



ABM
RESOURCES NL

ABM RESOURCES NL

ABN 58 009 127 020

ANNUAL REPORT

EL 27566

'SPATHA'

For the period 6 April 2010 to 5 April 2011

NIL WORK REPORT

Holder	ABM Resources NL
Operator	ABM Resources NL,
Author	J Rohde
Date	April 2011
Email	joe @abmresources.com.au
Target Commodity	Gold
Datum/Zone	GDA94/ MGA Zone 52
250,000 mapsheet	Tanami (SE52-15)
100,000 mapsheet	Breaden (4859), Wilson Creek (4959)

Distribution:

- o NT DoR - digital
- o Central Land Council - digital
- o ABM RESOURCES NL - Perth - digital

File: jr26DoR EL 27566 Spatha AR11

CONTENTS

	Page
1.0 Summary	1
2.0 Introduction.....	1
3.0 Tenure.....	1
4.0 Geology	2
4.1 Regional Geology	2
4.2 Local Geology.....	2
5.0 Previous Exploration.....	3
6.0 Exploration Completed	3
7.0 Bibliography.....	3

TABLES

Table 1	Tenement Details
---------	------------------

FIGURES

Figure 1	Project Location	1 : 250,000
Figure 2	Tenement Locality	1 : 250,000

1.0 SUMMARY

Exploration Licences **27566** ‘Spatha’ is situated approximately 293km southeast of Halls Creek, in the north-western portion of the Tanami Desert (**Figure 1**).

ABM Resources NL (ABM) was granted the tenement at 6 April 2010. ABM explores the tenement for the potential of gold mineralisation

The application for **EL 27566** was pursued due to its strategic location on a geological trend between the Crusade Prospect to the north and the Groundrush deposits to the south. Its close proximity to the Crusade open pit and the renewed activity in the area by other explorers makes the tenement particularly prospective. The tenement remains geochemically poorly tested by the historical geochemical sampling and the assay data of a 567 PHRAB historical drill program which has to be sourced from public data once available. The stratigraphy includes the Nanny Goat Volcanics, which are the host for mineralisation at the Crusade and Kokoda prospects to the north.

No exploration was conducted during the period from the 6 April 2010 grant date to the reporting date 5 April 2011; therefore this report covers nothing that was conducted during the reporting period.

2.0 INTRODUCTION

The **EL 27566** is located approximately 290km southeast of Halls Creek, in the north-western region of the Tanami Desert (**Figure 1**). Access from Halls Creek is southeast via the unsealed Tanami Highway for approximately 320km to the Tanami Mine, then 83km north along the Lajamanu (Hooker Creek) Road towards the Supplejack Downs homestead, then east using station tracks. Access from Alice Springs is northwest via the Tanami Highway for approximately 700km until the Lajamanu turnoff (**Figure 1**).

The area is affected annually by high temperatures and seasonal rainfall associated with the northern monsoon, which generally extends from November to April. During this time access via road may be restricted due to wet conditions.

