Harts Range Jinka/Mt Riddoch Regions
Final Report
For
EL24641

16th September, 2012

Target Commodity: Garnet
Map Sheet:
Huckitta: 1:250,000
Dneiper & Jinka: 1:100,000

General View of EL24641 Uranium Exploration

Author: John Baxter
20th October, 2012
EXECUTIVE SUMMARY/ABSTRACT

Australian Abrasive Minerals Pty Ltd propose to relinquish EL24641 being part of the Harts Range Jinka/Mt Riddoch Regions Group of tenements. The tenement is located along the valley of the Plenty River and cover approximately 220km² or 64 blocks. Australian Abrasive Minerals acquired the Harts Range Garnet Project from Matilda Zircon Ltd in 2009.

This report is the final report for EL24641. The area covered by the relinquishment area has been explored in a reconnaissance manner for garnet and uranium without success. Australian Abrasive Minerals has concluded that it has no specific further interest in the tenement as it does not form part of the Harts Range Spinifex Bore Garnet Project to the west of this area.

Work Completed

The data supplied to Australian Abrasive Minerals covered by EL24641 indicates that, other than a brief assessment of the uranium potential, no work has been undertaken.

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INTRODUCTION

The Jinka/Mt Riddoch Region consists of a group of four tenements that have previously been grouped in terms of area and for the purposes of reporting. The project and tenements are located about 220km east of Alice Springs on the Plenty Highway (Figure 1). The tenements are within the Mt Riddoch and Huckitta Pastoral Leases. The tenements are listed in Table 1 and Table 2.

Table 1 Australian Abrasive Minerals Tenements, September, 2012

<table>
<thead>
<tr>
<th>Project</th>
<th>Prospects</th>
<th>Tenements</th>
<th>Rent 2008</th>
<th>Commitment</th>
<th>Anniversary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harts Range</td>
<td>Plenty River</td>
<td>EL25098</td>
<td>$ 1,360</td>
<td>$ 20,000</td>
<td>4th October</td>
</tr>
<tr>
<td></td>
<td>Spinifex Bore</td>
<td>EL24360</td>
<td>$11,425</td>
<td>$ 55,000</td>
<td>14th September</td>
</tr>
<tr>
<td></td>
<td>Irrelirre</td>
<td>EL24378</td>
<td>$27,895</td>
<td>$ 40,000</td>
<td>14th September</td>
</tr>
<tr>
<td></td>
<td>Huckitta</td>
<td>EL24641</td>
<td>11,974</td>
<td>$ 40,000</td>
<td>14th September</td>
</tr>
</tbody>
</table>

Table 2 Jinka/Mt Riddoch Group of Tenements, September 2012

<table>
<thead>
<tr>
<th>Title</th>
<th>Grant Date</th>
<th>Current Year</th>
<th>Blocks</th>
<th>Area (km²)</th>
<th>Min (Statutory) Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL24360</td>
<td>15/9/2006</td>
<td>6</td>
<td>61</td>
<td>190.3</td>
<td>$21,425</td>
</tr>
<tr>
<td>EL25098</td>
<td>04/10/2006</td>
<td>6</td>
<td>6</td>
<td>18.7</td>
<td>$11,360</td>
</tr>
<tr>
<td>EL24378</td>
<td>15/09/2006</td>
<td>6</td>
<td>151</td>
<td>471.1</td>
<td>$37,895</td>
</tr>
<tr>
<td>EL24641</td>
<td>15/09/2006</td>
<td>6</td>
<td>64</td>
<td>199.7</td>
<td>$21,974</td>
</tr>
</tbody>
</table>

All tenements are granted and the rent and rates are $58,223 (including GST). There is a current commitment in 2012 to spend $155,000 across the 4 granted tenements. In 2011-2012 the majority being directed toward EL24360 with the completion of a feasibility study including the ancillary projects such as water resources. The actual expenditures are shown in Table 3.

Table 3 Actual Expenditure on tenements up to 2012

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Previous Tenement</th>
<th>Previous Expenditure</th>
<th>2012 Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL24378</td>
<td></td>
<td>$ 36,215</td>
<td>$15,500</td>
</tr>
<tr>
<td>EL24641</td>
<td></td>
<td>$ 61,739</td>
<td>$2,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$ 97,954</td>
<td>$17,500</td>
</tr>
</tbody>
</table>

Australian Abrasive Minerals Pty Ltd (‘AAM’) acquired the Jinka/Mt Riddoch Group of tenements from Matilda Zircon Ltd in 2009. Matilda had previously conducted reconnaissance exploration on EL24641.
Matilda Zircon (previously Olympia Resources) has negotiated access agreements for reconnaissance drilling and helicopter surveys over EL24461. No further negotiations have been conducted with the CLC on access to these tenements.

