

Titleholder: Rum Jungle Resources Ltd

Operator: Rum Jungle Resources Ltd

Tenement Manager: Ross McColl

Tenement: EL 28334

Project Name: Ross River

Report Title: First annual report for EL 28334, Ross River,

period ended 19 June 2012

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Corporate Author: Rum Jungle Resources Ltd

Target Commodities: Uranium, copper, iron, silver, PGE, gold,

Date of Report: 23/07/2012

Datum/Zone: GDA94/ Zone 53

250K mapsheet: Alice Springs

100K mapsheet: Fergusson Range

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# **Contents**

SUMMARY	3
LOCATION, ACCESS AND LAND USE	4
HISTORY OF TENURE AND DOR ADMINISTRATION	4
INDIGENEOUS ACCESS AGREEMENTS	5
EXPLORATION RATIONALE	5
GEOLOGICAL SETTING	5
PREVIOUS EXPLORATION	6
CURRENT EXPLORATION AND RESULTS	7
PLANNED EXPLORATION YEAR 2	9
PLANNED EXPENDITURE YEAR 2	10
CONCLUSIONS AND RECOMMENDATIONS	10

Appendix 1 Geophysical Data

## **SUMMARY**

EL 28334 is held 100% by Rum Jungle Resources and is primarily targeting uranium. It is also prospective for base metals (principally copper and iron), PGEs, silver, and possibly gold. During the first year of tenure an airborne geophysical survey (mag, rad, DEM) was flown over part of EL 28334 by Daishat Geodetic Surveyors / Aerosystems. This was part of a larger survey of Rum Jungle Resources' contiguous Ross River project titles. In all, 4,864 line km were flown at 100 m line spacing using an R44 helicopter at nominal 40 m height. The processing was undertaken by Baigent Geosciences and their report is included. All data from Areas 2-4 of the survey is presented in GDF to accompany this report. EL 28334 is in the southwest corner of this survey. Geophysical costs to EL 28334 are pro-rata based on line kilometres. Two uranium channel anomalies, named Mulga Dam 1 and 2 were identified in the north and south of the EL respectively. An agreement was reached with the CLC allowing on-ground access to the Ross River Project including EL 28334, but site-specific clearances will be necessary for more-invasive work such as drilling. Both a helicopter and a ground vehicle field reconnaissance were undertaken by Rum Jungle staff, using hand-held instruments and non-destructive testing and assaying. This was confined to areas of existing access and CLC clearance. The Mulga Dam 1 target was confirmed by on-ground measurements, but Mulga Dam 2 was downgraded.

Admissible expenditure was \$34,064 against a covenant of \$25,000. A year two covenant of \$19,550 is proposed. The actual expenditure may be higher if drilling is allowed to proceed in year two.

# LOCATION, ACCESS AND LAND USE

EL 28334 is located 80 km east of Alice Springs, in an area comprising the Hale River and Albarta Creek drainages, southeast of Ruby Gap Nature Park. The homestead at Atnarpa, shown on some maps, is abandoned. EL 28334 falls within Loves Creek Station which is owned by an aboriginal corporation. Selected parts of the station are leased for cattle grazing, but there is no commercial use of other areas. Few cattle were seen on EL 28334. There are few existing tracks and parts of the general area are quite rugged. Access to EL 28334 from the south is via Newmery Road then 26 km north along station tracks via Pulya Pulya Dam and Mulga Dam. Access from the north is either to Tommy's Gap and then 37 km via Chabbana Waterholes and Cleary Dam or 37 km from Arltunga via Atnarpa, Chabbana Waterholes and Cleary Dam. Access to the western portion of EL 28334 is difficult.

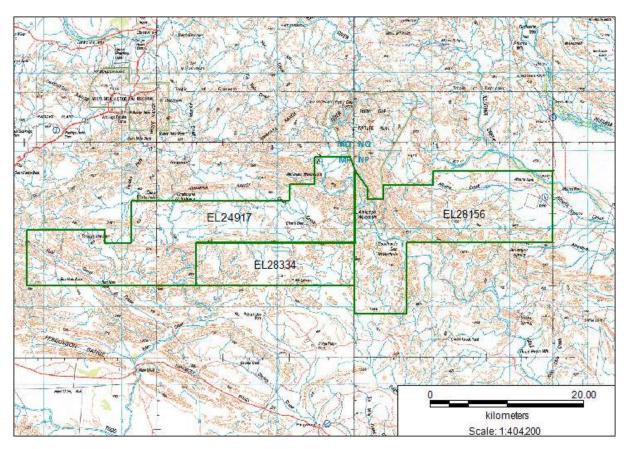


Figure 1. Location map of EL 28334 and other tenements in the Ross River project area

# HISTORY OF TENURE AND DOR ADMINISTRATION

EL 28334 was granted to Rum Jungle Resources Ltd on June 20 2010 for a period of six years. It is a simple rectangle of 36 sub-blocks or 113.27 km² and is surrounded on three sides by contiguous Rum Jungle Resources' ELs 24917 and 28156. These are all included in the DoR Authorisation 0447-002. The MMP enables the contiguous titles to be worked together.

#### INDIGENEOUS ACCESS AGREEMENTS

In October 2011, an exploration agreement was signed with the Central Land Council and Traditional Owners as the tenement falls on the Aboriginal-owned Loves Creek Station. The agreement included the provision for site-specific clearances before any major on-ground work could proceed.

#### **EXPLORATION RATIONALE**

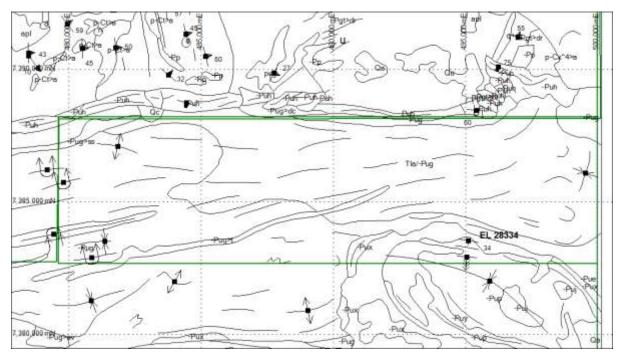
EL 28334 is being explored principally for uranium. It is also prospective for base metals (especially iron and copper), PGEs, silver, and possibly gold. Aerial geophysical surveys were used to determine radiometric (uranium) targets which were ground-truthed and drill targets developed. A parallel sampling program for other commodities is also envisaged.

## **GEOLOGICAL SETTING**

Basement rocks in the area comprise those of the Arunta Block. Broadly speaking, the Arunta Block consists of deformed and metamorphosed Palaeoproterozoic sedimentary and volcanic rocks which were then intruded by granite. The metamorphic history is complex with at least two major periods of widespread regional metamorphism with regional metamorphic grade ranging from greenschist to amphibolite.

Heavitree Quartzite unconformably overlies the Arunta basement rocks and forms the basal unit of both the Amadeus and Ngalia Basins. Both the basement rocks and the Heavitree Quartzite were deformed during the Alice Springs Orogeny, commonly resulting in complex inter-thrusted wedges and folds along the present basin edge.

The area surrounding EL 28334 is dominated by the large east-west trending Giles Creek synform, which forms part of the Arltunga Nappe Complex. This synform is comprised primarily of granitic and gneissic units of the Arunta block with pegmatite and aplite dyke swarms and rare ultramafic – serpentinite rocks. As shown in Figure 2, the northeastern three quarters of EL 28334 itself has surficial cover (Tla/Pug). The southern part of the tenement is occupied by Amadeus Basin sedimentary rock, with the basal Heavitree Quartzite bordering the Giles Creek Synform, followed by the younger Bitter Springs Formation, mainly the Gillen Member (Pug) to the south. The Gillen Member is mainly carbonates and mixed carbonate-siliciclastics containing evaporites and locally intercalated volcanic rocks. The Cyclops Member (Puy), Pertatataka Formation (Pup) and Julie Formation (Puj) are exposed in the synform that trends southeast out of the EL (Figure 2).



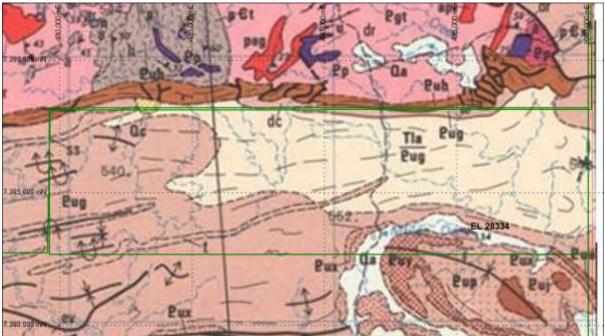


Figure 2 Published geology of EL 28334. See text for description.

## PREVIOUS EXPLORATION

During the late 1970s, Esso explored for uranium and other metals. Their work came to focus on the Paddy's Jump-Up and Arltunga prospects, well to the north of EL 28334. Rio Tinto held a number of contiguous ELs during the late 1980s to search for uranium and other metals. They focussed mainly on the basal Amadeus Basin rocks. CRAE explored for diamonds during the early 1990s. During the late 1990s, Rio revisited the Cleary Creek area under EL 9330 as part of their Central Basins Copper Project. They undertook regional surface sampling but failed to locate any worthwhile anomalies. Most of the sampling was south of EL 28334. From 2001 to 2003, Gutnick Resources used a Witwatersrand model to explore for gold mineralisation along the contact of the Amadeus Basin and basement. No anomalies were found on what is now EL 28334.

#### **CURRENT EXPLORATION AND RESULTS**

A helicopter geophysical survey was flown (Figure 3). The helicopter was chosen over fixed wing because of the rugged topography. The specifications of the full survey are given below:

Date of Survey: 6/2011

Survey Type: Aeromagnetics/Radiometrics

Survey Height: 40m Line Spacing: 100m Tie Line Spacing: 1000m Total Line Kilometres: 4864 km

Area Surveyed: Area 1, Area 2, Area 3 & Area 4 Datum: Geocentric Datum of Australia (GDA94)

**Equipment:** 

Aircraft Type: R44 Helicopter (VH-HBT).

**Magnetometer:** Boom (stinger) mounted in a Robinson R44 helicopter - Geometrics Cs vapour magnetometer G823B with precision counter.

- Billingsley TFM100G2 vector magnetometer.

Base Magnetometer: 2 x Geometrics portable proton precession base

magnetometers (SN 278172 & SN 278171).

**Spectrometer:** Model RSX-4 16L integrated gamma detector & spectrometer.

**Radar Altimeter:** Model PT200 allied signal (Bendix-King) KRA-405B radar altimeter and accessories. **Climatic Observations:** Vaisala barometric and temperature/humidity module. (SN D3250014)

Onboard Computers: ZDAS Acquisition and navigational control module.

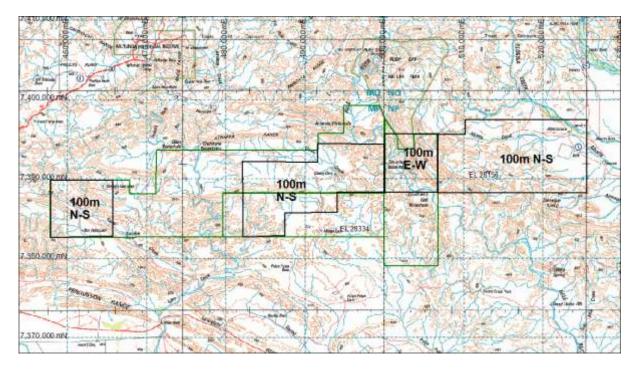


Figure 3 Geophysical coverage acquired over the Ross River Project, showing line spacing and flight directions. Note the partial coverage of EL 28334 in the centre.

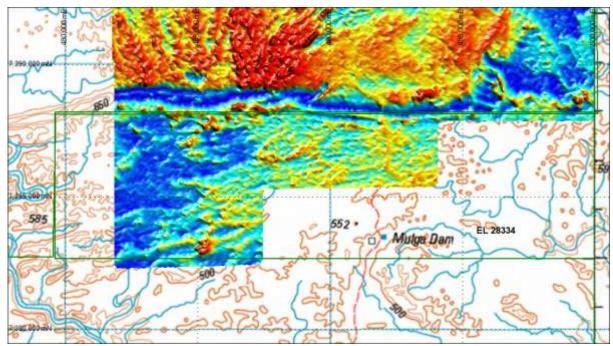


Figure 4 Total count radiometrics over EL 28334.

Two uranium anomalies, named Mulga Dam 1 and 2, were identified in the north and south of EL 28334 respectively (Figure 5). They are within, or at the contact of, putative Gillen Member which is known to contain intercalated volcanic rocks nearby. The Mulga Dam 1 target was confirmed by on-ground measurements (Figure 7), but Mulga Dam 2 was downgraded. The TMI over EL 28334 shows very little character and is not depicted here.

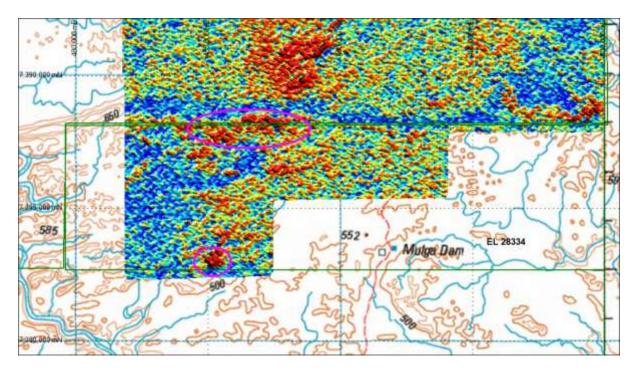


Figure 5 Uranium channel coverage showing Mulga Dam 1 in the north and Mulga Dam 2 in the south.

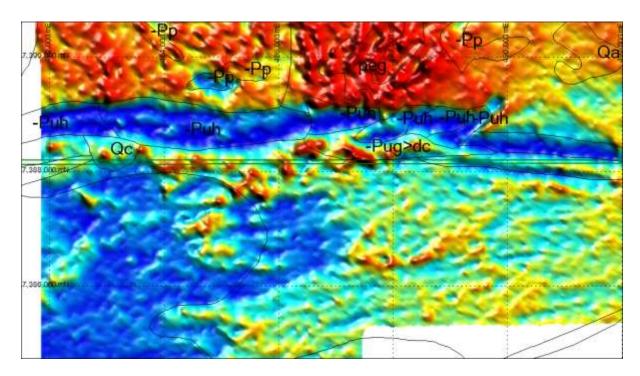


Figure 6 Close-up of the Mulga Dam 1 total count radiometrics with geology polygons superimposed. The green lines are EL boundaries.



Figure 7 Outcrop at Mulga Dam 1

# **PLANNED EXPLORATION YEAR 2**

The minimum year two work proposed for EL 28334 is a vehicle and/or heli recon, surface observations and measurements, sampling program and geophysical anomaly follow-up.

Ideally, additional work, including drilling, could be undertaken in year two but will depend on the following being completed before, or early in, the 2012 field season:

• selection of worthwhile drilling targets

- obtaining site-specific clearances from the CLC enabling drilling to proceed (successfully obtained after reporting deadline)
- DoR approving the MMP which covers all activities in Rum Jungle Resources' Ross River Project, including EL 28334
- clearing and preparation of access tracks
- sourcing a suitable drill rig.

Should drilling be allowed to proceed, the following are eastings and northings of proposed hole locations at Mulga Dam 1:

Hole ID	MGA 53 Easting	MGA 53 Northing
RRRC013	487140	7388395
RRRC014	487132	7388388
RRRC015	487437	7388207
RRRC016	487430	7388198
RRRC017	487535	7388160
RRRC018	487531	7388154
RRRC019	487622	7388162
RRRC020	487615	7388150

# PLANNED EXPENDITURE YEAR 2

The planned expenditure, which exceeds the DoR minimum threshold, is outlined below:

ACTIVITY DETAILS FOR THE NEXT REPORTING PERIOD				
Admissible Expenditure	Specify the work to be undertaken			
A. Geological Activities and Prospecting	vehicle and/or heli recon, surface observations and measurements	12,000		
B. Geochemical Activities	Surface sampling included above or downhole only if D proceeds			
C. Geophysical and Remote Sensing Activities	Assessment of gratis ASTER data included in H below			
D. Drilling	Subject to CLC site clearances and MMP approval before 2012 field season			
H. Office Studies		5,000		
I. Overheads (not to exceed 15% of the sum of A to H above)		2,550		
J. Covenant for next reporting period		\$19,550		

# **CONCLUSIONS AND RECOMMENDATIONS**

The radiometrics acquired in year one of tenure shows two uranium anomalies, one of which, Mulga Dam 1, warrants drill testing. CLC clearances have been obtained and work in the 2012 field season will depend on timely grant of the MMP by DoR.