

Friday 30 April 2010

**AUSTRALIAN SECURITIES EXCHANGE
COMPANY ANNOUNCEMENTS PLATFORM
ASX CODE USA**

ACTIVITIES REPORT 3 MONTHS ENDED 31st March 2010

OVERVIEW

The discovery of new high grade uranium mineralisation well to the west of the Blackbush Prospect within the Mullaquana Project near Whyalla on South Australia's Eyre Peninsula (announced 24th February 2010) led to a complete review of our results and the acquisition of new geophysical data sets. The new geological models resulting from this work have now been drill tested resulting in the further discovery of new uranium mineralisation (reported below). It is very clear from this work that there are large areas of highly prospective ground contiguous with the established Blackbush Prospect. Drill testing of this contiguous ground will commence in the June quarter and it is anticipated that this will result in the delineation of additional resources of mineralisation.

The technical work required to advance the Blackbush Prospect to a field leach trial is now well underway and results from initial laboratory tests will become available during the June quarter. A Development Team has been established in-house and initial meetings have been held with regulatory agencies.

Application of the new geological models across the Mullaquana Project has identified previously unknown prospective areas, and has provided significant insights into the distribution of mineralisation within the Emubush, Samphire and Plumbush Prospects.

MULLAQUANA PROJECT

The Mullaquana Project lies south of Whyalla in South Australia and contains the Blackbush Prospect of sediment hosted uranium mineralisation which is being evaluated for potential development as an in-situ recovery mining operation. The initial JORC Inferred Mineral Resource for the Blackbush Prospect is 12Mt @ 0.02% U₃O₈ (224 ppm) for an estimated 2,700t contained U₃O₈. Ongoing drilling continues to return intercepts of better than resource average thickness and grade and contiguous areas of mineralisation continue to be discovered.

1. Western continuation of Blackbush mineralisation confirmed

On the 24th February 2010, the Company reported on the completion of hydrogeological hole MRHC1, which was collared 600m west of known mineralisation and intended to sterilise ground for future plant purposes. The drill hole intersected a cumulative 13.80m @ 1,392 ppm eU₃O₈. This isolated intersection has been followed up by geophysical surveying during the reporting period, and interpretation of the data was tested by a short profile of holes drilled westward from Blackbush with the following results (holes from east to west approximately 100m apart, cross section attached);

- MRM571: cumulative 6.38m @ 178 ppm pU₃O₈ including 1.12m @ 2,120 ppm pU₃O₈
- MRM572: cumulative 18.30m @ 287 ppm pU₃O₈ including 12.60m @ 340 ppm pU₃O₈
- MRHC1: cumulative 13.80m @ 1,392 ppm eU₃O₈ including 12.60m @ 1,470 ppm eU₃O₈ (previously reported MRHA1).

These drill results confirm the interpretation of the geophysical and open up a new area of potential ore grade mineralisation. Drilling indicates the area is in excess of 200m wide, and it can be inferred from geophysical interpretation to extend for several hundred meters north and south of the drilled section. The area will be covered as part of the next round of pattern drilling which is scheduled to commence mid-May 2010.

Drill hole MRHC1 was previously reported with the identifier of MRHA1. The identifier has been changed to harmonise the numbering system for hydrogeology holes.

2. Blackbush drilling

On the 24th February 2010, the Company reported on the completion of an initial 5,000m in-fill drilling of the Blackbush Prospect and reported the following significant drill holes (in addition to those reported 21 December 2009):

- MRHC1: cumulative 13.80m @ 1,392 ppm eU₃O₈ including 12.60m @ 1,470 ppm eU₃O₈ (previously reported MRHA1)
- MRM558: cumulative 4.47m @ 1,281 ppm pU₃O₈ including 1.12m @ 2,120 ppm pU₃O₈ (previously reported)
- MRM562: cumulative 2.57m @ 3,950 ppm pU₃O₈ including 0.87m @ 5,170 ppm pU₃O₈ (previously reported)
- MRC001: cumulative 9.70m @ 1,357 ppm pU₃O₈ including 4.63m @ 1,520 ppm pU₃O₈ and 2.12m @ 2,360 ppm pU₃O₈ (previously reported)

