ABN 19 127 106 665

Relinquishment Report
for the Period Ending 13 February 2010

# EXPLORATION LICENCE 26040
# MOUNT DOREEN

# ARUNTA PROJECT

**Tenement Holders:** Arunta Uranium Pty Ltd ACN 127 112 323
(Subsidiary of Callabonna Uranium Ltd)

**Submitted by:** Callabonna Uranium Ltd

Prepared by M Dawson
24 December 2010

# EXECUTIVE SUMMARY

Exploration Licence EL 26040 “Mount Doreen” was granted to Arunta Uranium Pty Ltd on the 14th February 2008 covering an area of fifty-one (51) sub blocks. In February 2010 Arunta Uranium Pty Ltd was required to relinquish 18 sub-blocks under the mandatory reduction requirements. This partial surrender report has been prepared to detail the exploration activities within the relinquished areas. In the two year period Arunta Uranium Pty Ltd did not undertake any field orientated activities within the 18 relinquished blocks and therefore there is no data to be reported. A majority of the mapping and sampling completed by Arunta Uranium Pty Ltd was completed in the retained area of the lease.

## CONTENTS

## INTRODUCTION

EL26040 “Mount Doreen” is located near Alice Springs in the Arunta Region of the Northern Territory. The tenement is held by Arunta Uranium Pty Ltd, a wholly-owned subsidiary of Callabonna Uranium Ltd (CUL).
CUL is targeting structurally controlled high-grade uranium with rare earth minerals hosted in granite. However, CUL has chosen to relinquish these 18 sub-blocks because they are less likely to contain high grade uranium mineralisation.

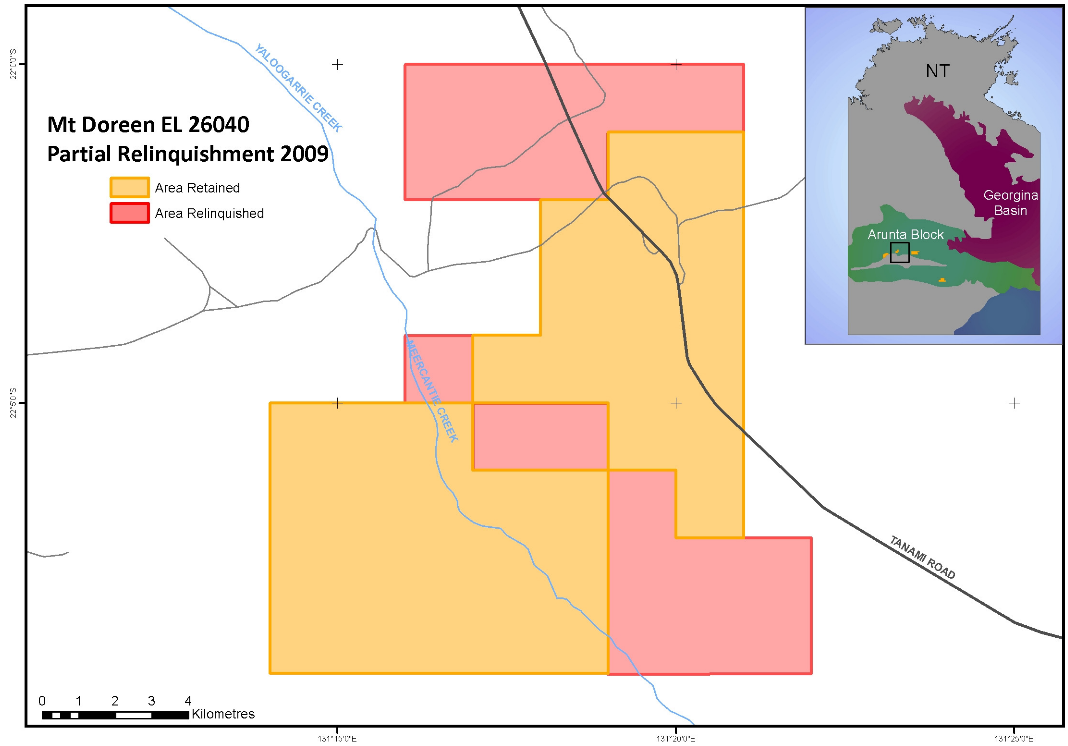


*Figure 1. EL 26040*

## TENURE

Exploration licence 26040 was granted on 14 February 2008 for a period of 6 years (Table 1). The tenement, at the time of grant, covered an area of 51 sub-blocks and 163.3 square kilometres. In February 2010, Arunta Uranium Pty Ltd relinquished 18 sub-blocks from the tenement area (Figure 1).

| Tenement | Name | Granted | Expiry | Sub-Blocks | Area Sq Kms |
|---|---|---|---|---|---|
| EL 26040 | Mt Doreen | 14-Feb-08 | 13-Feb-14 | 33 | 105.6 |

*Table 1. Current Tenement Details*

## NATIVE TITLE

No Native Title claims exist over the relinquished area of EL 26040.

