

ASX ACTIVITIES REPORT

3 months ended:
30 June 2014

UraniumSA Limited ("UraniumSA")

ASX Code: USA

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BOARD OF DIRECTORS

Alice McCleary Chairman
Russel Bluck Director &
Geoscience Manager
David Paterson Director &
Acting CEO

PROJECTS

South Australia

Samphire ELs 4979, 5426
Western Shoal ELA 2008/00129
Murninnie EL 5440
Pine Hill EL 4787
Wild Horse Plains EL 4693
Muckanippie EL 4694

ISSUED CAPITAL

31 July 2014
Shares on Issue: 162,274,756
Quoted shares : 162,274,756
Unlisted Options: 12,550,000

INVESTOR INQUIRIES

executive@uraniumsa.com.au

**Inquiries regarding this report
and company business may be
directed to:**

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VISIT OUR WEBSITE

www.uraniumsa.com.au

31 July 2014



3 MONTHS TO 30 JUNE 2014 OVERVIEW

During the quarter to 30 June 2014:

1. **Samphire project** located south of Whyalla on the Eyre Peninsula in South Australia.
 - a) Targeting for high grade mineralisation within the Western Zone at Blackbush was progressed and advised to market 25 July 2014. Drilling targeted on this work is expected to increase the amount of uranium contained in the Western Zone at Blackbush.
 - b) Uranium mineralised veins (up to 0.5% uranium, portable XRF) and minor disseminated base metal sulphides (copper, molybdenum) have been found in granite basement below the Western Zone at Blackbush during re-logging of existing core. While in its early stages this observation is significant as it confirms that uranium has been mobile in vein systems in granite below the uranium mineralised Eocene unconformity (above).
 - c) