NORTHERN URANIUM LIMITED
AMADEUS BASIN PROJECT

ANNUAL GROUP TECHNICAL REPORT for the period
1 December 2009 to 30 November 2010
Exploration Licenses EL26920, 27016, 27017, 27018, 27019, 27020

OPERATED BY
NORTHERN URANIUM LIMITED

ANNUAL GROUP REPORT
NUMBER: 2010-14
NAME: AMADEUS BASIN PROJECT
ACTIVITIES: EXPLORATION
DUE DATE: 30 DECEMBER 2010

PREPARED BY: R. WILSON
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1.0 SUMMARY

The Amadeus Basin Project comprises the tenements EL26920, 27016, 27017, 270128, 27019 & 27020 and lies approximately 65km to the east of the township of Alice Springs, in the Northern Territory. The project covers an area of 996.6 square kilometers. The licences were granted in 2009 for a period of 6 years. Group technical reporting status was granted by the NT Department of Resources for the Amadeus Basin Project on 6 October 2010.

Northern Uranium Limited is targeting Cambrian aged phosphorite deposits within the Amadeus Basin. The Todd River Dolomite, which is seen to be outcropping in all of the project tenements, is considered to be a potential host for phosphate mineralisation.

Due to difficult finance circumstances experienced worldwide it was not possible to complete the proposed mapping, sampling and drilling activities in 2010. With the Company now well-funded following a major capital raising in late 2010, it is anticipated that the proposed exploration activities will be undertaken in 2011.

2.0 INTRODUCTION

All major Australian phosphate deposits occur in the Georgina Basin, several occurrences having been recorded within the Cambrian sediments of the Amadeus Basin. The Cambrian Todd River Dolomite which outcrops in the north eastern margin of the Amadeus Basin has been recorded to contain significant phosphatic occurrences.

A literature review has found reports of Cambrian phosphorite occurrences within the (Early Cambrian) Todd River Dolomite, (Middle Cambrian) Tempe Formation (Late Cambrian – Ordovician) Pacoota Sandstone, all of which are located in the central and eastern portion of the Amadeus Basin. The Todd River Dolomite is of Cambrian age and is considered the most prospective unit for hosting phosphate mineralisation.

This report details the exploration activities conducted by Northern Uranium Ltd on exploration licenses 26920, 27016, 27017, 27018, 27019 & 27020 between 1 December 2009 and 30 November 2010.

3.0 LOCATION & ACCESS

The Amadeus Basin Project is located approximately 65km to the east of the township of Alice Springs in the Northern Territory (Figure 1).

Access to the tenement is via the sealed Ross Highway and graded gravel roads provide access within the tenement area. The Project is located within close proximity to Alice Springs and favorably positioned to access existing rail and road infrastructure (Figure 1).
Figure 1: Tenement Location and Access Map
4.0 TENURE

The Project area consists of 337 blocks and covers an area of 996.6 square kilometers. The license area was granted to Northern Uranium on the 20th May 2009 for a period of 6 years.

Table 1: Tenement Schedule

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Tenement no.</th>
<th>Blocks</th>
<th>Blocks Relinquished</th>
<th>Grant Date</th>
<th>Expiry Date</th>
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</thead>
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<tr>
<td>Amadeus Basin Project EL26920</td>
<td>214</td>
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<tr>
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<td>Nil</td>
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<td>14/09/2015</td>
<td></td>
</tr>
</tbody>
</table>

5.0 REGIONAL GEOLOGY

The Project lies within the northeast portion of the elongated Proterozoic Amadeus Basin and is located within the Alice Springs 1:250,000 map sheet, number SF 53-14.

The Amadeus Basin is a large east-west trending intra-cratonic Basin of Late Proterozoic to Carboniferous aged marine and continental sediments. These sediments were derived from the surrounding early to mid Proterozoic granites and metamorphic rocks of the Arunta Block to the north and Musgrave Block to the south.

The rocks are deformed by broad folding and faulting. The main trends are east west, while faulting is both normal and thrusting styles. Only weakly developed low grade metamorphism is recognized in the southern part of the Basin.

The Early Cambrian basal deltaic sediments of the Arumbera Sandstone underlie the lower Cambrian Todd River Dolomite which itself is overlain by the Giles Creek Dolomite and subsequently the Chandler Limestone. The siltstone, shale and limestone Shannon Formation is overlain by Goyder Formation which is subsequently overlain by the Pacoota Sandstone. The sediments of the Larapinta Group can be separated into the Carmichael and Stairway Sandstones which are overlain by the cross-bedded Mereenie Sandstone. The valleys floors and creek lines primarily consist of Quaternary and Tertiary aged transported sediment cover.

A Literature review has found reports of Cambrian phosphorite occurrences within the (Early Cambrian) Todd River Dolomite, (Middle Cambrian) Tempe Formation (Late Cambrian – Ordovician) and Pacoota Sandstone, all of which are located in the central and eastern portion of the Amadeus Basin.
Figure 2: Amadeus Basin Project Geology
6.0 EXPLORATION ACTIVITIES

To date exploration work completed by Northern Uranium Ltd has been a review of the previous completed historical exploration work and a compilation of all publicly available government data sets including geological and geophysical data. An Aboriginal sacred site desktop study/inspection was also carried out through the Aboriginal Areas Protection Authority (AAPA). The results of the review are described below.

Exploration completed in the first year of tenure includes:

6.1 Data Compilation and Review

A detailed review of previous work has been completed on all available data relevant to the EL area which was compiled into GIS format using the MapInfo/Discover software. The data include topographical, cadastral, geological, geophysical, geochemical and drillhole information sourced from NT government agencies and records of previous exploration activities. The data was interpreted to identify exploration target areas for follow-up geological reconnaissance mapping and surface geochemical sampling where appropriate.

6.2 Sacred Site Inspection

An Aboriginal sacred site database inspection was carried over the Project area out through the Aboriginal Areas Protection Authority (AAPA). The inspection comprised a search of all recorded sacred sites within the Project area on the AAPA register.

6.3 Geophysical Data Compilation

All available government geophysical data over the northeastern Amadeus Basin has been acquired for processing and interpretation. The data has been processed by Resource Potential to produce several new images, and has been compiled into (GIS) MapInfo format. The data has been interpreted by Northern Uranium geologists to identify potential exploration target areas for follow-up geological reconnaissance mapping and surface geochemical sampling.

7 PROPOSED EXPLORATION

7.1 Geological Mapping and Geochemical Sampling

The tenement areas with outcropping Todd River Dolomite unit will be subject to reconnaissance geological mapping and detailed mapping of target areas. The mapping programs will be focused on identifying target zones for surface geochemical sampling (rock chip and soil sampling) where appropriate. Following the identification of targets, a systematic geochemical soil and rock chip sampling program will be implemented where appropriate (i.e. areas of outcrop and/or in-situ soil cover).

The follow-up mapping and sampling of target areas defined from the initial reconnaissance work will be initiated. This will include more detailed mapping and geochemical sampling where appropriate to refine target areas in preparation for drilling.
7.2 Aircore/RAB Drilling

Regional aircore or RAB Drilling will be carried out over target areas defined from the previous work. Drilling will be reconnaissance in nature with holes wide-spaced (1km) and to depths of 40-50m. It is unlikely that drilling will take place in 2011, and is more realistically proposed for 2012, following on-ground Aboriginal heritage surveys. Some site preparation may be required in order to facilitate drill rig access, although existing tracks will be used wherever possible.

8 REFERENCES

Alice Springs (Second Edition), NT 1:250,000 Geological Series Explanatory Notes, Sheet SF/53-14