

# **KORAB RESOURCES LIMITED**

# EL 25242

# FINAL REPORT Incorporating Year 3 Annual Report

Period: 12 September 2006 to 11 September 2009

# GREEN ALLIGATOR PROJECT BATCHELOR Northern Territory

By John A Earthrowl MSc for

KORAB RESOURCES LIMITED KORAB HOUSE LEVEL 1, SUITE 6, 100 MILL POINT ROAD, SOUTH PERTH, 6151, WESTERN AUSTRALIA PO BOX 195 SOUTH PERTH WA 6951 AUSTRALIA, Tel (08) 9474 6166 Fax (08) 9474 6266

2

# **TABLE OF CONTENTS**

#### SUMMARY

- 1 INTRODUCTION
- 2 TENEMENT STATUS
- 3 LOCATION
- 4 GEOLOGY
- 5 PREVIOUS EXPLORATION
- 6 EXPLORATION PROGRAM AND TARGETS
- 7 METHODS
   7.1 Reconnaissance Ground Traversing
   7.2 Mapping
   7.3 Rock Chip Sampling
   7.4 Ground Radiometrics
- 8 WORK DONE AND RESULTS
  8.1 Year 1
  8.2 Year
  8.2.1 Geology
  - 8.2.2 Radiometrics
  - 8.2.3 Assay Results
  - 8.3 Year 3
- 9 CONCLUSIONS
- 10 RECOMMENDATIONS
- 11 EXPENDITURE STATEMENT for Year 3.

#### LIST OF FIGURES

- Figure 1 Location of EL 25242
- Figure 2 EL 25242 on Regional Geology Base map
- Figure 3 EL 25242 Rock Chip Sample Locations
- Figure 4 EL 25242 Ground Radiometric Readings

## **APPENDICES**

- Appendix 1 EL 25242 Spreadsheet: Rock Chip Samples
- Appendix 2 EL 25242 Spreadsheet: Radiometry
- Appendix 3 EL 25242 Assay Results of Rock Chip Samples

#### REFERENCES

- Lally, J.H. (2002) Stratigraphy, structure and mineralization, Rum Jungle Mineral Field, Northern Territory. N.T.G.S. Record 2002-005
- Mudrovska, I (2008) Korab Resources Ltd Year 1: Annual Report for EL 25136 and 25242 Report to DPIFM

## SUMMARY

Field work on EL 25242 has consisted of ground radiometrics and rock chip sampling. The mapped stratigraphy has been verified. The tenement has been prematurely surrendered in order to concentrate on adjoining tenements.

### **1. INTRODUCTION**

This document is the Final Report for Exploration Licence 25242 covering the period 12 September 2006 to 11 September 2009 incorporating the Annual Report for Year 3 for the period 12 September 2008 to 11 September 2009.

This tenement comprises part of Korab Resources Ltd Green Alligator Project in the Batchelor area of the Northern Territory, Australia.

## 2. TENEMENT STATUS

EL 25242 was granted 100% to Korab Resources Ltd. on 12 September 2006 and consists of 4 sub-blocks totaling 1.96 km<sup>2</sup>.

In view of the late start to field work in 2008 due to unavailability of experienced exploration personnel, a waiver of reduction for the tenement was lodged on 11 September 2008. This was subsequently granted however the company in rationalising its exploration program in the Batchelor area decided to surrender the EL in September 2009.

### 3. LOCATION

EL 25242 is located approximately 90 kms south of Darwin, west of the Stuart Highway, mainly south of the Crater Lake Rd turnoff.

EL 25242's centroid is at approximately 13° 4′ S, 131° 6′ E (WGS 84 728200E, 8555400N).

#### 4. GEOLOGY

EL 25242 falls within the Rum Jungle Uranium Field (RJUF) of the Pine Creek Orogen and is underlain by the Early Proterozoic, Mount Partridge and South Alligator stratigraphic Groups.

More specifically recent NTGS government mapping shows EL 25242 to be underlain by the following units as listed:

- Ppw Wildman Siltstone (incl Acacia Gap Quartzite, Mt Deane Volcanics)
- Psg Gerowie Tuff
- Psk Koolpin Formation

Mudrovska (2008) describes in considerable detail the distribution of various metal prospects in the near vicinity of EL 25242.

