



Quantum Resources Limited

ACN 006 690348

MT. PEAKE

EXPLORATION LICENCE 23409

ANNUAL REPORT

FOR THE PERIOD

15 OCTOBER 2007 to 14 OCTOBER 2008

BY

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DUE DATE: 14TH NOVEMBER 2008

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TENEMENT REPORT INDEX

COMPANY / OPERATOR:	Quantum Resources Limited
PROJECT:	Mt Peake
PROSPECT:	No known prospect
TENEMENTS:	Exploration License 23409
REPORTING PERIOD:	15 October 2007 to 14 October 2008
AUTHOR:	B.White, A.Raza, & C.Ashcroft
DUE DATE:	11 November 2008
STATE:	Northern Territory
LATITUDE:	S21° 22' – S21° 42'
LONGITUDE:	E133° 23' – E133° 50'
MGA94-53 mN:	7621000 - 7635000
MGA94-53 mE:	330000- 355000
1:250,000 SHEET:	SF53-05 Mount Peake, SF53-06 Barrow Creek
1:100,000 SHEET:	5555 Conical Hill, 5554 Anningie, 5655 Crawford, 5654 Barrow
MINERAL FIELD:	No recorded mineral field
MINERAL DISTRICT:	No recorded mineral district
COMMODITY:	Au, Pb, Cu, Zn, Ag
KEYWORDS:	Gold, Base Metals, Airborne Magnetic survey, radiometric geophysical geology



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1. SUMMARY OF EXPLORATION ACTIVITY

This report describes exploration carried out on the Mt Peake Project tenement EL 23409 between 15 October 2007 and 14 October 2008 (Figure 1). A detailed airborne magnetic and radiometric geophysical survey was commissioned and flown during the reporting period. The data collected during the survey is currently being processed by Fugro Airborne Surveys Pty Ltd.

2. TENEMENT STATUS

The application for Exploration Licence EL 23409 was submitted on the 2nd October 2001 and granted to Astro Mining NL on the 15th October 2003. The licence has been managed by Quantum Resources Limited (Quantum) since 2006. On the 15th October 2005, the tenement underwent the compulsory reduction to 118 blocks at the third anniversary. The tenement was reduced to 59 blocks on the 15th October 2006.

At the end of the fourth year of tenure a waiver from the statutory 50% reduction was granted on 19 November 2007 by the Department of Primary Industry, Fisheries and Mines (DPIFM) allowing the retention of 59 blocks until 14 October 2008 (DPIFM confirmed on 13 November 2008 that a letter dated 19 November 2007 referring to 118 block retention was in error). On 21st July 2008, Dealing D92679 was registered with Astro Diamond Mines NL holding a 20% interest in the tenement and Quantum Resources Limited 80%. On the 15th October 2008 the tenement is to be reduced to 30 blocks.

TENEMENT	STATUS	DATE	NUMBER OF BLOCKS
EL 23409	Application	02/10/01	236
	Granted	15/10/03	II
	Compulsory reduction	15/10/05	118
	Reduction	15/10/06	59
	Waiver of reduction granted	19/11/07	II
	Reduction due	15/10/08	30

3. LOCATION AND ACCESS

Exploration Licence 23409 lies in the Tanami Desert of south central Northern Territory between Rabbit Flat and Barrow Creek (Figure 2). The tenement can be accessed via Barrow Creek for the eastern area and Willowra Station and other aboriginal lands for the central and western areas.





EL23409 Tenement Bou	undary
—— Sealed Road	
Unsealed Road	
—— Watercourse Line	
Contour	

Comp. : CA
File : EL23409_EI_

4. GEOLOGY

4.1 Exploration Target

The tenement is prospective for base metal 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 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 belongs to the Proterozoic Arunta Inlier situated on the southern margin of the North Australian Craton. The Arunta Inlier shares its boundary with the two most significant gold hosting districts, the Tanami and the Tennant Creek regions. The Arunta Inlier comprises of three east-west oriented tectonic provinces (Northern, Central and Southern) separated by major fault; each having a distinct lithological, stratigraphic, metamorphic and deformational history (Stewart et al., 1984, Shaw et al., 1984). However, Collins and Shaw, 1995 have revised this division and have suggested that no distinct structural discontinuity exists between the North and Central Tectonic Provinces, and that the Redbank Thrust Zone defines, at least in part, the northern limit of the Southern Tectonic Province.

The tenement is a part of the Northern Tectonic Province. The Palaeoproterozoic succession of the Northern Tectonic Province consists of aluminous and silicious sediments and minor volcanics which have undergone at least two regional metamorphic events (at \geq 1820 and 1780-1770Ma), commonly to low grade but locally in some areas up to granulite facies (Zhao and Bennett, 1995 and references therein). Measured radiometric ages from granitioid bodies suggest that magmatism was episodic throughout its geological history but more intense during 1770-1750 (Zhao and Bennett, 1995).