3. Uranium disequilibria at Blackbush

Geoscience Associates Australia Pty Ltd was contracted to undertake the geophysical logging of the holes drilled in the recent Blackbush campaign (December quarter 2009 and release dated 24th February 2010). In the course of this work, a series of 17 drill holes (MRM550 to MRM564 and MRC001 to MRC003 inclusive) were logged with a Prompt Fission Neutron tool (pfn).

Prompt Fission Neutron (pfn) logging indicates the uranium mineralisation in the central western portion of the Blackbush Prospect has a **positive disequilibrium factor of 1.23** and the natural gamma results underestimate the grade. This outcome may be specific to the portion of the Blackbush Prospect which was tested and further work will be carried out in other parts of the Blackbush Prospect and in other prospects as they are advanced.

The Company will continue to use natural gamma tools in its routine exploration and evaluation drilling. Further trials of the pfn tool will be carried out in other areas to examine the variation of disequilibria across all of the prospects.

4. Other Mullaquana prospects

Geophysics: The results of recent airborne electromagnetic (AEM) and gravity surveys are being processed and interpreted to plan further drilling.

Plumbush: Interpretation of the geophysical data has provided a framework for the next round of drilling to follow up the previously reported high grade intersections across an area some 2km by 1.5km. Drilling is tentatively scheduled for the area for late in the June quarter.

Emubush: The previously reported isolated high grade intersection at Emubush (drill hole MRM101) has interpretive similarities to the western area at Blackbush. The next round of drilling will follow on from work at Plumbush.

Samphire: Interpretation of the geophysical data has provided a framework for the next round of drilling to follow up previously reported intersections across an area some 1.2km by 1.2km. Follow up drilling has not been scheduled.

5. SRZ and AAO Joint Ventures

UraniumSA is party to a Native Title Mining Agreement for Exploration with the Barngarla Native Title Claim Group. A Cultural Heritage clearance survey for drilling in the south of the Mullaquana Project and into the Stellar Resources Limited and the Australasia Gold Limited Joint Venture areas has been completed. Drilling is scheduled to commence in early May 2010.

6. Mullaquana – forward work program to end June 2010

Blackbush: The focus will continue to be on advancing the Blackbush Prospect to a field leach trial. A recalculation of the resource within the area of the recent 100m drilling has commenced and will be released during the June quarter. The second round of 100m drilling has been contracted and should commence mid May 2010. Work will continue on analytical, metallurgical, hydrogeological projects as part of the progression to a field leach trial.

SRZ and AAO Joint Ventures: A program of widely spaced exploration drill holes will be commenced. The objective is to acquire basic geological and radiometric data which will be integrated with the available geophysics to identify areas for targeted drilling.

Plumbush: A further round of exploration drilling of the Plumbush prospect is scheduled to follow work in the Joint Venture areas.

OTHER SOUTH AUSTRALIAN PROJECTS

1. Cleve Project, eastern Eyre Peninsula

UraniumSA has entered into a joint ventured with Archer Exploration Limited (ASX code AXE) over the Cleve tenement, Exploration Licence 3377. Under the terms of the JV the Company retains all rights to uranium and AXE will earn the right to all other minerals by expending \$300,000 on the tenements over the next two years, with a minimum spend of \$150,000 before it can withdraw.

The Joint Venture enables UraniumSA to maintain its technical, operational and financial focus on the Mullaquana Project while keeping its exploration access to the Boothby and other uranium prospects within the tenement.

Forward work program to end June 2010. There is no work presently scheduled for the project.

2. Kingoonya Palaeodrainage System

The Kingoonya Palaeodrainage System has been the subject of exploration under the Kingoonya Project made up of Joint Ventures with Marathon Resources Limited and wholly owned tenure, and the Tarcoola Project which is a Joint Venture with Stellar Resources Limited.