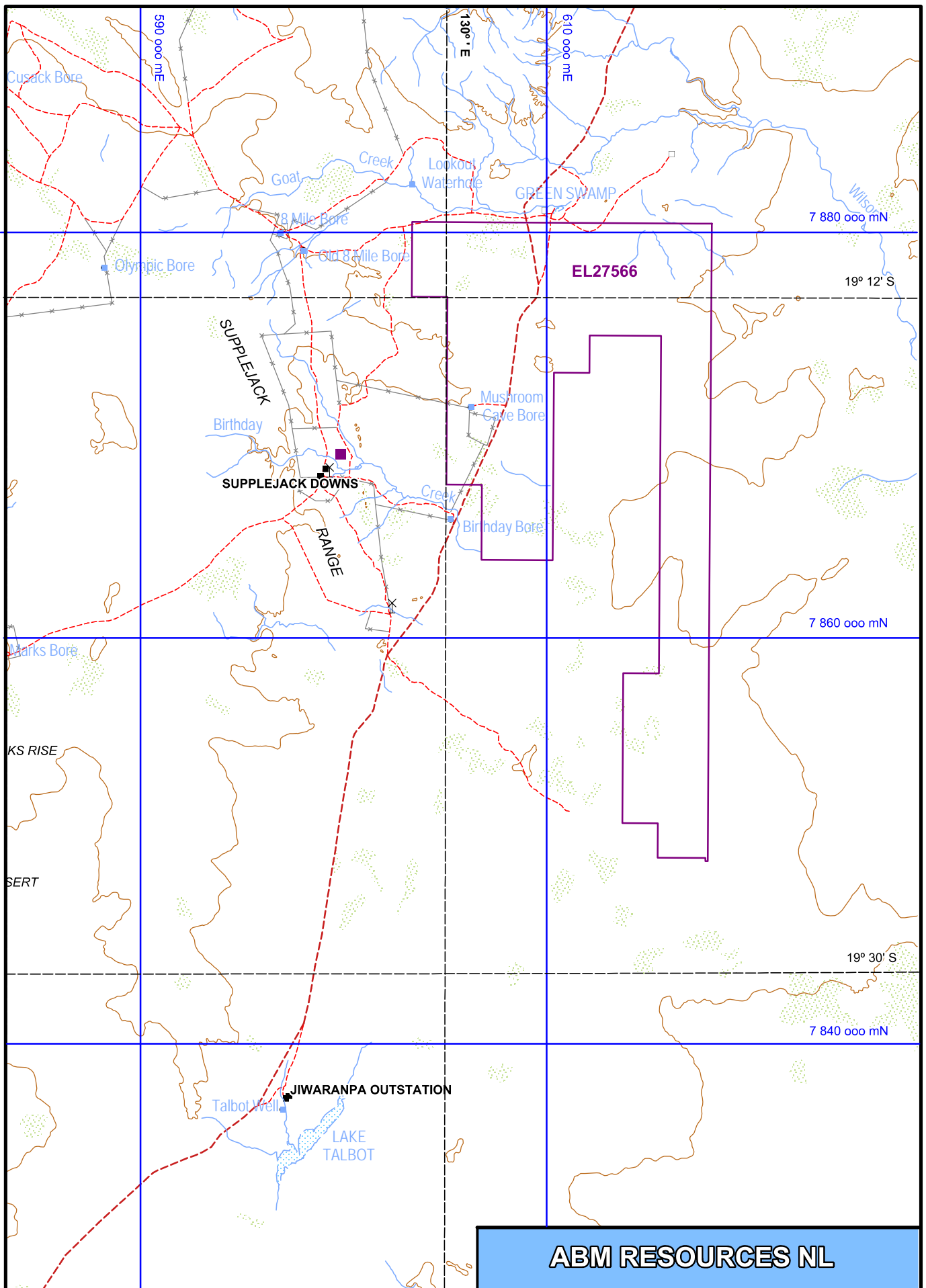
3.0 TENURE

On the 6th April 2010 Exploration Licences **27566** ‘Spatha’ was granted to ABM for a period of six years. Tenement details are listed below in **Table 1** and are illustrated in **Figure 2**.

Table 1: Tenement Details

Tenement Name	Tenement No	Blocks	Km ²	Grant Date	Expiry	Current Covenant
Spatha	EL 27566	75	241.5	6 April 10	5 April 16	\$30,000

Even so as **EL 27566** is situated on a Pastoral Lease the Central Land Council is included in the distribution list of the reporting.



