



Wednesday, 12 December 2007

**AUSTRALIAN STOCK EXCHANGE LIMITED
COMPANY ANNOUNCEMENTS PLATFORM**

ASX CODE USA

URANIUM DISCOVERY

Discovery

UraniumSA Limited is pleased to announce the discovery of sediment-hosted uranium in its Mullaquana tenement on the Eastern Eyre Peninsula. Uranium mineralisation at grades averaging 0.010% eU₃O₈ was encountered over widths of between 0.31m and 1.92m in two of the first five holes drilled. This is a new discovery of uranium mineralisation in a geological setting that is distinctly different to that of conventional sediment-hosted systems, and in an area that has not previously been explored for uranium.

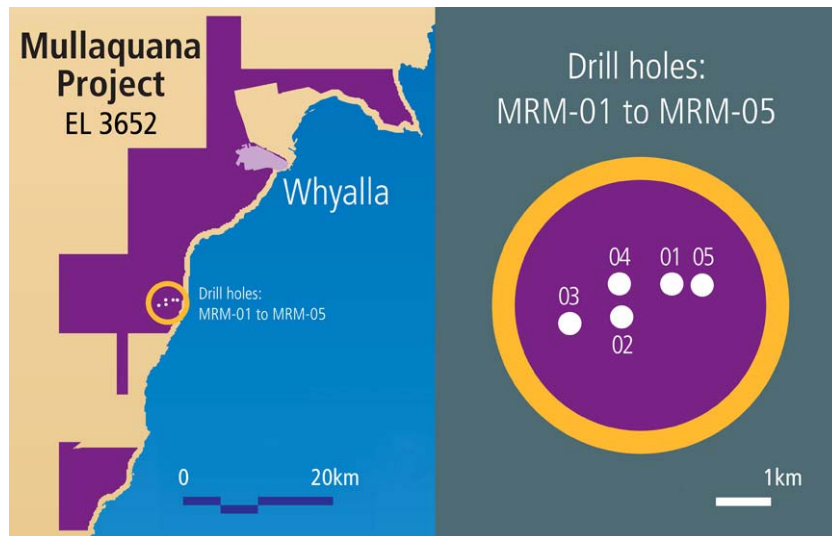
The Company announced it had commenced drilling at Mullaquana on Monday 26th November 2007 with its own Mayhew drilling rig and associated down-hole logging equipment (ASX release of that date). Uranium mineralisation was intersected in the first drill hole, MRM-001, and a photograph of that hole being drilled was included in the ASX announcement. A further significant intersection was obtained in drill hole MRM-004, collared 1 km to the west.

Geology

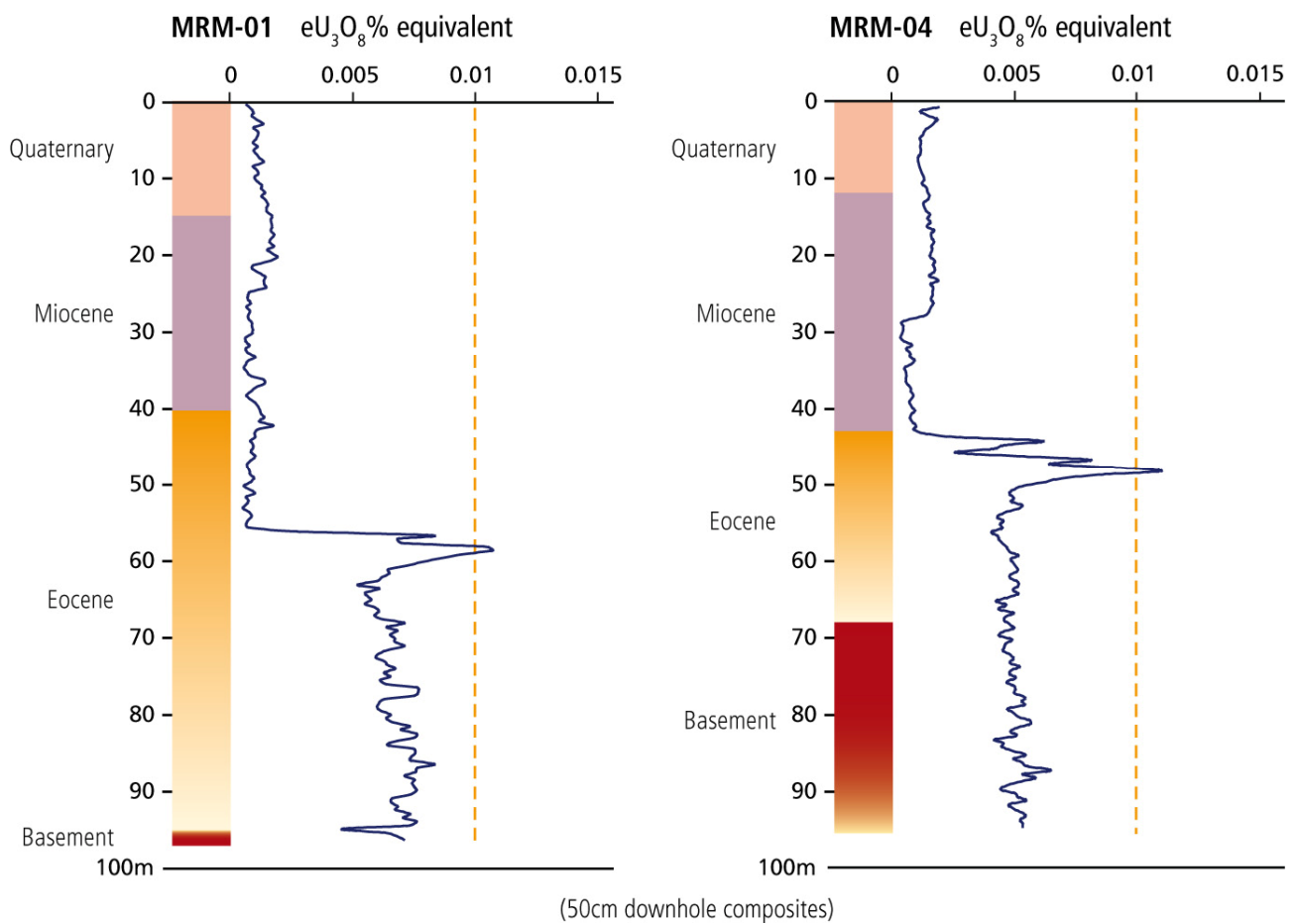
The Mullaquana mineralisation is contained in the Tertiary Pirie Basin and hosted by a sand and claystone unit of the marginal marine Kanaka Beds. Five holes have been completed along two east-west traverses ~600m apart, with a hole separation of ~600m to 1,000m along the traverses. The system is open in all directions and drilling is continuing.