The Kingoonya Project lies almost entirely within the newly imposed Instrument Zone of the Woomera Defence Area and access to the majority of prospective ground has been denied by the Australian Defence Force since 2008. The issue of access into these sections of the Woomera Defence Area has been in negotiation between the South Australian and Federal Governments for an extended period without discernable progress being made. Rather than continue to pursue exploration in an area where we cannot be confident that any discovery could be developed, the Company has decided to withdraw from the Joint venture and to relinquish its own tenure in the area.

The Tarcoola Project is also in the Woomera Defence Area, but well outside the restricted Instrument Zone, and exploration and mine development is not unreasonably impeded. Drilling to test drainage positions downstream from the Warrior Uranium Prospect is planned.

Forward work program to end of June 2010. Planning is in progress for an exploration drilling program within the Tarcoola Project area. The objective is to commence work late in the June quarter.

CORPORATE

1. Promotion

With the assistance of our Corporate Advisors, BGF Equities, the Company participated in a promotional tour through parts of Europe. Presentations were made to invited participants in London, Paris, Munich, Zurich and Geneva. There was a clear interest in what the Company has achieved and in our rapid progression of the Mullaquana Project towards a field leach trial.

2. Corporate

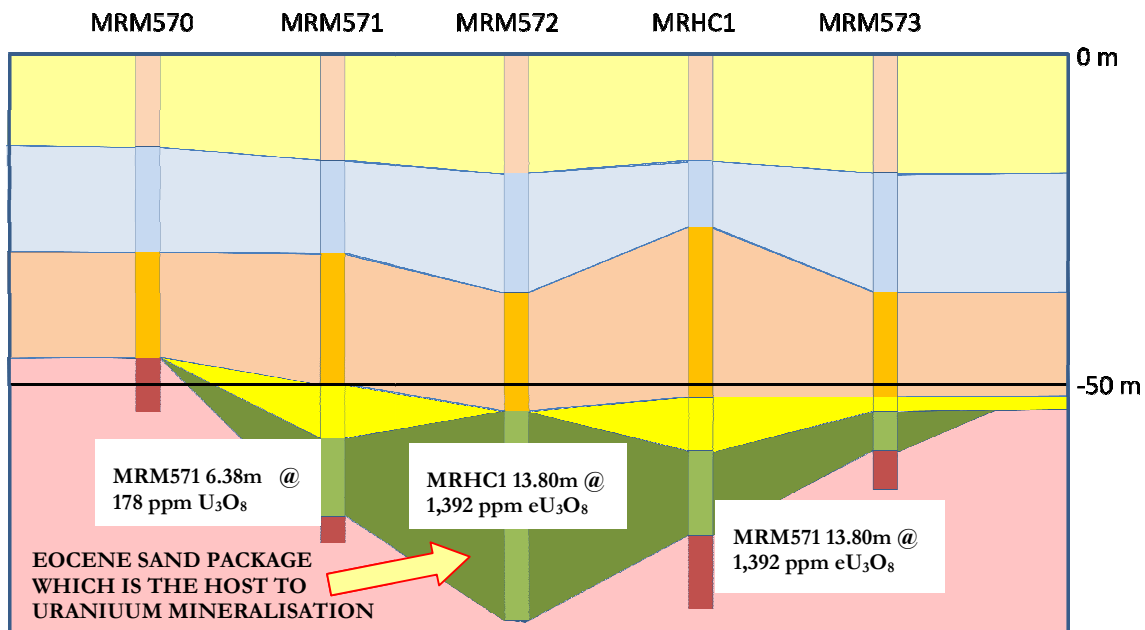
The focus of the Board remains on advancing the Blackbush Prospect towards a field leach trial, and on growing the asset base of uranium mineralisation under relevant JORC classification through continuing exploration of the Mullaquana Project and adjacent Joint Venture areas.

CROSS SECTION

Western continuation of Blackbush mineralisation. Section 6324500N, view north.

