EXPLORATION LICENCE 23400

MOUNT PEAKE PROJECT

PARTIAL SURRENDER REPORT

FOR THE PERIOD

25 NOVEMBER 2007 TO 24 NOVEMBER 2008

BY

B. White and A. Raza

PRIVATE AND CONFIDENTIAL
NOT TO BE COPIED OR DISTRIBUTED

DISTRIBUTION:
Department of Business, Industry & Resource Development, Darwin
Quantum Resources Limited, Melbourne
TENEMENT REPORT INDEX

OPERATOR: Quantum Resources Limited
PROJECT: Mt Peake
TENEMENT: EL 23400
REPORT PERIOD: 25 November 2007 to 24 November 2008
DUE DATE: 24 December 2008
AUTHOR: B. White and A. Raza
STATE: Northern Territory
LATITUDE: 21° 05’S – 21° 22’S
LONGITUDE: 132° 45’E – 133° 00’E
MGA mN: 7635000 - 7670000
mE: 268000 - 330000
1 : 250,000 SHEET: SF53-05 Mount Peake
1 : 100,000 SHEET: 5455 Willowra, 5555 Conical Hill
MINERAL FIELD:
COMMODITY: Diamonds, gold
KEYWORDS: Aeromagnetic survey, radiometric survey, geology
# TABLE OF CONTENTS

1. SUMMARY OF EXPLORATION ACTIVITY 1  
2. TENEMENT STATUS 1  
3. LOCATION AND ACCESS 1  
4. GEOLOGY 4  
   4.1 REGIONAL GEOLOGY 4  
   4.2 LOCAL GEOLOGY 4  
5. EXPLORATION 6  
6. BIBLIOGRAPHY 8  
APPENDIX A 9  

# LIST OF FIGURES

1. EXPLORATION INDEX  
   1:150,000 scale Landscape  
2. RELINQUISHED BLOCKS MAP  
   1:150,000 scale Landscape  
3. LOCATION MAP  
   1:250,000 scale Landscape  
4. GEOLOGICAL MAP  
   1:150,000 scale Landscape  
5. SURVEY AREAS  
   1:150,000 scale Landscape
1 SUMMARY OF EXPLORATION ACTIVITY

This report describes the exploration activities carried out on EL 23400, which forms part of the Mount Peak project, between 25 November 2007 and 24 November 2008 (Figure 1). Exploration was limited to an aeromagnetic and radiometric survey that was flown between the 25th and 28th of September 2008.

2 TENEMENT STATUS

Astro Diamond Mines NL (formerly Astro Mining NL) applied for Exploration Licence 23400 on the 2nd October 2001 and was granted on the 25th November 2003 covering an area of 337 sub blocks or 1038 km². A waiver of reduction was granted for EL23400 on the 25th October 2005. The tenement underwent a compulsory 50% reduction on the 25th November 2006, retaining 166 sub blocks. On the 21st July 2008, under transfer D92679, Quantum Resources Limited (Quantum) acquired an 80% interest in the tenement with Astro Diamond Mines N.L. retaining 20%. A second compulsory 50% reduction was undertaken on the 25th November 2008, retaining 83 sub blocks.

<table>
<thead>
<tr>
<th>TENEMENT</th>
<th>DATE OF GRANT</th>
<th>STATUS</th>
<th>AREA (km²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 23400</td>
<td>24/11/03</td>
<td>granted</td>
<td>1038</td>
</tr>
<tr>
<td></td>
<td>24/10/05</td>
<td>waiver of reduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25/11/06</td>
<td>compulsory reduction</td>
<td>517</td>
</tr>
<tr>
<td></td>
<td>21/7/08</td>
<td>joint venture established</td>
<td></td>
</tr>
<tr>
<td></td>
<td>25/11/08</td>
<td>compulsory reduction</td>
<td>256</td>
</tr>
</tbody>
</table>

3 LOCATION AND ACCESS

Exploration Licence 23400 lies in the Tanami Desert of south central Northern Territory, approximately 30km north of Mt Peake and 90km north-west of Barrow Creek. The tenement may be accessed through Barrow Creek, and then taking various station tracks (Figure 2).
4 GEOLOGY

4.1 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. It comprises three east-west oriented tectonic provinces (Northern, Central and Southern) separated by major faults and each having a distinct lithological, stratigraphy, metamorphic and deformational history (Stewart et al., 1984, Shaw et al., 1984). However, Collin and Shaw (1995) have revised this division and have suggested that no distinct structural discontinuity exists between the North and Central Tectonic Provinces but 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 that have undergone at least two regional metamorphic events (≥1820 Ma and 1780-1770Ma), commonly to low grade but locally in some areas up to granulite facies (Zhao and Bennett, 1995 and references there in). Measured radiometric ages from granitioid bodies suggest that magmatism was episodic throughout its geological history and being more intense during 1770-1750Ma (Zhao and Bennett, 1995).

