 and EL23342 (**Figure 3**). Two anomalous zones in EL22229 have peak values of 6.06ppb and 1.97ppb Au. One anomalous zone in EL23342 has peak value of 1.22ppb Au. Zones of low level anomalous pathfinder elements occur in all tenements.

The results of the surface sampling program during the year ending 23 July 2013 justify further exploration of the tenements of the Cave Hill Project.

2.0 INTRODUCTION AND ACCESS

This is the group annual report for the TNT Cave Hill Project tenements for the year ending 23 July 2013.

The tenements are located approximately 650km northwest of Alice Springs along the Tanami Road (**Figure 1**). Main access to the tenements is by the Tanami Road and then to southwest from the Rabbit Flat Road House via the track to Smoke Hills.

Cross country bush driving is required to access the tenements. The wetlands shown as a green area on Figure 1 also present access problems. Other areas of dense vegetation and sand dunes also form natural barriers preventing access for vehicles.

3.0 TENURE

On 30 March 2010 the tenements comprising the Cave Hill Project were acquired by Tanami (NT) Pty Ltd (TNT), a wholly owned subsidiary of Tanami Gold NL, from Otter Gold NL (Otter). Otter is a wholly owned subsidiary of Newmont Asia Pacific.

Tenement details of the exploration licences covered in this report are detailed below in **Table 1**.

Table 1 Tenement Details

Tenement No.	Tenement Name	Current Blocks	Grant Date	Expiry Date
EL 9763 #	Red Hills	7	24-Jul-00	23-Jul-13
EL 10355 #	Red Hills North	4	4-Jun-01	3-Jun-13
EL 10411 #	Tanami Downs N	7	4-Jun-01	3-Jun-13
EL 22229 #	Question Mark Bore East	8	8-Jun-01	7-Jun-13
EL 22378 #	Question Mark Bore Far East	6	8-Jun-01	7-Jun-13
EL 23342	Coomarie	9	25-May-06	31-Dec-15