Hole separation is 100m.

MRM570 is 300m due west of drill hole MRM557 which was drilled into the previously known portion of the Blackbush prospect (previously reported). A plan of the drill hole locations at Blackbush is given on the next page.



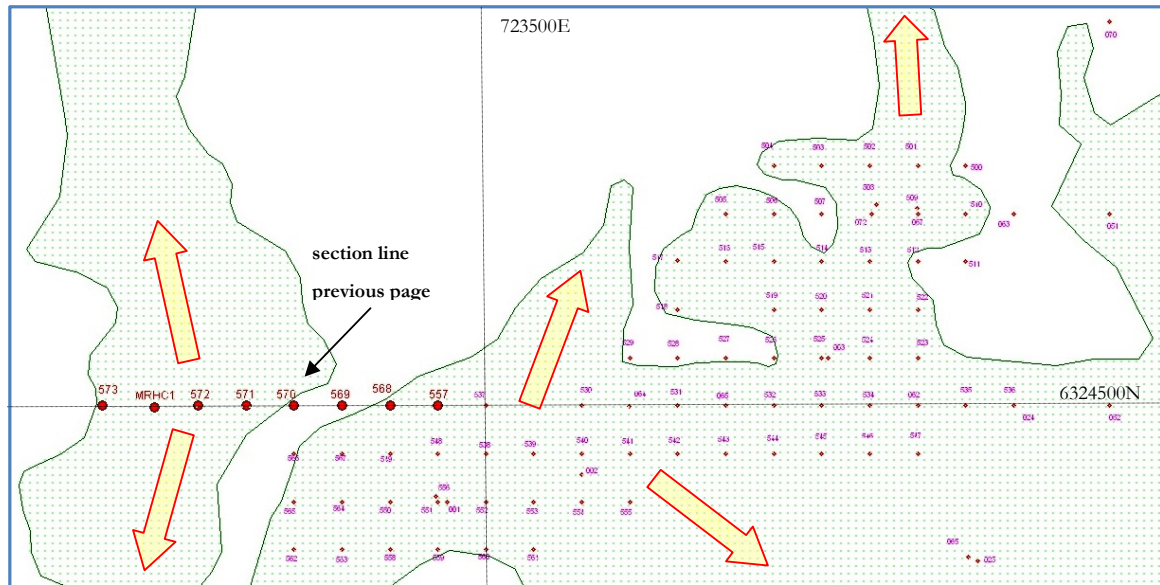
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DRILL MAP OF THE BLACKBUSH PROSPECT

View north. The drill hole separation is 100m.



Previously reported drill holes – small purple dots and numbers show the collar locations, detail of the numbers are provided in prior reports to ASX .

Holes reported herein red dots and numbers.

The green stippled outline is the interpreted limit of Eocene sedimentation as interpreted from drilling and geophysical data. Uranium mineralisation occurs within the Eocene sediments.

The arrows indicate the directions in which more drilling is required to close off the limits of potential ore grade mineralisation.

Further pattern drilling is contracted to commence May 2010.

About UraniumSA Limited



UraniumSA is an Adelaide based uranium only explorer specialising in sediment hosted styles of uranium mineralisation within a substantial portfolio of properties in South Australia's Gawler Craton.

The Company has discovered sediment hosted uranium mineralisation within its Mullaquana Project, 20km south of the industrial city of Whyalla on the eastern Eyre Peninsula. The Blackbush Prospect has an Inferred Mineral Resource of 12Mt at 0.02% eU₃O₈ with an estimated 2,700t contained U₃O₈. The Company is working to advance the Blackbush Prospect to an in-situ-recovery field trial as soon as practicable. Continuing drilling to expand the resource base is obtaining intersections significantly above deposit average grade and thickness. The objective is to expand the resource base through incremental addition and new discovery.

Through its own tenure and by Joint Venture the Company has exploration control over what it considers the most prospective portions of the Pirie Basin.

Russel Bluck
Managing Director
UraniumSA Limited

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