

# REPORT

for SEL 23659
Mac Peak

for the period **20<sup>th</sup> March 2009 to 19<sup>th</sup> March 2010** 

'Central' Project Northern Territory

Volume 1 of 1

**1:250,000 SHEET:** THE GRANITES SF 52-03

**1:100,000 SHEET:** MCFARLANE 4757

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TENEMENT HOLDER: Australian Tenement Holdings Pty Ltd

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Newmont Asia Pacific

Central Land Council

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April 2010 Newmont CR 34797

### **SUMMARY**

This is the annual report on SEL 23659 for the period 20<sup>th</sup> March 2009 to 19<sup>th</sup> March 2010.

No field exploration was carried out over the area.

It was, however, important for ATH to ensure that there is a reasonable amount of exploration land to include with the TMJV/Groundrush Mining Leases as a saleable package. If we reduce the ATH landholdings in the vicinity of the TMJV/Groundrush Mining Leases and processing infrastructure, the likelihood of securing a sale to an established junior Mining Company or Initial Public Offerings may be diminished. In addition, all of the area covered by the project area is considered prospective for gold mineralisation similar to the Tanami, Twin Bonanza, Old Pirate & Groundrush deposits and any purchaser will require time to effectively evaluate the exploration potential of the area.

During the reporting period a purchase agreement has been signed and the divestment is in progress.

During 2010 Newmont is planning to continue with its environmental auditing of ATH tenements to ensure the success of previous rehabilitation of exploration disturbances.

# **TABLE OF CONTENTS**

1.	INTRODUCTION	2
2.	TENEMENT DETAILS	2
3.	LOCATION AND ACCESS	2
4.	GEOLOGY	2
5.	EXPLORATION DURING THE PERIOD	3
6.	REFERENCE LIST	4
7.	BIBLIOGRAPHIC DATA SHEET	5
	LIST OF TABLES	
Table	e 1: Tenement Summary for SEL 236592	
	LIST OF FIGURES	
	re 1 Tenement Location	
ı ıgul	E 2 A00633	•

### 1. INTRODUCTION

SEL 23659 – Mac Peak – as part of the Central Project, was granted to Australian Tenement Holdings Pty Ltd on 3<sup>rd</sup> April 2003. This report is the annual report for the period 20<sup>th</sup> March 2009 to 19<sup>th</sup> March 2010.

## 2. TENEMENT DETAILS

Tenement details are listed in Table 1:

Table 1: Tenement Summary for SEL 23659

Licence	Status	Grant Date	Area/Blocks
SEL 23659	Granted	03/04/2003	23

### 3. LOCATION AND ACCESS

SEL 23659 is located on The Granites 1:250 000 map sheet (McFarlane 4757), approximately 650 km northwest of Alice Springs. Access is by air or via the Tanami Highway and a network of pre-existing and newly formed tracks and can be limited during the wet season (December to March).

## 4. GEOLOGY

The Granites-Tanami Goldfields lie in the eastern part of the Early Proterozoic Granites-Tanami Inlier, which is part of the Northern Australian Orogenic Province (Plumb, 1990). The Inlier abuts the Arunta Complex to the south and east and is probably a continuation of the Halls Creek Orogen in Western Australia (Hendricks et al., 2000). It underlies younger cover sequences including the extensive Paleozoic Wiso Basin on its northeastern margin, and the Victoria River Basin to the north. To the west clastic sediments of the Middle Proterozoic Birrindudu Basin overlie and separated the Inlier from the similar aged rocks of the Halls Creek Province.

The oldest rocks of the Tanami region belong to the Billabong Complex, a suite of Archean age gneiss and schist. These are unconformably overlain by the Proterozoic MacFarlenes Peak Group (mafic volcanic and volcaniclastic rocks), followed by a thick succession of clastic sediments of the Tanami Group (Hendricks et al., 2000). A suite of syn- to post-deformation dolerites and gabbros are found intruding both the MacFarlane Peak and Tanami Groups.

Complex polyphase deformation during the Barramundi Orogeny (1845-1840Ma) has affected the entire Granites-Tanami Inlier. It appears to have been largely controlled by two sets of regional scale fundamental crustal fractures that trend NNE and WNW. This is evidenced by the orientation of successive phases of macroscopic folding in the region and the consistent sympathetic trends of late tectonic faults.