ABM RESOURCES NL

ORIGINATOR: **J.Rohde** DATE: **MAY 2011** DRAWN: **B.MASTAGLIA**

SUPPLEJACK

1 : 250,000
 0 5 10 15
 ───────────
 MGA Zone 52 (GDA94) kilometres

**TENEMENT LOCALITY
 EL27566**

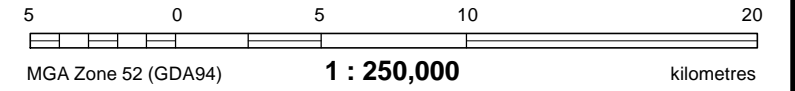
Plan No. TAN_SJ_1_0_003

FIGURE 1

ABM RESOURCES NL

SUPPLEJACK

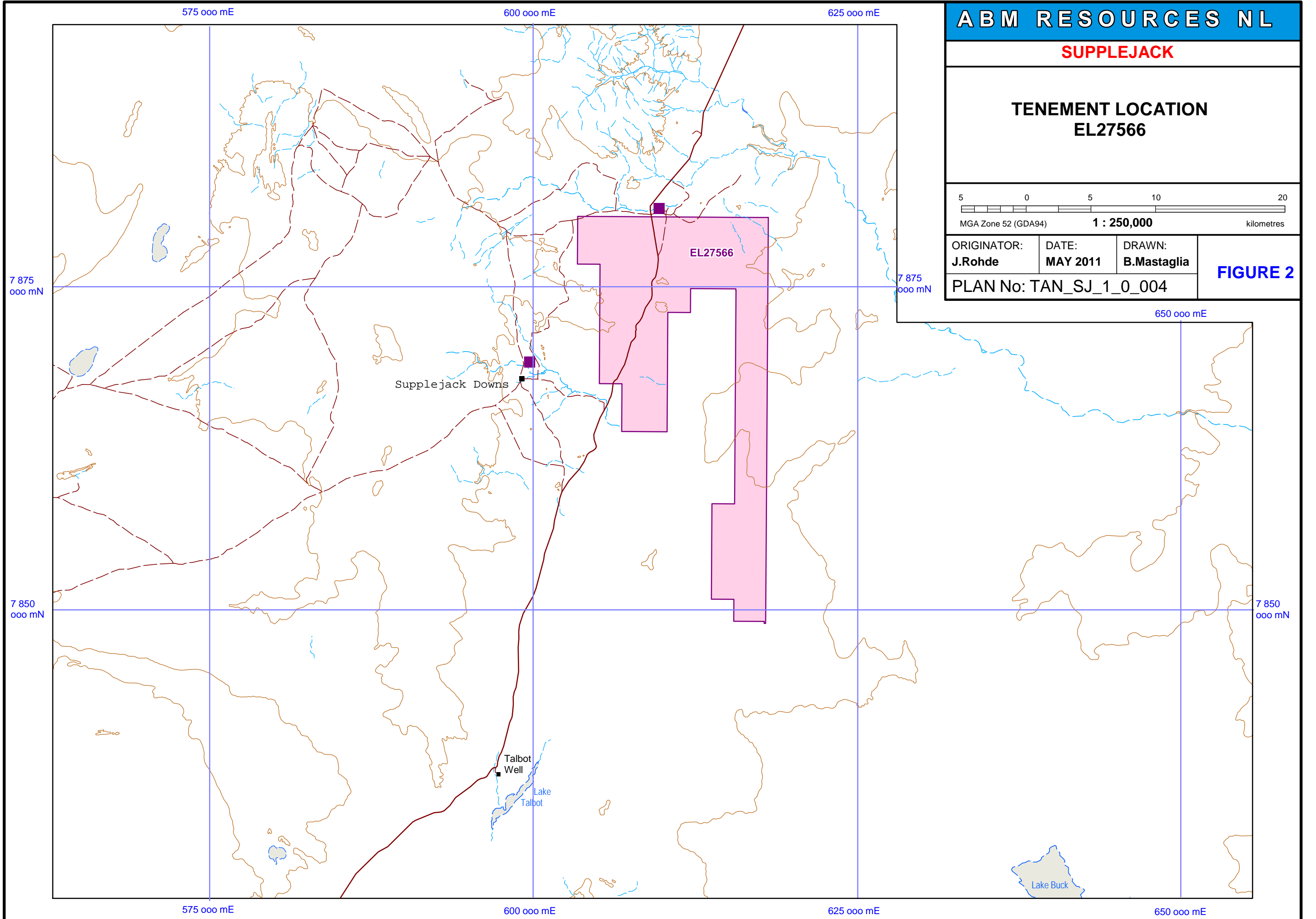
**TENEMENT LOCATION
EL27566**



ORIGINATOR: J.Rohde	DATE: MAY 2011	DRAWN: B.Mastaglia
-------------------------------	--------------------------	------------------------------

FIGURE 2

PLAN No: TAN_SJ_1_0_004



4.0 GEOLOGY

4.1 Regional Geology

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 MacFarlanes Peak Group (mafic volcanic and volcanoclastic 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 polytict 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, which 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 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.