# 5. **PREVIOUS EXPLORATION**

El 25242 has been covered by a number of exploration licences in the past. In the 1970s and 1980s Uranerz Australia Ltd and Minad had a joint venture in the area. Their target was uranium mineralisation as known at Whites/Dysons in the Embayment Area of the RJUF.

As the area of EL 25242 did not include either the Coomalie Dolomite or Whites Formation, no detailed work was done on the ground as they were the only stratigraphy targeted in that era.

More regional exploration by other companies has been described in Mudrovska (2008).

# 6. EXPLORATION PROGRAM AND TARGETS

The RJUF is prospective for the following commodities: uranium, copper, cobalt, nickel, lead, silver, gold, phosphate, magnesium and platinum/palladium.

In the case of uranium the exploration methods used covered the possibilities of veintype uranium mineralisation being present, as is known south of Adelaide River township.

# 7. METHODS

With no known previous detailed exploration results from the area of EL 25242, Korab's field work has consisted of regional traversing for familiarisation with the stratigraphy and checking government mapping, the collection of rock chip samples from all stratigraphic units and the recording of detailed radiometrics across the various stratigraphic units.

### 7.1 RECONNAISSANCE GROUND TRAVERSING

On the EL ground, traverse routes were chosen on the basis of access and to cut across the stratigraphy. Man made features such as tracks and fence lines and natural features such as creek beds were chosen and it was possible to sample all mapped stratigraphic units present.

#### 7.2 MAPPING

As mentioned in Section 4, current government mapping has delineated, by interpretation, certain stratigraphic units to be present on EL 25242. It is known that certain aspects of the stratigraphy of the RJUF remain undefined and not well understood. The stratigraphic nomenclature has been under continuous review since the early 1970s.

#### 7.3 ROCK CHIP SAMPLING

Rock chip samples were collected on the reconnaissance traverses whenever a different stratigraphic unit or gossanous material was encountered.

Their locations were GPS recorded, the lithology described, a sample number assigned and a 1-2 kg sample submitted for assay.

#### 7.4 GROUND RADIOMETRICS

Total count scintillometer readings were taken at approximately 20 metre intervals along all traverses.

If on an EW or NS traverse, control was by maintaining the GPS reading. On an irregular traverse along a creek or fenceline readings were taken at approximately paced intervals of 20m.and the GPS reading recorded.

#### 7.5 ASSAYING

All rock samples were submitted to the Darwin based laboratory, Northern Territory Environmental Laboratories (NTEL). Assay methods and detection limits were chosen commensurate with the grades expected.

Samples were routinely analysed for Cu, Co, Ni, Pb, Zn, U and Au.

## 8. WORK DONE AND RESULTS

#### 8.1 Year 1

Korab's work during Year 1 was related to the introduction of a new staff member to the project and the transferring of uranium mineral rights to Uranium Australia Limited, a proposed new Company to list on the Australian Stock Exchange in late 2007. An intensive geological data review of the area of EL 25242 was undertaken prior to the transfer of the uranium rights. On the basis of the compilation of initial data, a preliminary Geographic Information database was created. It is planned to develop a drilling program on the basis of the derived maps. Review of historic information from NTGS records and databases, as well as published literature was also commenced during the reporting period. Production of geophysical maps was commenced through Southern Geoscience Consultants in Perth, but was not invoiced before the end of the reporting period. Preliminary interpretation commenced and showed good correlation between aeromagnetic and radiometric data. However it was noted that known uranium mineralisation had poor correlation with radiometric anomalies, and this will be an important constraint on future target generation. Geophysical data also extended known prospective horizons away from outcrops and gave a better indication of subsurface geometries.

#### 8.2 Year 2

Although the field activities in Year 2 commenced late due to unavailability of a suitably qualified contractor, the following field work was done on this tenement during that year as shown on Figs 3 and 4 and listed in Appendix 1 and 2:

- 3.62 kms of foot traversing by geologist and field assistant
- 22 Rock Samples collected (#s 110659 to 110680)
- 181 Scintillometer readings taken

#### 8.2.1 Geology

The route of the foot traverse followed the fence line of the railway corridor.