Peak metamorphism during the Barramundi Orogeny reached amphibolite facies (Granites Gold Mine), but is more generally greenschist facies through the Inlier (Callie

Gold Mine). Contact metamorphic aureoles, commonly identified in politic schist units by randomly orientated andalusite porphyroblasts, are well developed at the margins of the syn- and post-orogenic granite plutons.

Localised extension followed, forming small basins, that filled with shallow marine sediments to the west (Pargee Sandstone) and pillow basalts and turbiditic sediments to the east (Mt Charles Formation).

Following the period of extension, widespread granite intrusion and volcanism followed in the period 1830 – 1810 Ma. At least three suites of granitic intrusives and two volcanic complexes are present. The last intrusion of (undeformed) granite occurred at around 1800 – 1795Ma, with the intrusion of The Granites Suite (Hendrickx et al, 2000).

Residual hills of gently folded Carpentarian Gardiner Sandstone unconformably overlie Early Proterozoic lithologies. Younger flatlying Cambrian Antrim Plateau Basalts are also preserved as platform cover in areas protected from erosional stripping.

Tertiary drainage channels, now completely filled with alluvial and lacustrine clays and calcrete are a major feature of the region. Some drainage profiles are 10 km wide and greater than 100m deep.

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.

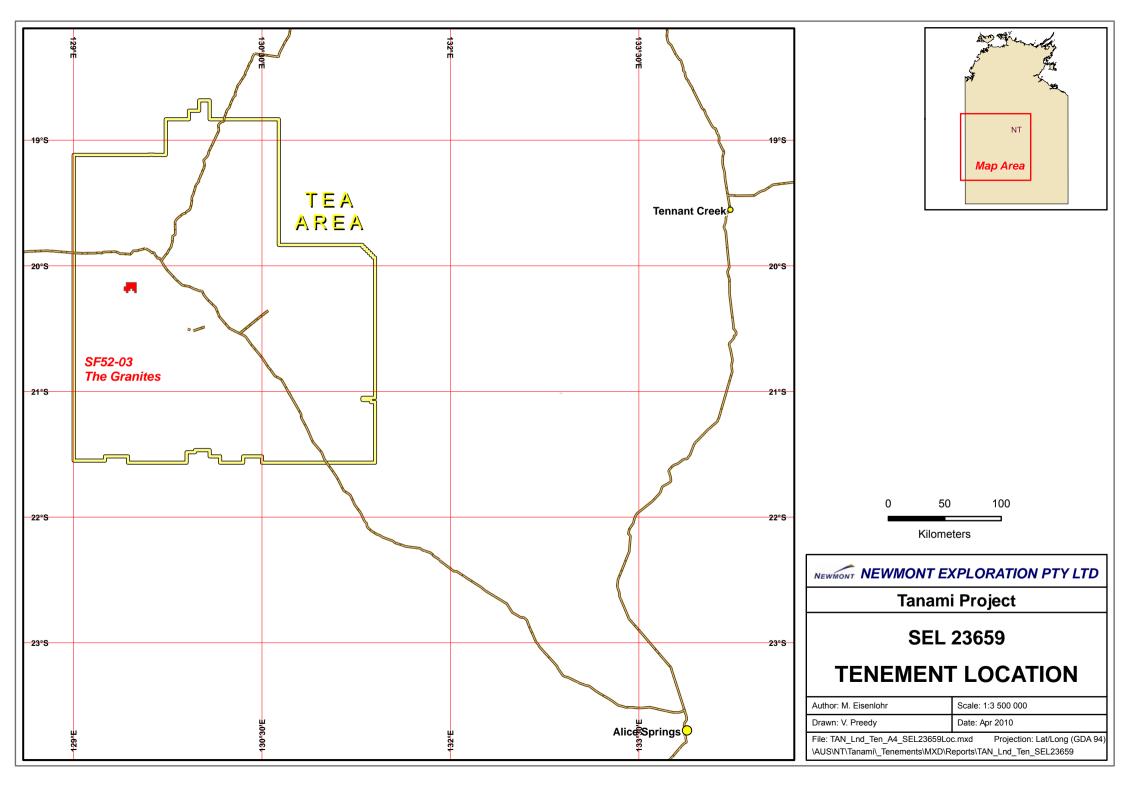
Gold mineralisation within the Newmont Tanami tenement holdings is dominantly hosted by the Tanami Group, a sequence of fine to medium-grained turbiditic metagreywackes with lesser amounts of metapelite, carbonaceous siltstone and schist, banded ironformation, chert and calcsilicates. (Hendrickx et al, 2000). Owing to their more resistant nature, only the cherts and iron-formations and associated interbedded graphitic schists tend to outcrop above the sand plain. The interlayered pillow basalts and sediments of the Mt.Charles Formation at the Tanami Mine deposits also host significant gold mineralisation.

