



Friday, 21 December 2007

AUSTRALIAN SECURITIES EXCHANGE LIMITED
COMPANY ANNOUNCEMENTS PLATFORM
ASX CODE USA

CLARIFICATION

In response to questions from industry and professional peers the Company provides the following background to its recent announcement of the discovery of uranium mineralisation at Mullaquana.

The significance of the grade encountered

In an established mining operation, or one at an advanced stage of evaluation, the term “cut-off grade” has a clear and defined economic meaning which is determined by the specific characteristics of that individual deposit. In general terms, the cut-off grade of a particular operation is the grade below which it is not economically feasible to exploit that mineralisation. As noted in the Company ASX release of 12th December 2007, uranium deposits from a diverse range of geological setting and geographic locations are presently using 0.01eU% as a cut-off for their economic evaluations. It is in this context that in evaluating results from exploration of its sediment hosted uranium exploration plays the Company considers that;

1. material which has a uranium content in excess of 0.005 eU% (equivalent to 50 ppm or eUppm) but less than 0.01eU% (equivalent to 100ppm or eUppm) is anomalous and has exploration significance and requires technical attention. However, unless it has a negative impact on previously announced results, it does not warrant an announcement to market.
2. material which exceeds 0.01eU% (equivalent to 100ppm or eUppm) requires serious technical consideration and analysis, and if it occurs over a significant width and within a host sequence with characteristics which could make it permissive for in-situ leach operations, an announcement to market is required.

Gamma logging

The use of down-hole gamma probing for the evaluation of uranium resources is a well established and industry standard technique. The technique has a number of limitations including the contribution of non-uranium materials to the result and the reliability of the grade correlation algorithms.

1. There are a range of materials which have the potential to contribute to the measured gamma count and therefore lead to an overestimation of grade. The main contributors to the count rate are uranium itself, potassium, thorium, heavy minerals containing these elements and radon gas, and in marine settings glauconite and phosphate minerals. The Company has the following procedures in place to evaluate the possibility for error from these sources in the course of routine exploration;

- the gamma probe is run twice in each hole and the results of the two runs compared to determine the count rate stability of significant peaks and to check for drift or shift in values or locations. Particular attention is paid to impervious boundaries identified in the geological logging as sites for potential radon gas accumulation or leakage. In the drilling completed to date at Mullaquana the gamma logs have been stable and repeatable. No sharp peaks have been located at either major or minor impervious boundaries and the profiles have been reproducible where re-logged, both factors indicating that radon gas is not a significant contributor to the measured response.
- grab samples of sand units in and about gamma peaks are panned down, the concentrates examined for heavy minerals and the composition of the clastic fragments checked. To date at Mullaquana, no heavy minerals have been seen and the clastic fragments have predominantly been mature quartzose materials with few composite lithic fragments or ironstone.
- gamma response peaks are checked against the logged geology for indications of apatite (phosphate) associated with the limestone and for visible glauconite. To date, the limestone has been reflected by a negative gamma response. Glauconite, while frequently significant elsewhere within the target Kanaka Beds, is not a significant component in the area being explored, and in the holes reported it does not correlate directly with gamma peaks.

UraniumSA considers that the above procedures, while not absolutely definitive, provide a sound basis for it to conclude that the significant gamma responses reported are not caused by either radon gas, heavy minerals, glauconite or apatite. This may not be the case across the entire project area.

2. The gamma probe in use by the Company has been calibrated at the PIRSA test facility in Adelaide. During the field work a standard three-point correlation and its resulting algorithm was used. Examination of the raw data and resulting values by the Consulting Geophysicist found poor statistical reliability for the correlation at low grades. Following a comprehensive analysis of the equipment and the calibration data the Consulting Geophysicist was able to provide a correlation algorithm for the Company equipment which provides a very high degree of confidence in the grade conversions. The statistical reliability measures of the algorithm are;

$$r^2 = 0.9999999976 \text{ (an } r^2 \text{ of 1.0 represents a perfect correlation)}$$

$$\text{axis intercept} = 0.0000046568 \text{ eU\% (an intercept of 0.0 is a perfect solution).}$$

The results released to market are based on this statistically sound algorithm and are considered to be an accurate representation of the eU% grade of these initial intersections.

