



Quantum Resources Limited

ACN 006 690348

MT. PEAKE

EXPLORATION LICENCE 23409

ANNUAL REPORT

FOR THE PERIOD

15 OCTOBER 2006 to 14 OCTOBER 2007

BY

N.FARRELL

DUE DATE: 14TH NOVEMBER 2007

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TENEMENT REPORT INDEX

COMPANY / OPERATOR:	Quantum Resources Limited
PROJECT:	Mt Peake
PROSPECT:	
TENEMENTS:	Exploration License 23409
REPORTING PERIOD:	15 October 2006 to 14 October 2007
AUTHOR:	N. Farrell
DUE DATE:	14 November 2007
STATE:	W.A.
LATITUDE:	S21° 22' – S21° 42'
LONGITUDE:	E133° 23' – E133° 50'
AMG mN:	7600000 – 7635000
AMG mE:	330000 - 380000
1:250,000 SHEET:	SF53-05 Mount Peake, SF53-06 Barrow Creek
1:100,000 SHEET:	5555 Conical Hill, 5655 Crawford, 5654 Barrow
COMMODITY:	Au, Pb, Cu, Zn, Ag
KEYWORDS:	Gold, Base Metals, Aeromagnetic survey, Landsat Interpretation, data review, geology



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1. SUMMARY OF EXPLORATION ACTIVITY

This report describes exploration carried out on the Mt Peake Project tenement E 23409 between 15 October 2006 and 14 October 2007 (Figure 1). An investigation was undertaken of previous exploration geological data and airborne geophysical data. A preliminary exploration strategy was devised, including a detailed aeromagnetic/radiometric survey. A heritage application has been submitted and a Mine Management Plan approved, however, drilling and sampling is yet to commence.

2. TENEMENT STATUS

Exploration Licence EL 23409 was granted to Astro Diamond Mines NL on 15 October 2003. The licence is managed by Quantum Resources Limited.

TENEMENT	DATE OF GRANT	STATUS	AREA (km ²)
EL 23409	15/10/03	Live	731.63

3. LOCATION AND ACCESS

Exploration Licence 23409 lies in the Tanami Desert of south central Northern Territory between Rabbit Flat and Barrow Creek. Access to the area would be through Barrow Creek for the eastern area and Willowra Station and other aboriginal lands for the central and western areas.

4. GEOLOGY

4.1 Exploration Target

The tenement is prospective for base metals mineralisation. The proposed exploration activities will include airborne surveying, sampling and drilling to investigate the nature of base metal mineralisation associated with the unconformity between the Killi Killi Beds and the Gardiner Sandstone. This mid-Proterozoic sandstone outcrops as a part of the Northern Ware Range in the east of the tenement and the Birrindudu Range, just off the west of the tenement. The presence of potentially reducing shales is optimistic for the presence of base metals.

4.2 Regional Geology

The project area lies along the southern margin of the North Australian Craton (NAC) where the Lander Rock Beds have been intruded by granitic and mafic rocks at about 1820 Ma



(Hendrickx et al 2000). This remnants of the North Australian Platform Cover (NAPC), is equivalent to the Hatches Creek Group of the Tennant Creek Inlier (Ahmad 2000). The intrusion is attributed to the Tanami Event (1845-1830 Ma), reflecting the collision of the North Australian Craton with the Kimberley Craton and they are also correlative with intrusions in the Halls Creek Orogen. Similarly, the King Leopold Orogen in the West Kimberley, lamproites, granitic and mafic rocks occur in a similar structural setting and age to the Mount Peake Project area. (Griffin et al 1995).

The Proterozoic bedrock in the region comprises the Lower Proterozoic Bullion Schist, which consists of metamorphosed shelf sediments and minor volcanics. These are overlain by Middle Proterozoic sediments, intruded by granites, and subsequently overlain by Late Proterozoic sediments. Previous workers have noted the occurrence of a number of extremely dense and magnetic circular bulls-eye aeromagnetic features that are probably concealed mafic plugs.

Previous exploration by Normandy NFM Limited indicates that outcrop of the Proterozoic rocks is very sparse in the area and is dominated by Quaternary aeolian sands and red soils, with minor Tertiary laterites. The Cenozoic cover can vary from less than one meter, to over 50 m in large Tertiary palaeochannels.

4.3 Local Geology

Locally, the tenement is dominated by sands, gravels and Quaternary Aeolian sediments. Alluvial sands and silts from ephemeral drainage, river gravel and red soils containing ferruginous pisoliths are common. Gravel sand, colluvium and scree surround the ranges in the east and a very small outcrop of granitoid occurs in the south of the tenement.

5. EXPLORATION

5.1 Summary

The proposed exploration activities will include a full geophysical analysis and a programme of sampling and drilling to investigate the nature of base metal mineralisation associated with the unconformity between the Killi Killi Beds and the Gardiner Sandstone.

5.2 Geological & Geophysical Data Review

Multi-client airborne magnetic data with 500m line spacing was acquired from The Department of Mines and Energy, Northern Territory Geological Survey, 1995. This data was used in conjunction with a full review of Open File Exploration Research to assist in generating an appropriate exploration strategy. Subsequently, a more detailed magnetic and



radiometric survey has been commissioned. It will be conducted within the next reporting year at 100m line spacing by Fugro.

5.3 Program Development

Due to the extensive recent alluvium, the lack of definition in the current TMI data and the Greenfields nature of the exploration, broad hole spacing may allow a general idea of stratigraphy. Hence, the potential for mineralizing lithologies and can be followed up with a more intensive program as reducing shales, which may be suitable hosts to mineralization, may be as narrow in places as 20-60m.

The sampling programme will include loam sampling of targets over the defined region and stream sediment sampling of the sparse drainage in the region. The drilling programme will include approximately 40 RAB/RC holes at 500m spacing, across 2 traverses running north-south. The traverses shall cross cut the strike of the more distinctive magnetic-highs.

5.4 Recommendations

The alluvial cover that dominates the tenement can only be effectively explored using RAB drilling. The Birrindudu group unconformably overlies the lower-Proterozoic sedimentary Killi Killi Beds of the Tanami Complex and both have experienced regional tectonism. Hence, they warrant investigation to determine the extent of any existing mineralization particularly shale-hosted base metal mineralisation.

Analysis of geophysics and historical geochemistry will enable target selection based on geochemical anomalies, structural targets associated with granite intrusives, flexures in the regional magnetics, suitable host lithologies and areas beneath cover. This program, including the attainment of more detailed geophysical data, sampling and drilling will continue in the broader context of the Mt.Peake exploration project with a view to acquiring more detailed information about the stratigraphy to assist with delineating appropriate targets for mineralisation.



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