

31 October 2012

## QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 30 SEPTEMBER 2012

### LAKE MASON URANIUM PROJECT, WESTERN AUSTRALIA

Prime holds 100% of exploration licence (E 57/785) located central to the Lake Mason palaeo-drainage, Western Australia.

Lake Mason is known to host playa lake style, calcrete-hosted uranium mineralisation within the lake sediments and around its margins. This style of mineralisation is similar to that at Mega Uranium's Lake Maitland project. There is potential for additional mineralisation in a number of locations adjacent to Lake Mason, including the drainages and deltas that feed into the lake.

Historic mapping of the Lake Mason licence area and surrounds by the Geological Survey of Western Australia, though accurate, was deemed to be of insufficient detail for exploration of the licence. During the quarter, a detailed mapping programme was undertaken, highlighting the distributions of geological units over the area of interest (overleaf). Work is continuing to better understand the geometries and inter-relationships of the geological units. This is important as some units will be far more prospective for mineralisation than others.

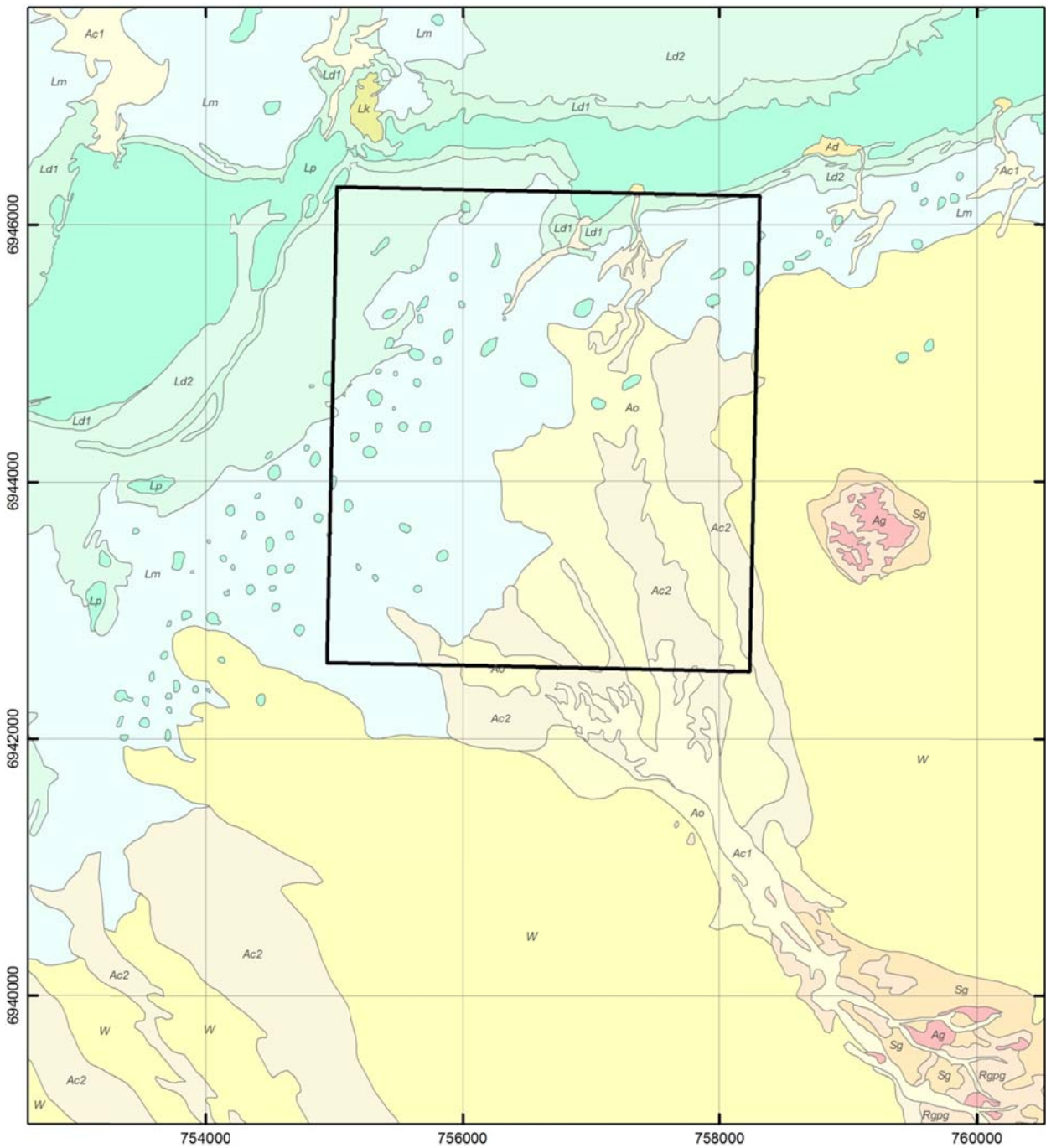


Previously, a regolith sampling programme was undertaken covering the entire licence area. A total of 195 samples were taken from depths of up to 1 m beneath surface. In each case, calcrete/silcrete material was selected for sampling, with varying radiometric readings throughout the sample suite. Results of the programme indicate preferential distributions of anomalous uranium values in gypsiferous dunes in the northwest of the tenement, and in river channel alluvial deposits in the southeast of the tenement. These anomalies may be indicative of underlying carnotite mineralisation

### PROJECT GENERATION

The Directors are actively pursuing new opportunities for the Company. Their efforts are focused on finding a suitable, highly prospective asset to augment the Lake Mason Project.

During the quarter, several projects were examined in detail for acquisition by the Company. Of these, due diligence was completed on two of the projects and they were rejected. The Company is continuing to assess the other projects for possible acquisition.



**New high-resolution mapping showing geology of the Lake Mason project area.**

Geology codes used: Ac1, Ac2, Ao & Ad – Alluvium; Ak – calcrete; Ag, Rgpg & Sg – granite and weathered granite products; Ld1, Ld2, Lm & Lp – Salt lake pan and dune systems, W – Sheetwash.

**For further information please contact:**  
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**Or consult our website:**

<http://www.primeminerals.com.au/>

**Competent Persons Declaration**

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Matthew Painter, who is a consultant to Prime Minerals and is a member of The Australasian Institute of Geoscientists and the Society of Economic Geologists. Dr Painter has sufficient experience that is relevant to the various styles of mineralisation and types of deposit under consideration, and to the activity that they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves". Dr Painter consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**Forward-Looking Statements**

This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Prime Minerals Limited's planned exploration programme and other statements that are not historical facts. When used in this document, the words such as "could," "plan," "estimate," "expect," "intend," "may", "potential," "should," and similar expressions are forward-looking statements. Although Prime Minerals Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.