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

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

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

4.2 LOCAL GEOLOGY

Most of the surrounding region of the tenement is covered by a Cainozoic ferricrete/silcrete horizon and loose Quaternary sediments. The Proterozoic rocks belonging to the Arunta Inlier outcrop sparsely in the adjacent area but form many low elevation ranges further to the east (Figure 3).
Exploration Licence 23400 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. The Cainozoic cover can vary from less than 1m to over 50m in large Tertiary palaeochannels.

Based on the published interpreted geology map of the Mount Peak (Donnellan, 2006), the tenement overlies the Paleoproterozoic Lander Rock Beds and granites that subcrop under the Cainozoic cover.

5 EXPLORATION

Between the 25th and 28th September 2008 an airborne aeromagnetic and radiometric survey was flown by Fugro Airborne Surveys (Fugro) over the Mount Peake area (Figure 4). The survey comprised three areas, two of which are located within Exploration Licence 23400. The survey was flown using a Cresco 750 aircraft, owned and operated by Fugro. Aeromagnetic data was collected using a Scintrex CS-2 Caesium Vapour Total Field Magnetometer and a Billingsley TFM100-1E 3-axis Vector Magnetometer. Radiometric data was collected using an Exploranium GR820 256 channel Gamma-ray spectrometer and an 8 NaI(Tl) crystals, 33.56L downward looking gamma-ray detector.

The survey was flown at a nominal height of 50m along North-South traverse lines at 400m spacing. Sampling intervals can be found in Table 2.

<table>
<thead>
<tr>
<th>Nominal data sample intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnetometer 7m (@10Hz)</td>
</tr>
<tr>
<td>Radar Altimeter 7m (@10Hz)</td>
</tr>
<tr>
<td>Thermometer 70m (@1Hz)</td>
</tr>
<tr>
<td>Barometer 70m (@1Hz)</td>
</tr>
<tr>
<td>GPS 70m (@1Hz)</td>
</tr>
<tr>
<td>Spectrometer 70m (@1Hz)</td>
</tr>
<tr>
<td>Magnetic Base Station 5 seconds</td>
</tr>
</tbody>
</table>

Table 2: Survey sample intervals

Processing of the aeromagnetic and radiometric data was conducted by Fugro and supplied to Quantum Resources Limited. Results from the survey are shown in Appendix A. Quantum Resources Limited are currently reviewing the survey data for the purposes of target generation.
Mt Peake EL23400
Survey Areas

Legend
- Blocks to be retained
- Blocks to be surrendered
- Airborne survey areas

Quantum Resources Limited

Comp.: BW  Date: 04/12/08
File: EL23400_Surrender_Survey_041208  Loc.: Melbourne
Plot: Survey Areas  Figure: 4


6 BIBLIOGRAPHY


APPENDIX A
Mt Peake EL23400 Uranium Raw Data

Legend

- blocks to be retained
- blocks to be surrendered

Quantum Resources Limited

GDA94/MGA53

0 2.5 5 10
Kilometers

04/12/08
Melbourne
Legend

- blocks to be surrendered
- blocks to be retained

Mt Peake EL23400
Thorium
Raw Data

Quantum Resources Limited

Comp.: BW
Date: 04/12/08
File: EL23400_Th_Surrender_041208
Loc.: Melbourne
Plot: Thorium Raw Data
Figure: 2
Legend

- blocks to be retained
- blocks to be surrendered

Quantum Resources Limited

Mt Peake EL23400
Total Count Raw Data

Comp. : BW
Date : 04/12/08
File : EL23400_TotalCount_Surrender_041208
Loc. : Melbourne
Plot : Total Count Raw Data
Figure : 3
Mt Peake EL23400 Potassium Raw Data

Legend

- blocks to be retained
- blocks to be surrendered

Quantum Resources Limited

Comp.: BW  Date: 04/12/08  
File: EL23400_K_Surrender_041208  Loc.: Melbourne
Plot: Potassium Raw Data  Figure: 5