Figure 1 Location of Australian Abrasive Minerals Pty Ltd Tenements, 2012

The area proposed to be relinquished is shown in Figure 2.
Figure 2  EL24461 to be surrendered and EL24378 partially relinquished

Once this relinquishment has been concluded Australian Abrasive Minerals proposes to reduce the area under tenements to 136 blocks covering 424km² and including EL28696, EL24360, EL25098 and the reduced EL24378.

Figure 3  Harts Range Spinifex Bore Project (after relinquishments)
GEOLOGICAL SETTING –EXPLORATION RATIONALE

Garnet bearing sands in paleochannels have been identified along the Plenty River valley at Aturga Creek and Entire Creek. In an endeavour to identify a garnet resource in the vicinity of the borefield identified around Spinifex Bore exploration of the floodplains of the Plenty River and Stones and Ulgarna Creeks was completed with a reconnaissance drilling programme by Matilda. Australian Abrasive Minerals continued this exploration with a major drill out of the area in 2010.

In order to assess the potential for garnet in paleochannels and abandoned channels of the Plenty River and Entire Creeks AAM scoured available data using digital terrain models, Google Earth images and NTGS geophysics in an attempt to identify paleochannels that may contain garnet deposits or any other potential mineralisation. These observations were integrated into the regional uranium exploration data obtained previously on the tenements. In the area being relinquished no suitable targets were identified and no drilling had been reported.

Exploration Licences EL24641 and EL24378 were examined in some detail for uranium and a helicopter survey was completed providing observations of the anomalous sites. The localities were selected by review of the NTGS digital database and a literature review undertaken by Vince Roberts. The locations are shown in Figure 4.

![Figure 4 Location of Uranium Exploration EL24360, EL24378 and EL24641](image)

The observations are summarized in Appendix 2 (Excel File EL24641-Data.txt).

Extensive, Tertiary calcretes (chalcedonic limestone) are exposed as prominent outcrops to 50 m above plain level, in the headwaters of Plenty tributaries on and
near to Australian Abrasive Minerals tenements. These occurrences attest to extensive Tertiary alluvial sediments in the area and underlying alluvials are expected to include prospective host rocks for uranium mineralisation. The prospective host rocks are expected to be the deeper, more porous and more reactive calcrite and/or sandy to pebbly, clastic sediments.

The anomaly reconnaissance showed that most anomalies occurred near the base of calcrite mesas, suggesting the underlying rock to be more favourable, as would be expected. However these areas of interest are blanketed by talus deposits, and aeolian sands, which would diminish the intensity of associated anomalies very substantially, as well as hide the underlying rock from view. The favourable part of the Tertiary alluvials is therefore expected to be preserved intact under cover of various younger sediments.

The Huckitta tenement, EL24641, contains several boudins of gneisses and the flats of the Plenty River. A small basin has developed that is shear bounded to the northeast. This is possibly a small down thrown block of Waite Formation. On this licence it is worth review in the air for pegmatite styles of mineralization. The targets identified are listed in Table 4.

CONCLUSION/RECOMMENDATION

The conclusion of the exploration completed on this tenement has indicated no potential for uranium in channels and very low potential for garnet. There is a very low potential for pegmatite hosted uranium.

It is recommended that no further work be undertaken.

Table 4 Anomalous zones in EL24641

<table>
<thead>
<tr>
<th>Longitude</th>
<th>Latitude</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>135°26'56.6''E</td>
<td>22°48'58.8''S</td>
<td>A small Basin surrounded by hills with Plenty River to SW with U anomalism, possible hand auger site</td>
</tr>
<tr>
<td>135°23'9.1''E</td>
<td>22°52'4.5''S</td>
<td>Boudin on small hill, anomalism on NW side</td>
</tr>
<tr>
<td>135°21'27.1''E</td>
<td>22°53'22.7''S</td>
<td>Possible structural site trends northeast anomalous U</td>
</tr>
<tr>
<td>135°20'8.8''E</td>
<td>22°51'59''S</td>
<td>On the north side of the Plenty River and the southern side of a boudin, uranium anomaly</td>
</tr>
<tr>
<td>135°19'16''E</td>
<td>22°50'26.1''S</td>
<td>Low grade anomaly on northern side of boudin</td>
</tr>
</tbody>
</table>

BIBLIOGRAPHY


McQuire, T., 2007, Drilling Report, Harts Range Project, Western Australia, Report OLY07-001


Appendix 1 – Excel File of Uranium Observations (EL24641-Data.txt)