A23439 - RUM JUNGLE CREEK SOUTH

ANNUAL REPORT
For the period
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Author: G Johansen
(garry.johansen@compassresources.com.au)

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EXECUTIVE SUMMARY

Compass Resources is exploring in the Batchelor area for oxide and sulphide basemetal deposits and uranium. During the reporting period, Compass finalizing the compilation of all historical exploration data, completed a new structural interpretation of the Rum Jungle district and undertook airborne geophysical surveys.

A23439 was flown with helicopter borne EM and magnetics with 100m spaced flight lines with nominal 35m terrain clearance for approximately 20 line km of survey. The survey was undertaken in October 2010 and the data is still being processed and will be reported in the next annual report.

TENEMENT DETAILS

This area was originally applied for by Compass Resources NL and Guardian Resources Pty. Ltd on 12 November, 2001 being parts of 4 blocks. It was previously a reserve, RO588.

The tenement was granted as A23439, effective 15 November, 2005 covering an area of 2.930 square kilometres. The tenement was granted to Compass Resources 90% and Guardian Resources Pty. Ltd. 10%. Compass now effectively owns 100% equity in the tenement following the acquisition of Guardian Resources Pty. Ltd.
LOCATION

The tenement is located approximately 4.5km south of the Browns Oxide Project and 3.5km west of the town of Batchelor, covering the site of the old Rum Jungle Creek South uranium mine and its waste dumps.

The location of the tenement is outlined in Figure 1.

ACCESS

The main access is from Batchelor via the Litchfield Park road, then by the local road to the location known as Rum Jungle Lake. Several tracks exist within the tenement to allow for local access.

GEOLOGICAL SETTING

Previous geological mapping indicates the dominant surface rock types of the tenement belong to the Mount Partridge Group of the Lower Proterozoic. The oldest of these sediments are of the Crater Formation, consisting primarily of arkosic arenites and conglomerates. This unit is overlain by black shales and marls of the Whites Formation.

The White Formation is in turn overlain by the major carbonate sequence of the Coomalie Dolomite. It is within the lower parts of the Whites Formation and in the transition zone between the Whites and Coomalie Dolomite that the stratabound base metal sulphides occur. The extensive areas of quartz-haematite breccias represent structurally disturbed and altered equivalents to the Coomalie Dolomite.

Minor Mid Proterozoic dolerites intrude the stratigraphy.
PREVIOUS EXPLORATION

Due to the proximity of the licence to a known uranium mine and associated mineralisation, a significant amount of exploration has been undertaken by several organisations. The BMR commenced exploration in 1951 with a high level airborne survey and continued exploration in the area up to about 1970.

Territory Exploration Pty. Ltd. (TEP), a subsidiary of CRA, undertook significant regional and detailed evaluation in the period 1954 to 1965. This work concentrated on uranium exploration and mining, however in excess of 125 diamond drill holes were completed within the boundaries of the tenement in that period, mostly in the vicinity of the RJCS Prospect.

Uranerz undertook detailed uranium exploration in the general area in the period 1979 to 1984, drilling a large number of RAB and aircore holes around the tenement (then a reserve) and in adjoining tenements.

In 2006 5 RC holes at 891m were drilled, sampled and assayed. These holes are located to the north of the existing RJCS mine. In 2007 a following 6 RC holes at a total of 770m were drilled, sampled and assayed and are also to the north of the existing RJCS mine.

In 2008 the Company commenced developing a comprehensive database or all historical and modern exploration within the Rum Jungle Mineral Field. Despite Compass Resources being placed in voluntary administration in early 2009, the data compilation has continued with the data being placed into the new database (Datashed) and GIS system (ArcMap). The validated database currently comprises approx 5000 drillholes for 350,000+ metres.
WORK COMPLETED THIS YEAR

During the reporting period, work carried out focussed on validation of the compilation of all historical exploration data. A review of this data (in conjunction with field checking) resulted in the development of a new structural model for the Rum Jungle district.

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, tourmaline, chlorite and disseminated pyrite.

Within A23439 the faulting sliced up much of the lower Proterozoic stratigraphy reducing exploration potential for base metals. However the strong structural preparation has increased potential for uranium mineralisation.
The development of a 3D model for the RJCS mineralisation has continued utilising the new database to further develop the regional structural understanding as well as the controls of potential uranium mineralisation at depth. Manipulation of the drilling data in LEAPFROG suggests high grade mineralisation within the RJCS pit was controlled by sub-vertical, NW trending structures within an N-S structural corridor.

Mineralisation extends to the north of the historical RJCS pit and limited historical drilling beneath the pit indicates the presence of a mineralised structure at depth that remains open in all directions (see Figure 1).

Figure 1. RJCS pit illustrating the potential of a feeder structure at depth as well as the extension of mineralisation to the north.
In October 2010 the tenement was flown with helicopter borne detailed aeromagnetics and EM and part of a survey covering all Compass tenements in the Batchelor district. Flight-lines within A23439 were E-W at 150m spacing with a nominal terrain clearance of 35m. N-S tie-lines were flown at 1km intervals. Approximately 20 line kilometres of survey were completed within A23439.

Results of this survey are still being processed by the contractor and are not yet to hand.

**PLANS FOR NEXT YEAR.**

Work proposed by Compass Resources for Year 6 of A23439 is expected to comprise the processing and review of the detailed airborne magnetic and EM surveys completed in October 2010. The results of this review will identify any anomalies requiring field checking and drill testing.

Expenditure proposed for this work program will exceed $30 000.00

**PREVIOUS REPORTS AND REFERENCES**

H Porteous 2009


T. Croshaw and A. Johnston 2008


D. Major December 2007;


M. K. Boots December 2006

EXPENDITURE REPORT

Salaries & Wages  $ 21,818
Consultants     $ 1,375
Field Costs     $ 1,350
Travel & Accommodation  $ 1,071

Total expenditure  $ 25,614
Figure 2. Location Map