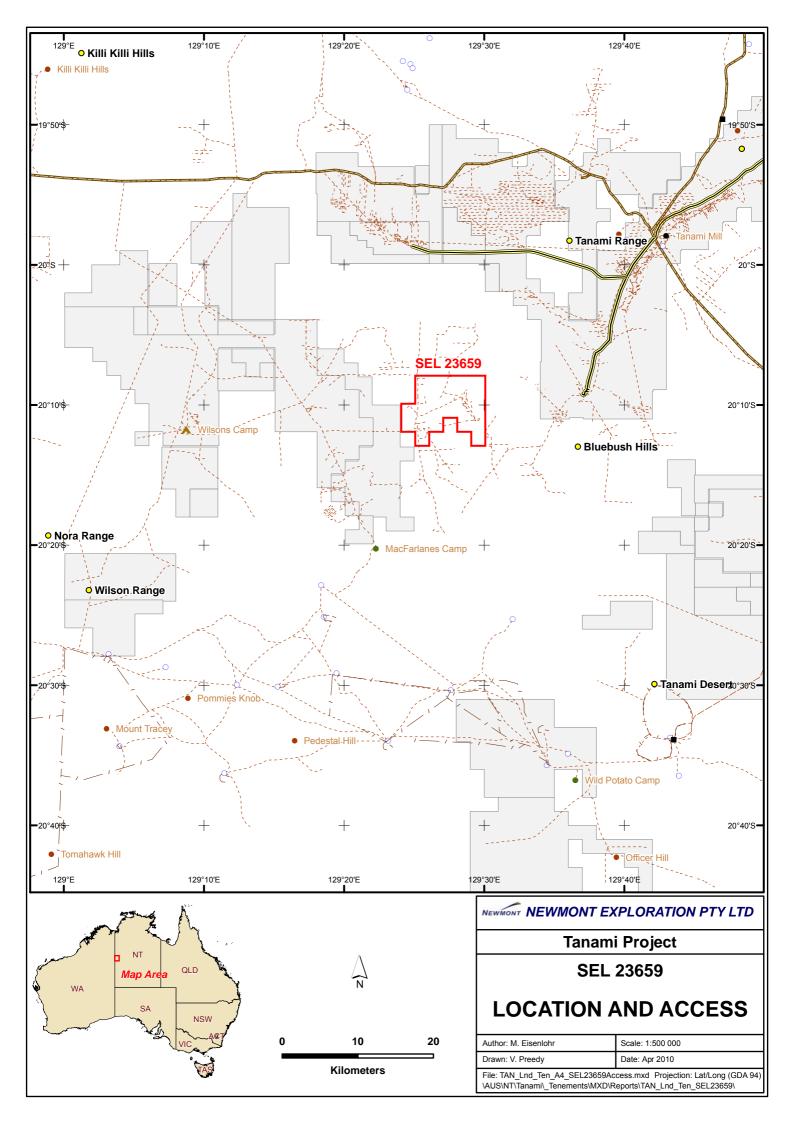
# 5. EXPLORATION DURING THE PERIOD

Since the last report a purchase agreement has been signed and the divestment process of the Tanami tenement package has been initiated.

During 2010 Newmont is planning to continue with its environmental auditing of ATH tenements to ensure the success of previous rehabilitation of exploration disturbances.

# Figure 1 Tenement Location





# Figure 2 Access

### 6. REFERENCE LIST

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**HOLDER** Australian Tenement Holdings

Pty Ltd

**PROJECT** Central

**TENEMENTS** SEL 23659 - Mac Peak

**REPORT NUMBER** CR 34797

**DATE** 19<sup>th</sup> April 201

AUTHORS M. Eisenlohr

**STATE** NT

**LATITUDE** -20°08' to -20° 13'

**LONGITUDE** 129° 24' to 129° 30'

**1:250 000 SHEET** The Granites SF52-03

**1:100 000 SHEET** McFarlane 4757

**COMMODITY** Gold

**KEYWORDS** Rehabilitation, Divestment