EL 26748 ADNERA CREEK

PARTIAL SURRENDER REPORT

FOR THE PERIOD

18 FEBRUARY 2009 TO 17 FEBRUARY 2013

Date: April 2013
Authors: B Townrow
Keywords: Uranium, Northern Territory
Map Sheets: 1:250,000 Barrow Creek.
Distribution: Department of Mines and Energy, Darwin, Northern Territory
Intercept Minerals Ltd, Perth Office
EXECUTIVE SUMMARY

EL 26748 is located about 200km north of Alice Springs and forms part of the Adnera Uranium Project.

The tenement was granted to Uramet Minerals Limited (Uramet) on the 18 February 2009. Uramet Minerals changed its name to Intercept Minerals Limited in July 2011.

Work within the surrendered portion of the tenement from time of grant until surrender includes a literature search of open file reports and other available data including regional geophysics, and field reconnaissance and auger drilling.

A review of available data, along with field reconnaissance, failed to define any high priority exploration targets within the surrendered area; hence this area is being relinquished.
# TABLE OF CONTENTS

1 INTRODUCTION .................................................................................................................. 3

2 SITE ATTRIBUTES ............................................................................................................. 4
   2.1 Location ......................................................................................................................... 4
   2.2 Climate .......................................................................................................................... 4
   2.3 Environment ................................................................................................................. 4
   2.4 Infrastructure ............................................................................................................... 4

3 TENURE ................................................................................................................................ 4

4 GEOLOGY ............................................................................................................................... 6
   4.1 Regional Geology .......................................................................................................... 6
   4.2 Local Geology ............................................................................................................... 6
   4.3 Geomorphology ............................................................................................................ 7
   4.4 Geological Model ........................................................................................................ 8

5 PREVIOUS WORK (by Other Companies) ......................................................................... 8

6 INTERCEPT ACTIVITIES ..................................................................................................... 9
   6.1 Data Review .................................................................................................................. 9
   6.2 Field Reconnaissance ................................................................................................. 11
   6.3 Auger Sampling .......................................................................................................... 11

7 CONCLUSIONS AND RECOMMENDATIONS ................................................................ 13

8 REFERENCES ....................................................................................................................... 13

# LIST OF FIGURES

Figure 1 Adnera Creek Tenement Location................................................................. 3
Figure 2 Map showing original and current (retained) tenement boundaries ................. 5
Figure 3 Simplified Geology of Project Area (compilation of various published maps) ...... 7
Figure 4 Landsat image (742) of the report area showing relinquished area in white .......... 8
Figure 5 Regional (4km spaced stations) bouguer gravity image .................................. 9
Figure 6 Regional (400m line spaced) aeromagnetic TMI image ................................. 10
Figure 7 Regional (400m line spaced) Uranium radiometric image ................................. 10
Figure 8 Auger drilling at the Adnera Uranium Project ................................................. 11
Figure 9 Adnera Niton Uranium Results ......................................................................... 12
Figure 10 Adnera Quantum Uranium results ................................................................. 12
1 INTRODUCTION

EL 26748 (Adnera Creek) is located about 200km north of Alice Springs (Figure 1). This report details work undertaken by Intercept within the surrendered portion of the tenement since granted in February 2009.

Figure 1 Adnera Creek Tenement Location
2 SITE ATTRIBUTES

2.1 Location

The tenement is located on the Mt Skinner pastoral station, approximately 200km north of Alice Springs in the Northern Territory (Figure 1). The tenement which is referred to by Intercept as “Adnera Creek” falls within the Barrow Creek (SF5306) 1:250,000 map sheet and forms part of Adnera Uranium Project.

2.2 Climate

The project area is situated in the Central Australian Desert climatic zone with a variable wet season from November to March. The area is classified as semi-arid with between 250 mm and 500 mm of rainfall per year, however, rainfall can be highly variable within a season and from season to season. The climate of the project area can be loosely divided into a dry season generally from April to October, and a wet season from November to March. Unseasonal rain can however occur at any time. Maximum daily temperatures generally exceed 35°C between October and April. The normal exploration field season runs from April to October.

2.3 Environment

The project area occurs within the Mt Skinner pastoral lease, the primary land use being cattle grazing.

A search of the Sacred Site Registry does not reveal any sacred sites within the relinquished portion tenement; however a restricted work area occurs within the retained portion of the tenement.

2.4 Infrastructure

Access to the tenement from Alice Springs is normally by travelling north via the sealed Stuart Highway (Figure 1), then via station tracks to Mt Skinner homestead then north to the tenement (Figure 2). Most of the station tracks are generally in good condition.

3 TENURE

EL 26748 was granted to Uramet on 18 February 2009, originally comprising 40 blocks, covering an area of 127km². This is the first 50% reduction in area of the tenement reducing the area to 20 blocks. Figure 2 shows the original and current tenement boundaries.
Figure 2 Map showing original and current (retained) tenement boundaries
4 GEOLOGY

4.1 Regional Geology

The Project area lies at the boundary between Proterozoic-aged basement of the Arunta domain and the younger southern Georgina Basin. Kruse et al. (2002) have described the Georgina Basin as a 330,000km² erosional remnant of a series of originally interconnected central Australian intracratonic basins that range in age from Neoproterozoic to Palaeozoic. In excess of 1.5km of Neoproterozoic sedimentary rocks are preserved in downfaulted blocks and half-grabens on the southern margin of the Georgina Basin in the NT. Depocentres and synclines contain up to 2.2km of Cambrian to Devonian section.

The Arunta basement is dominated by folded and faulted Palaeoproterozoic-age felsic gneiss and metasedimentary rocks (biotite schist, quartzite and calcsilicate), intruded by syn- to post tectonic granitoids.