4.2 Local Geology

Within the ABM Supplejack project area, four stratigraphic units have been recognised; Nanny Goat Creek Beds, Supplejack Downs Sandstone, Gardiner Sandstone and Antrim Plateau Volcanics.

The Nanny Goat Creek Beds are Archean 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-porphyrific basaltic lavas with intrusive patchy porphyritic basalt and tuff. The subordinate rocks are metasedimentary greywacke, shale and siltstone.

The main part of the project area consists of subcropping Nanny Goat Creek Beds. The rocks generally appear to be 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.

The Supplejack Downs Sandstone unit (SDS) consists of sublithic arenite and quartz arenite with some locally exposed shale and siltstone. It appears to unconformably overlie the Nanny Goat Creek Beds and is in turn unconformably overlain by Gardiner Sandstone. Mapping in nearby tenements shows the SDS to have moderate dips (24-45°) and broad open folding.

The Gardiner Sandstone unit forms part of the Birrindudu Group and consists of sublithic arenite, subordinate quartz arenite, conglomerate, shale siltstone and glauconitic sandstone.

The Antrim Plateau Volcanics are considered to be the oldest Palaeozoic rocks in the area and are probably of early Cambrian age. The unit is dominated by tholeiitic basalt lavas with subordinate intercalated sandstone and chert. Exposure within the licence area is minimal. There is very little outcrop and most of the unit appears lateritised.

The remainder of the project area is covered by alluvial and aeolian sand, silt and gravels with extensive laterite development.

5.0 PREVIOUS EXPLORATION

Apart from the historic PHRAB drilling (on open file) no previous on ground exploration is known.

6.0 EXPLORATION COMPLETED

The application for **EL 27566** was pursued due to its strategic location on a geological trend between the Crusade Prospect to the north and the Groundrush deposits to the south. Its close proximity to the Crusade open pit and the renewed activity in the area by other explorers makes the tenement particularly prospective. The tenement remains geochemically poorly tested by the historical geochemical sampling and the assay data of a 567 PHRAB historical drill program which has to be sourced from public data once available. The stratigraphy includes the Nanny Goat Volcanics, which are the host for mineralisation at the Crusade and Kokoda prospects to the north.

ABM conducted no exploration in the time from the grant date (6 April 10) to the end of the reporting period (5 April 11).

7.0 BIBLIOGRAPHY

Blake, D., Hodgson, I.M., and Muhling, P.C., 1979. Geology of the Granites-Tanami Region, Northern Territory and Western Australia, Bureau of Mineral Resources, Geology and Geophysics, Australia, Bull. 197

Blake, D.H., Stewart, A.J., Sweet, I.P., & Hone, I.G., 1987. Geology of the Proterozoic Davenport Province, Central Australia. Bureau of Mineral Resources, Geology and Geophysics, Australia, Bull. 226.

Dean, A., 2001. Igneous rocks of the Tanami Region. Northern Territory Geological Survey, Record 2001-2003.

Hendrickx M.A., Slater K.R., Crispe A.J., Dean A.A., Vandenberg L.C., and Smith J.B., 2000. Palaeoproterozoic stratigraphy of the Tanami Region: regional correlations and relation to mineralisation – preliminary results. Northern Territory Geological Survey. Geological Survey Record GS 2000-13.

Hodgson, C.J., 1975. Tanami Northern Territory, 1:250,000 Geological Series: Explanatory Notes.

Plumb, K.A. 1990. Halls Creek Province and The Granites-Tanami Inlier – regional geology and mineralisation, in Geology of the Mineral Deposits of Australia and Papua New Guinea (Ed F.E. Hughes) pp 681-695 (The Australasian Institute of Mining and Metallurgy: Melbourne).

Shaw, R.D., Stewart, A.J., & Black, L.P., 1984. The Arunta Inlier: A complex Ensiatic Mobile Belt in Central Australia. Part 2: Tectonic History. Australian Journal of Earth Science, 31, pp 457-484.