Geological logging of the drill holes indicates that mineralisation is related to oxidation-reduction interfaces within a single distinct stratigraphic unit, and that the zones of mineralisation transgresses the host sequence. While the geology of the system is largely unknown, the lateral continuity of the host sequence and extensive uranium anomalism within it is unusual and highly encouraging for future exploration.

On the basis of existing information, the prospective stratigraphic unit may extend for some 12km to the north and 5 km to the south of the present drill holes. The Company will continue exploration drilling at 1km centres to define the size extent of the mineralisation, and to search for high grade developments within the identified low grade envelope.



Location of the drill holes within the Mullaquana tenement



Simplified down-hole logs of holes MRM-001 and MRM-002

Grade

In drill hole MRM-001, the 1.92m interval between 57.98m and 59.91m averaged 0.010% eU₃O₈. In drill hole MRM-004, the 0.31m from 45.89m to 46.20m averaged 0.010% eU₃O₈ and the 1.11m interval from 47.09m to 48.20m averaged 0.010% eU₃O₈.

The other three holes completed to date encountered anomalous uranium values over narrow, insignificant, widths.

Exploration objective

The Company will continue exploration drilling at 1km centres to define the extent of the mineralisation. In the area of the known mineralisation, infill drilling will be carried out to search for high grade developments within the low grade envelope.

Away from the present drill holes, the exploration potential is for the continuing identification of large areas of laterally continuous low grade mineralisation contained within a host sequence which is permissive for ISL extraction.

Technical background

The results reported are in percentage equivalent uranium oxide - % eU₃O₈. This value is derived from a down-hole gamma probe that measures total radiation, which is then converted to a mathematical estimate of the amount of contained uranium oxide by comparison to standards of known uranium content. While the method can be subject to error arising from radioactivity derived from materials other than uranium, it is an industry accepted measure of grade for uranium deposits.

A 0.010% eU₃O₈ lower cut-off is widely used in the evaluation of uranium deposits. A current example from South Australia is the Oban sediment-hosted uranium deposit that is being evaluated for development by Curnamona Energy Limited (ASX announcement of 26th February 2007). In hard-rock uranium deposits, cut off grades presently in use range from 0.030% eU₃O₈ (Mount Gee prospect, South Australia, Marathon Resources Limited, ASX announcement of 18th October 2007) to as low as 0.010% eU₃O₈ (Albidon Limited, Gwabe prospect, ASX announcement of 5th December 2007). The lower cut off grade which is used is a reflection of the unique characteristics of each deposit. This data is provided for the information of investors and these examples should not be used to make economic assumptions. The use of the above publicly available information does not imply in any way that the Companies whose ASX release are quoted are involved with or endorse UraniumSA or its projects.

About UraniumSA Ltd



UraniumSA is an Adelaide-based uranium-only explorer specialising in palaeochannel or rollfront and unconformity styles of uranium mineralisation within a substantial portfolio of properties in South Australia's Gawler Craton. The focus of the rollfront uranium search is within its substantial tenement holding over the highly regarded Kingoonya Palaeodrainage System which hosts the Warrior and Ealbara uranium prospects in adjoining tenements.

On the eastern seaboard of Eyre Peninsula, UraniumSA is exploring for potentially uranium mineralised unconformities and for sediment-hosted uranium mineralisation in younger sequences.

Russel Bluck
Managing Director
UraniumSA Limited

A handwritten signature in black ink, appearing to read 'R. Bluck', written over a white background.

The exploration results reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr. Russel Bluck a Member of the Australian Institute of Geoscience and an employee of UraniumSA Limited. Mr Bluck has sufficient experience relevant to the style of mineralisation and type of deposits being considered and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 Edition). Mr Bluck consents to the inclusion in the report of matters based on his information in the form and context in which it appears. It should be noted that the abovementioned exploration results are preliminary.

The geophysical results reported herein are based on work and information compiled by Mr Grant Koch, a Member of the Australian Society of Exploration Geophysicists and an independent Consultant to UraniumSA Limited. Mr Koch has sufficient experience relevant to the geophysical matters being considered and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 Edition). Mr Koch has consented in writing to the inclusion in this report of matters based on his information in the form and context in which it appears.