This conveniently transected all of the stratigraphic units interpreted to be present on the tenement viz. from south to north ....Psg Gerowie Tuff, Psk Koolpin Formation, Ppw Wildman Siltstone, Ppa Acacia Gap Quartzite.

In the field a wide variety of rock types were encountered as per App 1, and on this first reconnaissance traverse the contacts between the NTGS mapped stratigraphic units could not be recognised.

One discrepancy however was the presence of Mt Deane Volcanics, Ppd, at sample site 110669 suggesting that unit continues into the EL from the north or west.

#### 8.2.2 Radiometrics

The rail corridor traverse comprised 181 readings with a maximum of 376 c/s, a minimum of 123 c/s and an average of 251 c/s.

Grouping these data on the basis of NTGS interpreted geology we get:						
	No.Readings	Maxima	Minima	Average		
Gerowie Tuff	62	309 c/s	217 c/s	258 c/s		
Koolpin	36	319	176	268		
Wildman Siltsto	ne 57	323	123	229		
(Another 26 readings were from the rail cutting detail See man)						

(Another 26 readings were from the rail cutting detail. See map)

These data do not clearly show any marked difference in radiometrics for the different units. This may be the case or their groupings may be in error as stratigraphic units could not be differentiated in the field.

One reading of 700 c/s from Sample 110679 (GPS 728355E, 8556218N) from the cutting wall was on an outcrop of gossanous quartzite.

#### 8.2.3 Assay Results

Appendix 3, sample numbers 110659 to 110680, are results of analysis of the 22 rock samples collected from EL 25242.

These results can be summarized as follows:

Element	Range	Maxima	Sample No.
Au	1-33 ppb	33 ppb	110666
Co	1-100 ppm	100 ppm	110669
Cu	5-255 ppm	255 ppm	110666
Ni	5-610 ppm	610 ppm	110668
Pb	4-130 ppm	130 ppm	110666
U	5-20 ppm	20 ppm	110679/80
Zn	10-1070 ppm	1070 ppm	110668

Sample 110666 was of rubble of "iron rich Sediments/Volcanics" ... probably Koolpin. The highs of 255 Cu, 130 Pb are moderately anomalous.

Sample 110669 was of "deeply wthrd choc-brown, massive, unlaminated basic volcanic – probably Mt Deane volcanics.

Sample 110668 was of "siltstone, ferruginous, laminated "..probably Koolpin Formation. The 610Ni and 1070Zn are both moderately anomalous.

Samples 110679 and 110680 were both of "Quartzite, pyritic, carbonaceous" probably Acacia Gap Quartzite. This had given a 700 c/s TC reading. The assay value of 20 ppm U does not explain the 700 c/s.

#### 8.3 Year 3

No field work was carried out on EL 2542 during Year 3. Korab had decided to concentrate on testing higher priority targets on their contiguous tenements.

## 9. CONCLUSIONS

The field work completed has given a good regional overview of the mineral potential of EL 25242.

The reconnaissance geological mapping has indicated most NTGS interpreted geological units to be present albeit in places misplaced by up to 100m.

Radiometric traversing of TC (gamma) has shown no clear relationship with different stratigraphic units as mapped.

Except for one reading of 700 c/s no obviously anomalous readings have been recorded.

Several slightly anomalous assay values were obtained such as:

- Sample 110668 from EL 25242 returned anomalous value in Ni and Zn from a sample of Koolpin Formation.
- The high radiometric reading of 700 c/s from the Acacia Gap Quartzite which assayed 20 ppm U.

## **10. RECOMMENDATIONS**

Although several rock samples returned slightly elevated base metal values, the overall potential of them in the context of the stratigraphy of EL 25242 is lower than the company's other nearby ground.

Hence it was recommended the tenement be surrendered to allow Korab to concentrate their efforts elsewhere.

# 11. EXPENDITURE STATEMENT for Year 3

Expenditure Statement is attached.