EL 24770 – Litchfield

Sixth Annual Report for the period

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Batchelor & Reynolds River 1:100,000 Sheets
MGA 94 Zone 52
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1. INTRODUCTION

Exploration Licence 24770 is considered prospective for uranium, gold and base metal sulphide mineralisation. Compass Resources Limited was placed in voluntary administration in January 2009 and then placed under a deed of company arrangement from 1 May 2009 for a period of 12 months. This Deed was extended. On 15 November 2011 the Deed was terminated and Compass came out of Administration.

Due to significant difficulties encountered in processing the EM data from the flying carried out in late 2010, the data was not successfully processed until September 2011 with the data being supplied to DoR on 30 September 2011. As the geophysical data was to form the basis of selecting new targets for further exploration within the licence and it was not available no field work was undertaken in 2011. A consultant geophysist modelled the geophysical data in late 2011/early 2012 and has identified a series of EM anomalies requiring field evaluation.

2. TENEMENT DETAILS

An application for this exploration licence of 15 blocks (35.8 square kilometres) was made on 16 June, 2005. This area was granted as EL 24770 effective 4th April 2006 and expiring on 3rd April 2012 (see Figure 1). Ownership was originally Compass Resources NL 90% and Guardian Resources Pty. Ltd. 10%. Compass now owns Guardian Resources Pty Ltd, so has effective 100% ownership of the tenement. A Renewal Application for EL 24770 was lodged with DoR on 20 March 2012.

A 50% reduction (seven (7) sub-blocks) was undertaken in January 2011 so that eight (8) sub-blocks were retained.

The tenement is located on the Pine Creek 1:250,000 map sheet (5270), Batchelor 1:50,000 and Rum Jungle 1:50,000 topographic maps (5171-4 and 5071-1 respectively).
3. ACCESS
Access to the general area is by following the old railway route south from Batchelor, or via the unsealed Camp Creek road from Adelaide River. Only minor tracks exist in the tenement. As the tenement is in the Litchfield National Park access will be by foot or confined to existing vehicle tracks.

4. GEOLOGICAL SETTING
This tenement is located approximately twenty kilometres south-south-west of Batchelor on the southern side of the Archaean Waterhouse complex, mostly covering the middle and upper sedimentary sequence, including the Namoona Group and the Mt. Partridge Group. Large areas are mapped as Burrell Creek Formation (Finniss River Group) which is a mixture of shales and sandstones. Areas of brecciated ferruginous rocks and sandstones, variably referred to as the Geolsec Formation and/or the Depot Creek Sandstone of the Tolmer Group have been re-interpreted to be of structural origin and this represents a major change to the exploration potential of the tenement.

Outcrop is fair in the area, with some lateritisation and recent alluvium obscuring parts of the underlying rocks.

The tenement covers the Burnetts, QML2 and QML3 uranium prospects, and a radiometric anomaly named Danni. Most of these prospects were originally located by Uranerz in 1980-1981 or Queensland Mines in the 1970.

The most recent published data of this area is from Lally et al 2002 (Rum Jungle 1:100,000 Mineral Field Map).
5. PREVIOUS EXPLORATION

During the period 1950-1974, most of the regional exploration in this area was conducted by the BMR as part of a regional programme aimed at locating uranium deposits.

The most recent uranium exploration in this region was undertaken by Uranerz in the late 1970s and early 1980s. This involved extensive drilling programmes and ground geophysical surveys in the north of the EL. Four (4) of those holes were drilled as part of the South East Kylie prospect; 82SEK16, 17, 19, and 21. Four (4) more holes were drilled at the Burnettts prospect in the tenement, 82CB01-4. These Burnett holes were collared with an RC rig then finished with diamond, totalling 465.3m and intersecting uranium mineralisation in two holes (82CB01 and 82CB02). Marathon also explored the area in the late 1970s.

Aztec Mining last held a northern portion of the area in the period 1992-1998. Work by Aztec included stream sediment sampling, soil and rock chip sampling and a drill program in 1995 that consisted of 4 RC holes totalling 157m (HTRC01 - HTRC04). They also completed a large detailed aeromagnetic survey of the general region to the north that covered only 20% of the northern portion of EL 24770.

In the last couple of years Compass Resources compiled all historical exploration data for the Rum Jungle Mineral Field into a true GIS system. Exploration drilling data was collated and entered into the Datashed database and evaluated using ARC GIS and Micromine. In addition all historical maps relevant to EL 24770 were geo-referenced in ARC.

The database contains a total of 31 historical drill holes within the Litchfield tenement (see figure 2). The extensive shallow RAB drilling programs undertaken in the 1990s by Aztec/Nicron/Normandy covering the northern part of the tenement were not entered due to time constraints though geo-referenced maps of this data were registered in ARC.

Detailed aeromagnetic and radiometric surveys flown in the 1990s were merged with the regional geophysical data sets and reprocessed.
One of the prime benefits of compiling so much historical exploration data is that it generates a better understanding of both the regional geology as well detailed geology of individual prospects. At Rum Jungle this has resulted in a complete re-think of the timing and controls to mineralisation.

Based on the review of the historical exploration data there are two distinct primary mineralisation events at Rum Jungle:

(a) Lower Proterozoic stratiform base metal event (Browns, Area 55, possibly Mt Fitch sulphides)
(b) Mid Proterozoic structurally controlled uranium-gold-platinoid-base metal event (all other prospects).

The mid Proterozoic event is associated with a series of stacked, essentially bedding parallel thrust surfaces. These surfaces are characterised by extensive zones of brecciation and variable but often intense hydrothermal alteration. Alteration includes silicification, haematite dusting, specular haematite, apatite, chlorite and disseminated pyrite.

Within the Litchfield tenement these thrust surfaces start to merge generating zones of semi continuous brecciation and variable alteration up to 2.5km across that trend to the NE and NW. Recent published mapping has mis-identified this brecciation/alteration as Geolsec Formation and/or the Depot Creek Sandstone of the Tolmer Group. The structural event has effectively destroyed the Proterozoic stratigraphy within the northern part of EL 24770 (see Figure 3).

Extensive sills and non-concordant bodies of Zamu dolerite intrude along the thrust sheets and these are also variably altered and provide some age constraints on the structural and mineralising events.

The extent of brecciation has been confirmed through field checking and reviewing historical drill logs.
Given the improved understanding of the prospectivity of EL 24770 it was decided to fly the northern half of the tenement (along with all other Compass tenements at Batchelor) with helicopter borne aeromagnetics and EM. The survey was completed by GPX Surveys in late 2010 with flight lines at 150m spacing, orientated north-south and with a terrain clearance of 30m. East-west tie lines were spaced at kilometre intervals. This generated approximately 90 line kilometres of data within EL 24770.

6. WORK COMPLETED IN YEAR 6
The survey data was received by the Compass consultant geophysist in February 2011 however there were significant difficulties encountered in processing the EM data. This was eventually traced back to potential interference from a Defence Department facility in the area. Given these difficulties, the data was not successfully processed until September 2011 with the data being supplied to DoR in October 2011. As the geophysical data was to form the basis of selecting new targets for further exploration within the licence and it was not available no field work was undertaken in 2011 resulting in an under-expenditure on the licence. A consultant geophysist modelled the geophysical data in late 2011/early 2012 and has identified a series of EM anomalies requiring field evaluation.

7. PLANS FOR WORK IN YEAR 7
The use of detailed geophysical surveys has proven useful in understanding the geological setting of existing known mineral deposits and in highlighting numerous additional geophysical anomalies within the Rum Jungle district and EL 24770 in particular. As a consequence it is planed to fly all tenements (including EL 24770) within the Rum Jungle Mineral Field with a Falcon Gravity Survey during 2012 to enable better discrimination of anomalies.

Expected expenditure is anticipated to exceed $23,000.
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EL 24770 EXPENDITURE REPORT

For Year Ending 3 April 2012

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Salaries & Wages  2,800  
Geophysical Consultants  3,225  
Travel & Accom  750  

Total Expenditure  $6,775
Figure 1. Tenement location map for EL 24770.
Figure 2. Location of Historical Drilling within EL 24770.
Figure 3. Regional structural interpretation for EL24770.