The Northern and Central Tectonic Provinces underwent localized tectonism at ~1880 Ma (Yuendumu tectonic event) and 1820 Ma (Stafford tectonic event). However, major deformation was due to the Early and Late Strangways Orogeny (Collins and Shaw, 1995). During the Early Strangways Orogeny (ca. 1780-1770 Ma) polyphase deformation was associated with west to southwest-vergent thrusting and development of north-south and southeast-oriented folds (Betts and Giles, 2005 and references therein). During the Late Strangways Orogeny (ca. 1740-1715 Ma), east-west to northeast-southwest crustal shortening caused the formation of kilometer-scale sheath-like folds due to east-over-west shearing (Betts and Giles, 2005 and references



therein).

In the Southern Tectonic Province the two major tectonic events are the Argike tectonic event (~1680 Ma) and Chewings Orogeny (~1600 Ma) (Collins and Shaw, 1995).

The post Mesoproterozoic tectonic history is characterized by several phases of uplift and isolated magmatic episodes. Among them, the last and most significant deformational and metamorphic event was the intracratonic Alice Springs Orogeny (400-300 Ma).

4.3 Local Geology

Most of the region surrounding EL23409 is covered by the Cainozoic ferricrete, silcrete horizon and Quaternary loose sediments (Figure 3). The Proterozoic rocks belonging to the Arunta Inlier outcrop sparsely in the adjacent area and form many ranges of low elevation further to the east.

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 Proterozoic granitoid occurs in the south of the tenement. The Cainozoic cover can vary from less than 1 m, to over 50 m in large Tertiary palaeochannels.

Based on the published interpreted geology map of Mount Peake (1:250000 interpreted geological map of Mont Peake SF53-05 Sheet 2006), the western half of the tenement comprises Paleoproterozoic Lander Rock Beds and granites subcropping below the Cainozoic cover. No similarly detailed map is available for the eastern half of the tenement but it is highly likely that the same rock units continue eastward.



	EL23409 Tenement Bour	dary
Geology (Bagas, P.W. et al	, 1991 & Stewart, A. J. et al 1974)	
	1	
	Alluvium, river gravel	
Quate	Silt, clay, sands: playa deposits	
	Calcrete	
	- Fonglomerate	
020		
	Ferricrete gravel and angular qua	uz gravei
	Ferricrete	
	Deeply Weathered Rock	
.g -Pust	Arkose and feldspathic quartz are cross-bedded, red-brown, interber	nite, lithic, thin- to thick-bedded, ds of siltstone; minor conglomerate
-Pusf	Quartz arenite, feldspathic, white	purple and red-brown,
dnd-	Diamictite, massive, red-brown m	udstone matrix
-Pua	Orthoquartzite, white; minor granu	le pebble conglomerate
Pq-	Granite; commonly contains meta	sedimentary xenoliths
Proterr	Mica schist with rare sillimanite, p with rare andalusite, hornfels and	hyllite, micaceous meta-sandstone biotite gneiss.
	Contains amphibolite plugs and p	ossible flows
A	Quartz; dyke or vien	
	Faults	
	GDA94/MGA53 1:125,000 (A3)	
	Quantum Reso	urces Limited
	Quantum Reso Mt Peake	urces Limited
	Quantum Reso Mt Peake Geology	urces Limited
	Quantum Reso Mt Peake Geology EL23409	urces Limited
	Quantum Reso Mt Peake Geology EL23409	urces Limited
	Quantum Reso Mt Peake Geology EL23409	urces Limited
Comp. :	Quantum Reso Mt Peak Geology EL23409	urces Limited
Comp. : File :	Quantum Reso Mt Peak Geology EL23409 EL23409_geol_131008.mxd	urces Limited
Comp. : File : Plot :	Quantum Reso Mt Peak Geology EL23409 EL23409 Geolgy	urces Limited

5. **EXPLORATION**

5.1 Summary

An airborne magnetic and radiometric survey was conducted by Fugro Airborne Surveys Pty Ltd during the reporting period. The results of this survey have not yet been received by Quantum.

5.2 Previous Work

Previous review of open-file reports and review of multi-client airborne magnetic data (1995) as previously reported revealed the greenfields nature of exploration in the tenement area, the lack of definition in the geophysical data and the existence of extensive alluvial cover over the tenement area.

5.3 Geophysical Survey

Previous work highlighted the need for a tenement-wide geophysical survey. An airborne magnetic and radiometric survey was conducted at 100m line spacing by Fugro Airborne Surveys Pty Ltd in the latter part of the tenement year. Results from the survey are currently being processed by Fugro. With no data having yet been received by Quantum this geophysical survey will be detailed in full in the next annual report.

5.4 Recommendations

Given the alluvial cover that dominates the tenement EL 23409 can only be effectively explored using subsurface techniques. The future program includes a review of the recently obtained geophysical data, which is likely to be followed up with drilling with a view to acquiring more detailed information about the stratigraphy to assist in delineating appropriate targets for mineralisation.



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