## LOCATION & ENVIRONMENT

EL 26040 is located 250 km northwest of Alice Springs in MacDonnell Shire. The tenement can be accessed via the bitumen Tanami Road. The Alice Springs Darwin Railway Line also is nearby providing good access to infrastructure. In the arid climate, average rainfall ranges from 8 mm a month during the dry season to 41 mm a month during the wet season but rainfall can vary quite significantly from year to year. The mean annual temperatures range from a summer maximum of 36°C to a winter minimum of 4°C, with a mean diurnal variation of about 13°C. The land is flat to gently undulating desert plains and low rocky foothills at the base of the McDonnell Ranges covered by acacia woodlands and grasslands. The land is covered by pastoral leases where the primary land use is cattle grazing.

## GEOLOGICAL SETTING

Outcrops of Proterozoic rocks comprise about 5 to 10% while the bulk of the tenement is underlain by Quaternary sediments and drainages (Figs. 2 & 3). The active drainage system is defined by pale blue colours on the Landsat Geocover image (Fig. 2), while other (?older) drainages appear dark green.

The oldest rocks are the Palaeo-Proterozoic Lander Rock beds (>1847±26 Ma according to the GA stratigraphic database; Fig. 3). These consist of a range of metamorphic rocks, in the tenement area dominated by amphibolite facies cordierite-andalusite K-feldspar-biotite granofels (Plrc) and biotite-muscovite cordierite schist and quartzite (Plra) and greenschist facies muscovite-chlorite-quartz schist (Plrg). These are overlain by meta-sandstone and meta-siltstone (Prp) and intruded by various granitoids. The main granitoid intrusions are the Yalgoolgarrie Granite (megacrystic muscovite-biotite granite, pegmatite & aplite; Pgy) and the Yarunganyi Granite (formerly Mount Doreen granite a megacrystic biotite-muscovite granite; Pgsy). The Yarunganyi granite has been dated at 1567 Ma. There are two small outcrops of the Carrington Granitic suite (Pgc) of xenolithic biotite granite & tonalite dated at 1780 ma.

The most prominent structures trend almost east-west and are defined by prominent linear topographic features and quartz veins.

The geology of the tenement area has some similarities with the Alligator Rivers region of the Northern Territory, namely amphibolite to greenschist facies metamorphic rocks overlain by a coarse clastic sequence. Major structures trending WNW-ESE transect the southern part of the region and are locally associated with quartz veins. This setting is believed to be prospective for high grade unconformity-style uranium deposits.