In early Palaeozoic times the area was a stable platform on which carbonate, clastic and evaporitic units were deposited. The intracontinental, compressional Alice Springs Orogeny (370-310 Ma) affected the Georgina Basin and other central Australian Basin but resulted in little metamorphism (Dunster et al. 2007).

4.2 Local Geology

The geology of the project area (Figure 3) is dominated by Neoproterozoic and Cambrian clastic sedimentary rocks of the Central Mount Stuart and Octy Formations, and Paleoproterozoic Barrow Creek Granite Complex, with localised occurrences of early to mid Proterozoic Bullion Schist, and Ledan Schist. The latter three units are part of the Arunta Domain, and generally outcrop poorly in comparison with the Central Mt Stuart Formation.

Strike directions mainly trend NW-SE, sub-parallel to regional faults and shears such as the northwest trending Stirling Fault Zone. A secondary set of faults cross-cut the stratigraphy with a northeast strike.

The Neoproterozoic Central Mount Stuart Formation covers most of the north-eastern and eastern part of the area. The Cambrian Octy Formation is unconformable on the Neoproterozoic sandstones. The succession is part of a tilted fault block dipping gently towards a major geophysically defined bounding fault trending NW-SE. The Neoproterozoic sedimentary rocks range in thickness from a veneer at the base of the Cambrian (Dunster et al., 2007) in the north, to an interpreted 1200m depth to the south. The geology of the relinquished area is the Neoproterozoic Central Mount Stuart Formation.
4.3 Geomorphology

The Landsat image of Figure 4 highlights the variable geomorphology of the area. The topography is generally dominated by flat-topped hills of the outcropping Central Mount Stuart and Octy Formations (largely sandstone) represented as dark blue in the Landsat image.

Sand-plains usually show as light green to light brown, to light purple in the image. The sand-plain shown in the very southern part of the image (light purple) converges into the calcretised Wilora Paleochannel to the west of EL 26719.

Sand dunes can be seen in the north-eastern part of Figure 4.

Part of the alluvial plain, channels and clay pans of the Hanson River (white colour), being the largest drainage system in the area, can be seen in the north-western part of Figure 4.

The vegetation ranges from savanna woodland near the creeks, to gidgee and acacia scrub to annual grasslands. The vegetation is consistent with a semi-arid regime.
4.4 Geological Model

The style of mineralisation being targeted is quartz vein-hosted tungsten (scheelite/wolframite), similar to that found at the historical Millionaires Well workings; quartz vein/shear hosted gold, and alaskite hosted uranium.

5 PREVIOUS WORK (by Other Companies)

CRA explored the area nearby for stratabound base metals and uranium in the late 1970's. Work by CRA included mapping and rock chip sampling. CRA reported uranium rock chip results up to 620 ppm U, and a rock chip sample with 780 ppm W, supposedly within a calc-silicate rock.

Normandy explored for shear hosted gold between 1995 and 2000 to the east of the tenement. Work by Normandy included:

- 2 rock chip samples.
- 22 lag samples (no significant gold or base metal values).
- Vacuum drilling; 52 holes, usually on a 200m by 800m pattern (no significant gold or base metal values were reported).
- RAB; 20 holes for 896m (no significant gold or base metal values).

It should be noted that Normandy did not assay for tungsten in any of the drill samples.
6 INTERCEPT ACTIVIES

Work undertaken by Uramet within the surrendered portion of the tenement includes a data review, field reconnaissance, auger drilling soil sampling and geochemical analysis.

6.1 Data Review

Data reviewed by Uramet includes the following open file reports:

GS1978-014 (NTGS 1978)
CR19800027 (CRA 1979)
CR19940356 (CRA 1994)
CR20010003 (Normandy 1995 to 2000)

Other available data-sets including satellite imagery (Figure 4), and NT government gravity (4km spaced stations), aeromagnetic (400m line spaced), and radiometric data were utilised.

The gravity data (Figure 5) is useful for regional interpretation, but being too coarse to be of use for detailed interpretation.

The regional magnetics show the rocks of the Arunta Domain as generally having a much stronger magnetic signal than the sediments of the Georgina Basin (Figure 6).

The radiometric data corresponds well with the uranium anomalies located on the ground by CRA (Figure 7).

Figure 5 Regional (4km spaced stations) bouguer gravity image
Figure 6 Regional (400m line spaced) aeromagnetic TMI image

Figure 7 Regional (400m line spaced) Uranium radiometric image
6.2 Field Reconnaissance

Field reconnaissance was undertaken within the tenement to locate potential occurrences ofuraniferous alaskite (alkali feldspar granite) using a portable scintillometer. No samples wereanalysed within the relinquished Area.

6.3 Auger Sampling

A total of 108 auger holes were drilled (Figure 8) within the surrendered area, the holes were
drilled generally on 100m centres along lines spaced 200m to 400m apart. These holes were
drilled to test extensions of anomalous uranium results obtained in an auger program completed in
November 2009 adjacent to an outcropping alaskite

![Auger drilling at the Adnera Uranium Project](image)

Auger samples in the 2010 auger program were assayed using a Niton portable XRF analyser. A
number of anomalous >30 ppm U assays were returned using the Niton. Figure 9 shows the
anomalous Uranium samples. Checks were made on 99 samples using a commercial laboratory,
which did not confirm the anomalous Niton results. Further investigation is required to resolve this
issue.

Laboratory results are shown in figure 10. All Niton and laboratory assays are appended in digital
form.
Figure 9 Adnera Niton Uranium Results

Figure 10 Adnera Quantum Uranium results
7 CONCLUSIONS AND RECOMMENDATIONS

A review of available data along with field reconnaissance failed to define any high priority exploration targets within the surrendered area, hence the area being relinquished.

8 REFERENCES