Renewal applications pending

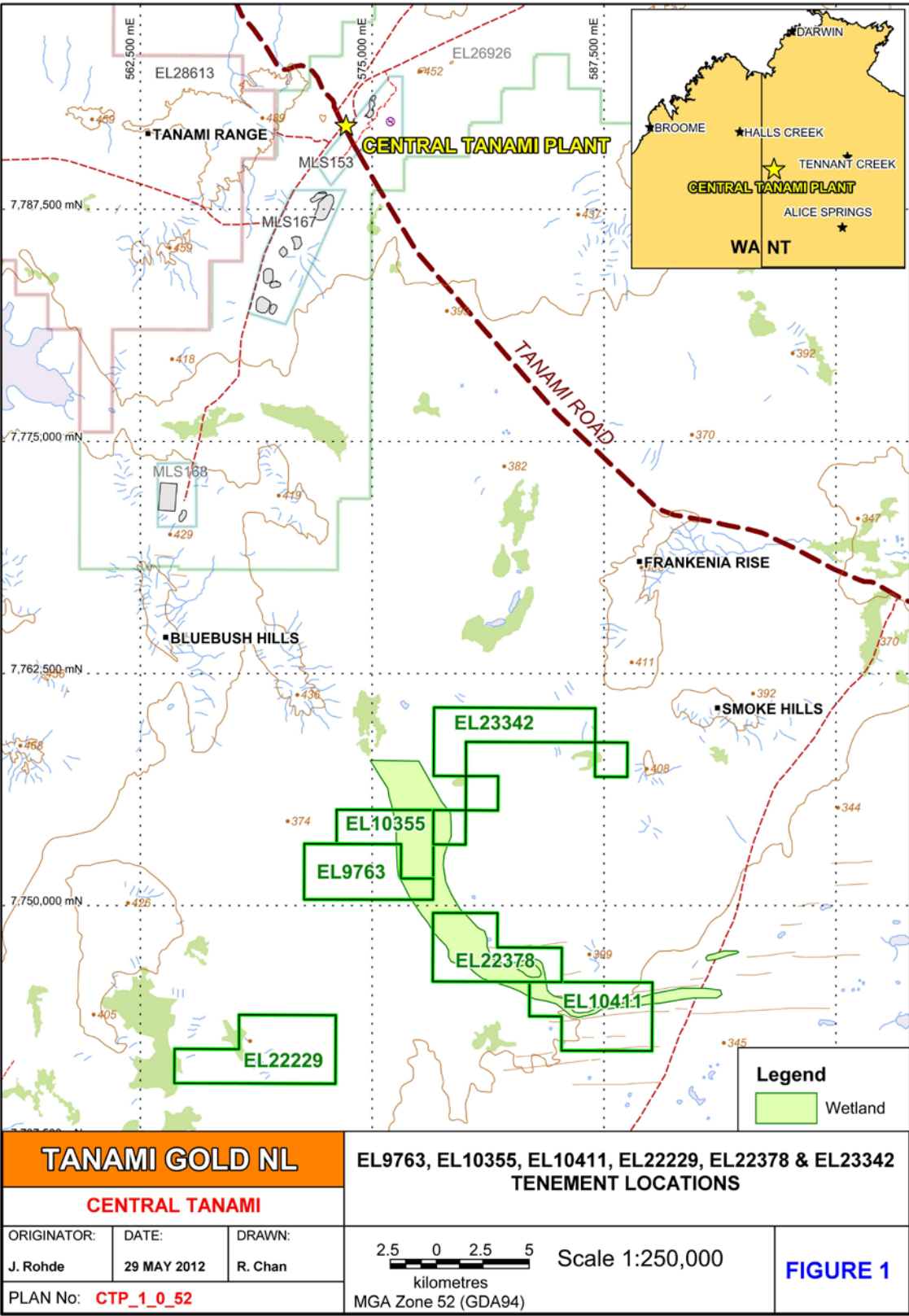


Figure 1: Tenement Location Plan

4.0 GEOLOGY

(From Parker 2008)

The Proterozoic Granites-Tanami Inlier is located about 600km NW of Alice Springs, in the Northern Territory and forms part of the broader Northern Australian Orogenic Province (Plumb, 1990). The Inlier underlies, and is bounded by, the Palaeozoic Canning, Neoproterozoic Wiso and Paleoproterozoic Victoria River Basins to the west, east and north respectively. The Arunta Complex lies to the south and may represent a continuation of the Halls Creek Orogen in Western Australia (Hendrickx, et al, 2000). To the northwest, clastic sediments of the Middle Proterozoic Birrindudu Basin overlie and separate the Inlier from the similar age rocks in the Halls Creek Province.

The oldest rocks of the Tanami region belong to the Billabong Complex, a suite of Archaean age gneiss and schist. This is unconformably overlain by the basal Proterozoic sequence known as the MacFarlanes Peak Group dominated by mafic volcanic and volcanoclastic rocks suggestive of a rift setting. The Macfarlanes Peak Group has a maximum age of deposition of 1880 Ma. This is followed by a thick, possibly disconformable succession of clastic sediments making up the Tanami Group representative of a passive margin sequence. (Hendrickx et al, 2000). The Tanami Mine Group is subdivided into a thin basal meta-quartzite, the lower Tanami Group (Dead Bullock Formation) made up of carbonaceous siltstone, BIF's and calc-silicates and an upper sequence of turbidites (Killi Killi Formation). A suite of pre- to syn-deformation dolerites and gabbros are found intruding both the MacFarlane Peak and Tanami Groups.

Complex, polyphase deformation during the Tanami Orogeny (1845-1835 Ma) has affected the entire Inlier (Vandenberg et al., 2001). Peak regional metamorphism during the Tanami Orogeny reached amphibolite facies, but is more generally greenschist facies through the Inlier. Contact metamorphic aureoles are well developed at the margins of granite plutons emplaced throughout deformation. Formation of molasse during the Tanami Orogeny occupies a small syn-orogenic sub-basin to the west of the inlier (Pargee Sandstone).

A period of crustal extension (≈ 1830 Ma) followed the Tanami Event, this resulted in the deposition of basalt and turbiditic volcanics in an inferred failed rift (Mt Charles formation) along with high level granite intrusion and felsic volcanism from ≈ 1830 -1800Ma (Dean, 2001). At least three suites of granitic intrusives and two volcanic complexes are present. The last intrusion of (undeformed) granite occurred at around 1805 – 1790Ma, with intrusion of The Granites Suite (Dean, 2001).

Residual hills of gently folded Birrindudu Group siliciclastics unconformably overlie early Proterozoic lithologies and provide platform cover sequences. Younger flatlying Cambrian Antrim Plateau Basalts are also preserved in areas protected from erosional stripping. Tertiary drainage channels, now completely filled with alluvial sediment, lacustrine clays and calcrete are a major feature of the region. Some drainage profiles exceed 10 km wide, 100m depth, presenting a formidable barrier to mineral exploration.

A desert terrain comprising transported and residual colluvial cover sediments and aeolian sand blanket a large portion of the Inlier, with an estimated outcrop exposure of less than 10% of the early Proterozoic lithological units. Gold mineralisation within the Tanami is dominantly hosted by the Tanami Group and Mt Charles Formation, though mineralisation has been recorded in all Proterozoic units older than the

Birindudu Group cover sequences. Owing to their more resistant nature, only the cherts and iron formations and associated interbedded graphitic schists tend to outcrop above the sand plain.

5.0 PREVIOUS EXPLORATION

July 2001 to July 2002

Work completed on the considerably different Cave Hill Project area during this period involved magnetic and gravity interpretation undertaken by Otter and Fractal Graphics in Perth. The gravity and magnetic datasets were 'wormed' using a process developed by Fractal Graphics and the CSIRO with the resulting data providing a new way to look information in three dimensions. A regional surface sampling program was completed but no surface sampling occurred within EL22229 and EL 22378.

July 2002 to July 2003

A review of the exploration potential was undertaken by Otter. No work was reported within EL22229 & EL22378.

