

# BROWNS RANGE PROJECT EL25207

## TANAMI REGION, NT

### PARTIAL SURRENDER REPORT

12/02/07 - 11/02/13

March 2013

J Jordan Churchlands Consulting Pty Ltd MAusIMM

### Title Page for Reporting under the NT Mining Act

Title Holder	Palace Resources Limited
Operator	Excalibur Mining Corporation Ltd
Tenement Manager	M & M Walter Consulting
Titles/Tenements	EL 25207
Mine/Project Name	Brown's Range
Report title including type of report and reporting period including a date	Partial Surrender Report for period ending 11/02/2013
Personal author	John Jordan, Churchlands Consulting Pty Ltd
Corporate author	Excalibur Mining Corporation
Company reference number	Tanami
Target Commodity or Commodities	Uranium, gold, PGE, base metals, REE
Date of report	15 March 2013
Datum/Zone	GDA94/Zone 52
250 000 K mapsheet	Tanami SE 52-15
100 000 K mapsheet	Mallee 4759
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#### SUMMARY

EL25207 ("Licence") comprising 488 sub-blocks, was granted to Palace Resources Ltd on 12/2/07. It covered a large area of mid-Proterozoic Birrindudu Formation with small windows of prospective Lower Proterozoic metasediments and granites. Area reductions since grant have relinquished portions of the licence that show no evidence of Lower Proterozoic rocks at or near the surface.

The Licence was due to expire on 12/2/13 but an application for extension of 54 subblocks was lodged. Besides reconnaissance ground truthing of published and interpreted geology, no significant field exploration had taken place on the surrendered area during the life of the Licence.

#### INTRODUCTION

Palace Resources applied for EL25207 to secure a strike length of unconformity between Lower and Mid-Proterozoic rocks in the Tanami region, considered prospective for unconformity-type Uranium mineralisation, akin to the East Alligator Region of NT. The Licence not only covered an interpreted 20km strike length of exposed unconformity in the west (Browns Range), it also covered a large area to the east where the Mid Proterozoic Gardiner Sandstone of the Birrindudu Formation was thought to thinly overlie the prospective Lower Proterozoic units.

The granted Licence initially comprised 488subblocks. This was reduced to 244 subblocks on 12/2/11. The latest reduction, the subject of this surrender report, involved 190subblocks, with 54 being retained (Figure 1).

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Figure 1: EL25207, areas surrendered and retained

#### WORK CARRIED OUT

Figure 2 shows the broad near-surface geology in the region of the Licence and the Licence as it was prior to the reduction.



Figure 2: E25207 Regional Geology

The prospective Lower Proterozoic metasedimentary lithologies are shown as blue and crop out in the western part of the Licence. More granitic lithologies appear as dark grey immediately to the east. It is clear from the plan that the eastern 80% of the Licence is covered by Mid-Proterozoic Birrindudu Formation (pale green) and quite recent Wiso Basin sediments (grey).

During the life of the Licence, Palace has carried out limited reconnaissance style inspection of the areas mapped by the NT Geological Survey as Birrindudu Formation and confirmed that little evidence exists in these areas for windows of Lower Proterozoic at or near the surface. Consequently all of its detailed work to date has taken place in the area currently retained.

As the focus since 2009 has shifted from unconformity-style uranium mineralisation to Tanami-style gold and base metals, the entire effort has concentrated on exposed Lower Proterozoic volcanic and metasediments. Historically, uranium exploration has been carried out over mid-Proterozoic cover rocks as sometimes uranium rich fluids originating beneath the unconformity leak close to surface along fractures etc and produce a detectable radiometric signature. In the past few years however the ability to raise capital for uranium exploration has been diminished and expenditure on this exploration target could not be justified. This rules out most of the Licence area.

Consequently there is no exploration data not already in the public domain that Palace can provide to accompany this surrender report.

#### **CONCLUSIONS AND RECOMMENDATIONS**

Almost 90% of the granted Licence area is underlain by cover rocks of mid-Proterozoic or younger age. These are not considered prospective for Tanami-type gold and base metals and there is no market support for uranium exploration. Consequently all of the Licence area determined to be masked by younger rocks and sediments have now been surrendered and only that part of the Licence with exposed Lower Proterozoic volcanic and metasedimentary rocks has been retained.

It is recommended that all exploration now concentrates on the lower Proterozoic Browns Range area. Any companies specializing in uranium exploration may be advised to fly airborne radiometrics over the relinquished areas seeking buried deposits at or near unconformities that have leaked to the near surface.