# FOR YEAR FOUR ACACIA PROJECT AREA

(Frazers North Prospect)

for the period

11<sup>th</sup> January 2011 to 10<sup>th</sup> January 2012

DARWIN SD52-4 MANTON DAM 5172-3

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#### **Summary**

The Frazers North Prospect (EL26434), of the Acacia Project Area, consists of the granted exploration licence covering 1.3 km<sup>2</sup> located about 60 kilometres south of Darwin, NT.

During the year The project area was 100% owned by Acacia Minerals Pty. Ltd. a subsidiary company of Equator Resources.

No exploration was completed on this tenement in year 4 as Equator Resources decided to sell the project and entered into a sale agreement with TUC Resources who are actively exploring similar terranes in the Rum Jungle – Pine Creek Region. The deal was completed in February 2012 and tenement transfer is currently underway.

#### 1. INTRODUCTION

### 1.1 Project Description

Exploration Licence 26434 is located on the Manton Dam (5172-3) 1:50,000 sheet. The licence was taken out in order to explore an area which is in a similar geological and structural setting to the Woodcutters Mine and which has base metal soil and gossan anomalies detected during earlier recent exploration programmes conducted by Acacia Minerals personnel and by numerous companies prior to Acacia Minerals involvement.

The aim of this report is to discuss the work conducted in the fourth year of tenure and to present results, data and initial interpretations.

#### 1.2 Location

The licence area is about 60 kilometres south of Darwin, NT and can be access via the Acacia Hills Road or via Mocatto Road. The tenement is on private land in the rural area of Darwin's south and is very accessible during the dry period. Figure 1 represents a regional location of the tenement.

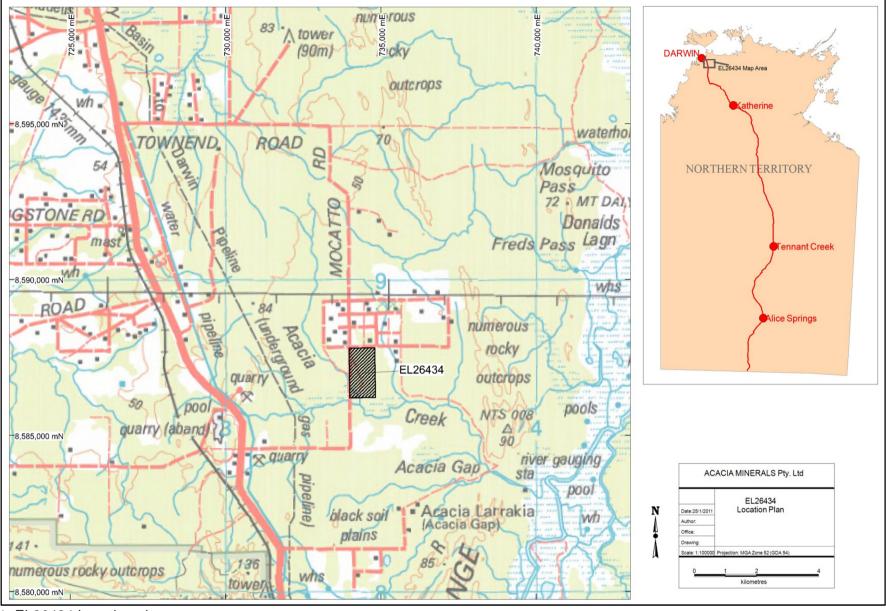


Figure 1. EL26434 Location plan.

#### 2.0 Tenement Status

EL26434 was granted for a period of six (6) years in 2008 to expire on 10<sup>th</sup> January 2014. The 1.299 sq km. (2 sub blocks) tenement is totally within the freehold land of NT Por 175/00275 and is bounded to the north by Whitestone Road, Acacia Hills.

Waivers of reduction have been accepted by the NT Dept. of Primary Industry, Fisheries and Mines, Titles Division due to EL26434 covering part of a major geological province which the company has been actively exploring.

#### 3.0 Regional Geology

EL26434 lies on the north-eastern margin of the Archaean Rum Jungle and Waterhouse basement complexes. These are overlain by Lower Proterozoic clastic and dolomitic units of the Namoona Group, Crater Formation and Coomalie Dolomite; shales and calcareous shales of the Whites Formation and shales with interbedded quartzite of the Wildman Siltstone.

Uranium and base metal mineralisation at Rum Jungle and Woodcutters is concentrated in structural zones in the lower Whites Formation just above the Coomalie Dolomite. Gold mineralisation at Sundance, Batchelor, is within palaeokarst collapse breccias above the contact of the Coomalie Dolomite and Whites Formation. Base Metals are associated with mafic units intersecting the Coomalie and Whites Formations.

The structure of the area is dominated by an early phase of N-S trending open folds and strike slip faulting consisting with extensional basinal development. A major arcuate fault has been identified in the western portion of the region from interpretation of aeromagnetic and radiometric data. These structures have been subsequently offset by a later phase of NE-SW trending structures, dominated by the Giants Reef Fault.

#### 3.1 Local Geology

Most of the project area is covered by Tertiary and Quaternary sediments with the axis of the Woodcutters anticline passing through the centre of the tenement. Airborne geophysics closer defined an interpreted dolerite dyke passing to the east of the anticlinal axis. Numerous associated magnetic anomalies within the calcareous and carbonaceous pyritic argillite, dololutite and dolarenite of the Whites Formation within the Mount Partridge Group are evident.

#### 4.0 Exploration Activities

## 4.1 Exploration in year 3

Thomson Aviation, based in Griffith NSW, carried out a Fixed Wing Geophysical Survey of a total of 3,101 line km near Humpty Doo, NT. The survey covered all Acacia Minerals tenements in the area.

A series if 56 Rotary Air Blast (RAB) holes were drilled on EL26434. The program was undertaken to test the sub-surface expression of previously collected rock chip samples. A total of 1439 metres was drilled in areas that showed surface rock chip sample anomalism corresponding to the sub-surface magnetic signature response. Drill hole locations are presented in Figure 4. Significant anomalous results were returned and reported in year 3.



Figure 2. Drill Hole Location.

## 4.3 Exploration in year 4

Assay cross sections for the drilling completed in year 3 are included in Appendix 1.

No further exploration was completed on this tenement as Equator Resources decided to sell the project during the year and entered into a sale agreement with TUC Resources who are actively exploring similar terranes in the Rum Jungle – Pine Creek Region. The deal was completed in February 2012 and tenement transfer is currently underway.

# **APPENDIX 1 (Digital)**

## Cross sections for year 3 drilling

File Names:

8586570AssaysSHORT.pdf 8586680AssaysSHORT.pdf 8587300Assayswest.pdf 8587330Assayswest.pdf NSsect733800Assays.pdf NSsect734150Assays.pdf