

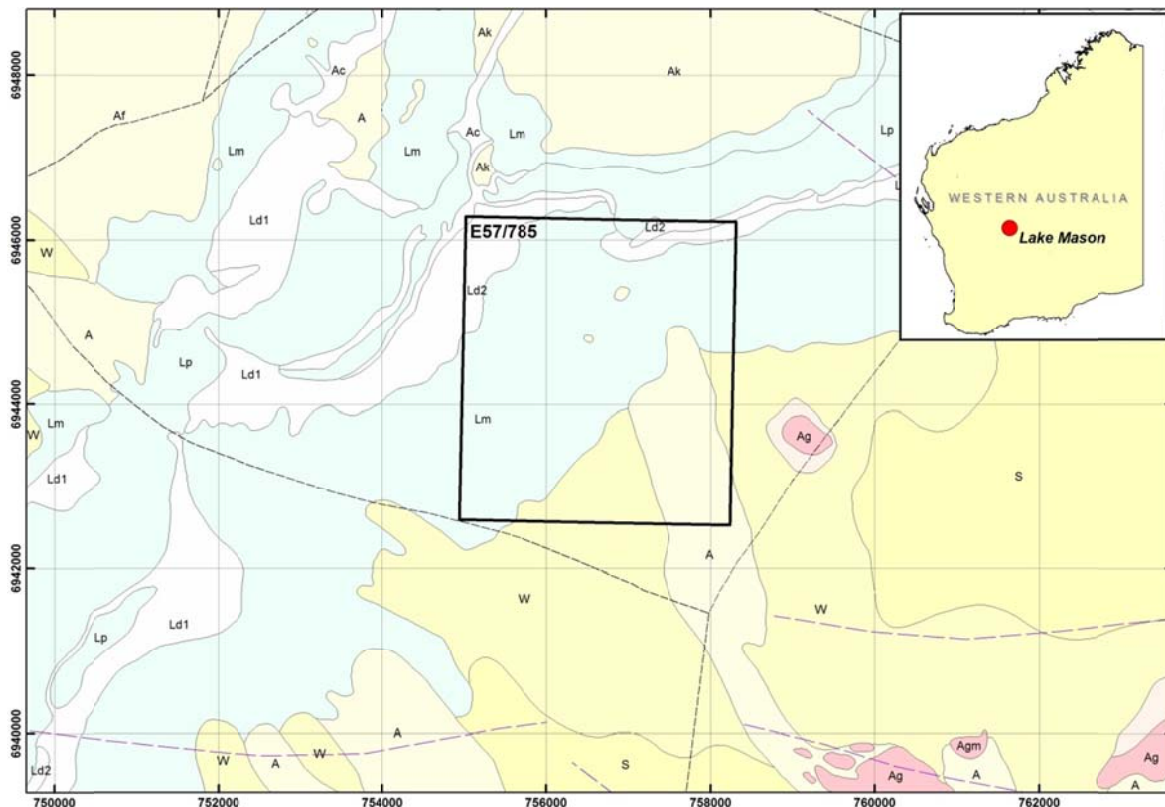
31 January 2012

## QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2011

### LAKE MASON URANIUM PROJECT, WESTERN AUSTRALIA

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

Previous exploration at Lake Mason has focused on the defined radiometric anomalies within the eastern extremity and northern shore of the main Lake Mason channel. However, radiometric anomalies are only of use for identifying outcropping uranium mineralisation. Given that calcrete-hosted uranium mineralisation forms in the subsurface, Prime must assess the entire licence area for buried mineralisation.



**Location and geology of the Lake Mason project area.**

Geology codes used: A, Ac & Af – Alluvium; Ak – calcrete; Ag & Agm – granite;  
Ld1, Ld2, Lm & Lp – Salt lake pan and dune systems, W – Sheetwash.

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.

Various experimental exploration techniques are being considered in order to fully assess the exploration potential of uranium throughout the Lake Mason area. Biogeochemical sampling, whereby vegetation is effectively collected over a broad area, is a proven technique for identifying subsurface uranium mineralisation.

During the September quarter, 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. Both of these areas will require follow-up exploration to test the sediments at depth.

## PROJECT GENERATION

The Directors are continuing their efforts to find a suitable asset to augment the Lake Mason Project.

## CAPITAL RAISING

On 13 January 2012 the Company concluded a highly successful, fully underwritten, 8 for 1 rights issue. A total of 337,444,946 shares were issued at 1.25 cents each which raised \$3,750,499 before expenses. The funds, after meeting costs, will be applied towards indentifying, assessing, and conducting due diligence on any new projects identified by the Company and the cost of acquisition if a suitable project is found. The funds will also be used for corporate administration and working capital.

### **For further information please contact:**

David Zukerman, Company Secretary

Phone (08) 9481 7833

### **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 Mr Alex Clemen of Clemen and Associates consultants, who is a member of The Australasian Institute of Geoscientists and the Society of Economic Geologists. Mr Clemen 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". Alex Clemen 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.