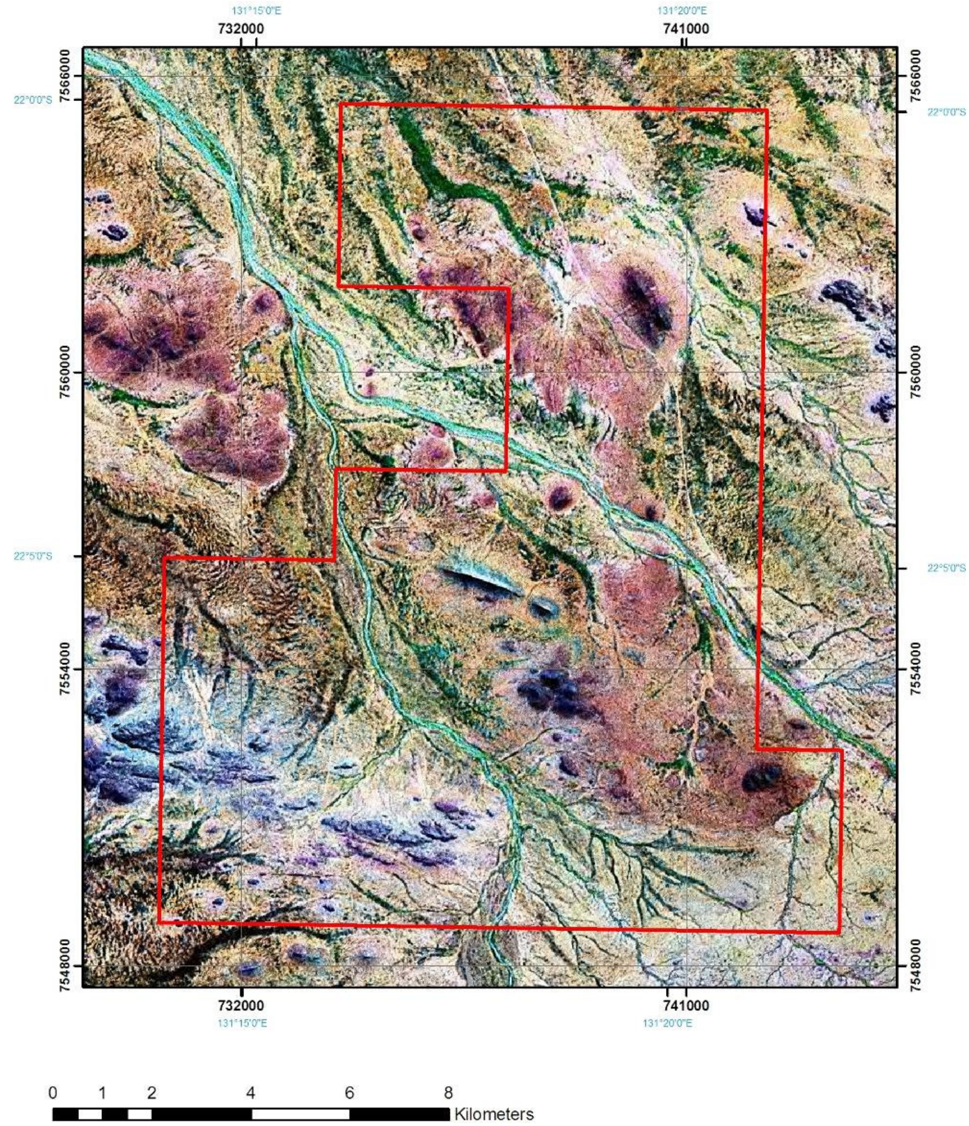


*Figure 2: Landsat Geocover Image of the tenement area*

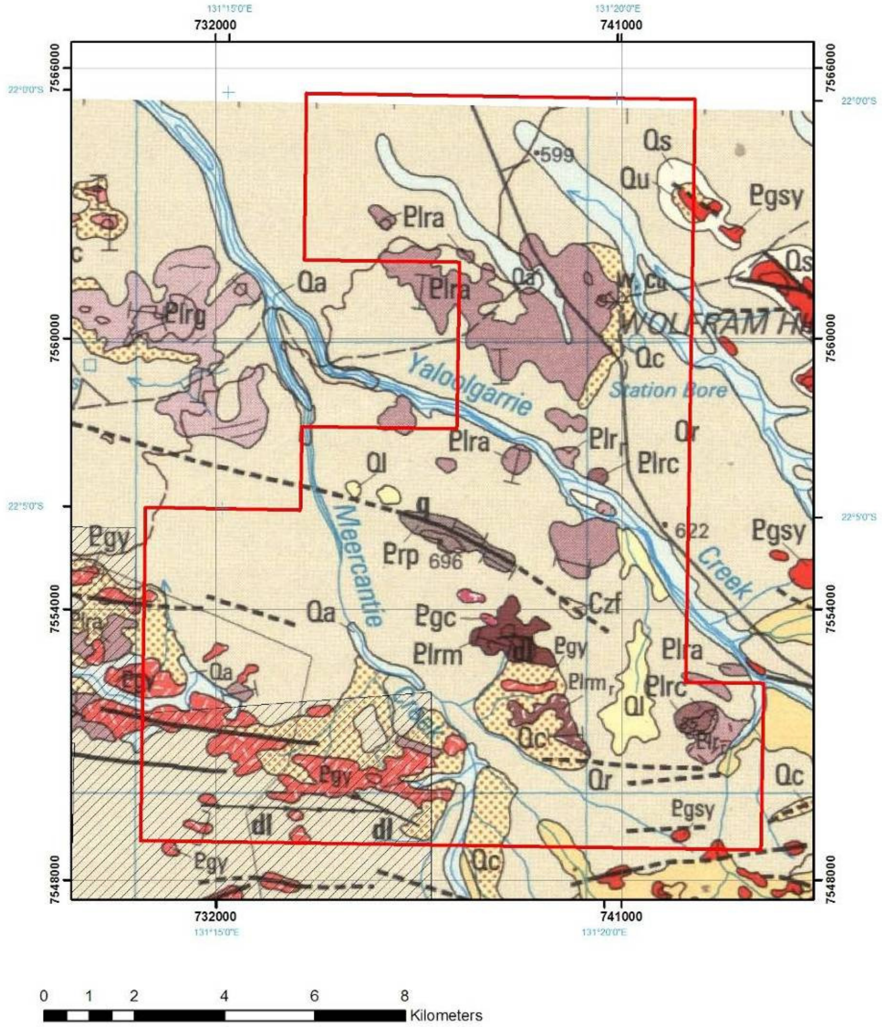


*Figure 3: 1:250,000 geology of the tenement area. Cross-hatched area to south-west shows the extent of the RTE radiometric survey.*

## WORK CARRIED OUT BY CALLABONNA IN THE RELINQUISHED AREA

**Year 1**

Work carried out in year 1 was confined to an assessment of previous exploration and of regional geophysical datasets. Plans for a field program were put on hold due to the adverse state of the market and the postponement of the planned float of CUL.

**Year 2**

During Year 2, the Geologists at CUL completed a reconnaissance field trip to EL 26040 to view the surface geology and to locate the source of historical elevated uranium assays in the Mt Doreen Granite. A hand held spectrometer was used for field assaying of outcrops; however a majority of the mapping and sampling was completed outside of the relinquished area.