



PRIME MINERALS LIMITED

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27 January 2011

**The Manager
Company Announcements Office
Australian Securities Exchange
Exchange Centre
20 Bridge Street
SYDNEY NSW 2000**

Dear Sir,

QUARTERLY REPORT FOR THE PERIOD ENDED 31 DECEMBER 2010

1. EXPLORATION ACTIVITIES

1.1 LAKE MASON URANIUM PROJECT, WESTERN AUSTRALIA

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

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.

The identified mineralisation at Lake Mason is located within the lake and on its margins. This mineralisation is of the 'playa lake-style' found 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 lake.

During the quarter licences E57/784 and E57/786 were surrendered in response to advice from our independent geological consultant.

1.2 PROJECT GENERATION

Prime is presently carrying out an active programme of project generation in both Australia and overseas to identify projects that will further enhance Prime's exploration portfolio.

Prime looks forward to updating shareholders as the Company's exploration and project generation programme continues.

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 Timothy Putt of Exploration and Mining Information Systems, who is a member of The Australasian Institute of Geoscientists and the Society of Economic Geologists. Mr. Putt 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". Timothy Putt 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.