3. It is not known if the mineralisation is in radiometric equilibrium. At an appropriate time, selected drill holes will be logged with a pfn tool to determine this issue.

Geological setting

The uranium mineralisation at Mullaquana is associated with an apparent reduction-oxidation interface that transgresses the Miocene sequence stratigraphy, and with carbonaceous coarse grained sands within the Eocene sequence.

The characteristics of the mineralisation are consistent with a sediment hosted reduction-oxidation front style of mineralisation. There are no indications that heavy minerals, radon or other materials make a significant contribution to the gamma responses measured and reported to the market.

UraniumSA is focussed on exploration for sediment hosted uranium deposits that are amenable to exploitation by in-situ leach (ISL) operations. The ISL method is widely considered a relatively environmentally benign and cost-effective method of production.

Discovery

The term “discovery” has no defined technical meaning but it has emotional impact and its use needs to be carefully considered. The Mullaquana uranium mineralisation occurs in an area with no previous history of uranium exploration, and is within the Kanaka Beds of the Pirie Basin which, similarly, have no prior history of exploration for uranium, and the site is geographically isolated from any other occurrences of sediment hosted mineralisation. The Company considers the use of “discovery” to be warranted in these circumstances.

Forward program

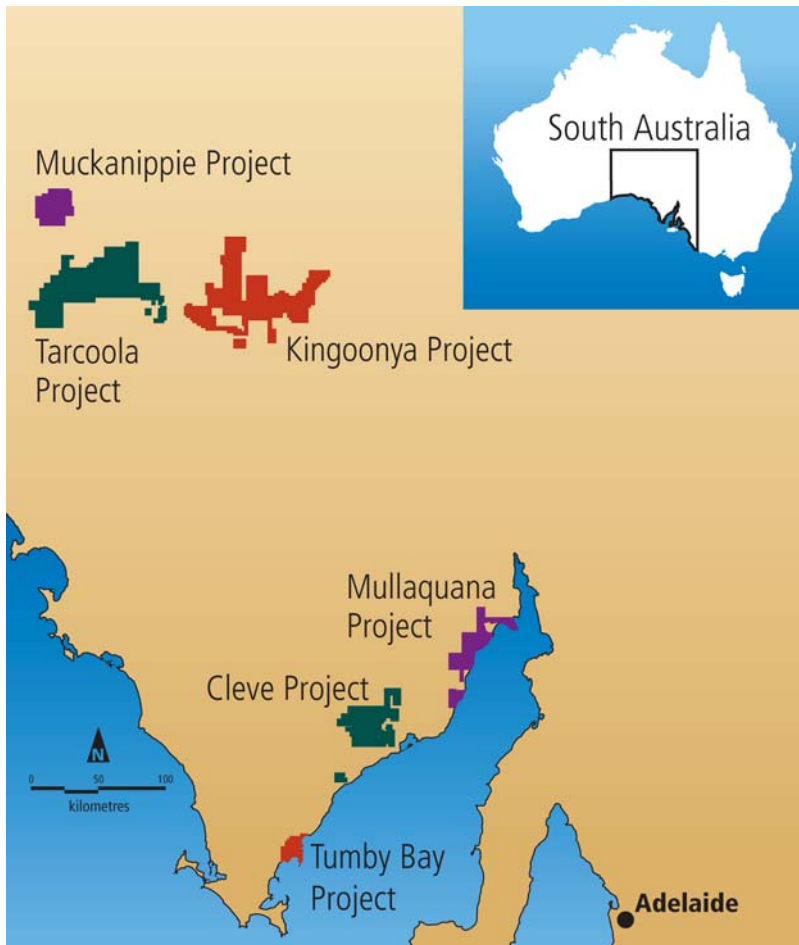
UraniumSA is continuing to explore the property, conducting step-out drilling at approximately 1km intervals to determine the limits of mineralisation. It is anticipated that this first-pass program will be completed in late January or early February 2008. Results will be reported to market when the drilling has been completed and the information has been compiled.

Russel Bluck
Managing Director
UraniumSA Limited



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.

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.