June 2003 to June 2004

Otter continued a data review and interpretation. A surface quartz vein sample was taken from the prospect known as Casa (within EL22178) and returned a gold value of 0.54ppm Au. Work within EL22229 was limited to establishing track access and ground reconnaissance and no work was reported within EL22378.

In 2003 – 2004 a prospectivity analysis was performed concluding that EL9763 covers an area where two regional scale faults meet. When looking at the magnetics EL9763 has prospective, untested targets possibly located at the intersection of two regional scale faults. The area has not been fully tested as there is potentially thick cover of Antrim Plateau Basalt.

During 2004 first pass drilling was planned for ELs 10355 and 10411. Drilling on EL10355 was not completed due to budget constraints; however, a program of 16 Aircore holes and 1 RAB hole for a total of 1,187m was completed on EL10411. The best result achieved was 0.065ppm Au.

No on-ground exploration was conducted by Otter on ELs 9763, 10355, 10411, 22229, 22378 and 23342, during the period 2005 to 2010 period prior to divestment of the tenements to TNT.

Work by TNT during 2010 was limited to desktop assessment of the tenements.

During year ending 23 July 2011 exploration included a regional reconnaissance and 1000m x 1000m surface sampling program on east west traverses over the project area. A total of 279 samples were collected and analysed. The best assay value returned was 0.00076ppm Au from anthill sample X121504, located on EL 22229.

The remainder of previously drilled Aircore or RAB holes were located. The drill hole samples showed fine to medium sediments from near the surface and a significant zone of contact metamorphic rock types over a quartz rich granite. Holes appeared to be of approximately 40m to 60m in depth.

No on ground exploration took place during year ended July 2012. TNT reviewed data obtained from the reconnaissance and soil sampling program and conducted an assessment of suitable exploration techniques for the Tanami Region.

6.0 EXPLORATION COMPLETED

In the year ending 23 July 2013 a surface sampling program was completed over the area of all the project tenements. The purpose of this program was to infill the existing 1000m spaced soil sampling undertaken in 2011 to a closer spacing of 500m. It has been determined that maximum sample spacing of 400/500m is necessary to detect typical economic sized gold deposits of the Tanami region.

Previous drilling and aeromagnetic images suggest most of the project area has cover of significant depth for soil sampling to be ineffective. TNT has been undertaking orientation biogeochemical surveys on other tenements with the ubiquitous spinifex plants of the Tanami region. Spinifex sampling studies have shown potential for spinifex leaf sampling to be effective at testing bedrock regolith through moderate depth cover due to the deep root system of mature plants. The results of TNT orientation programs elsewhere were not yet available so it was decided to proceed with the previously planned soil program, delayed from the previous year.

Sampling was undertaken at 500m by 500m spacing on north-south lines. The 2011 sampling sites were not repeated. A total of 352 soil, 57 lag and 9 rock chip samples were taken, with the details for each tenement in **Table 2**. Sampling locations are shown in **Figure 2**. Soil samples were taken at a nominal 15cm depth and sieved to -200um. Lag and rock chip samples were taken where available. Geochemical analysis was undertaken by Intertek Genalysis Perth laboratory by partial leach digest with ICP determination for gold and multi-element suite, the same analysis as the 2011 sampling.

Table 2 Geochemical Sampling

Tenement No.	Soil Samples	Lag Samples	Rock Chip Samples	Total
EL 9763	69	1		70
EL 10355	24	1		25
EL 10411	57		4	61
EL 22229	66	16	3	85
EL 22378	56		1	57
EL 23342	80	39	1	120
Total	352	57	9	418

Most of the lag samples collected were from EL22229 and EL23342 suggesting there may be significant areas in these two tenements with shallow cover.

Interpretation of geochemical analysis of samples has not been completed, but geochemical anomalism occurs in all tenements. There is a significant difference in sample population statistics from the 2011 and 2013 programs, despite the sampling methods and analysis being the same. There is also usually a lack of anomalism in 2011 samples within anomalous areas from the 2013 samples. This highlights that soil sampling through cover cannot be a definitive geochemical test of an area. The only notable variation from 2011 to 2013 is the preceding weather; the 2011 sampling followed a very wet summer whereas the 2013 sampling followed a dry summer.

Gold anomalous results occur in EL22229 and EL23342, with most being in EL22229. Gold results are shown in **Figure 3**. Apart from one zone of 3km strike in EL22229 all other anomalism is one or two sample zones. Maximum result in EL23342 is 1.22ppb Au. Maximum result in EL22229 is 6.06ppb Au. The larger anomalous zone in EL22229 has maximum result of 1.97ppb Au.

Pathfinder element anomalism occurs in all tenements. There appears to be a Bi association with Au, although not a correlation in individual samples. All pathfinder anomalism is at low levels however, at most 2-3 times background levels.

Although interpretation of results is incomplete it would appear that follow up work based on the results from the reporting year is justified. At a minimum this would be expected to be soil sampling, closing up the sample spacing around gold anomalous samples, particularly in EL22229.

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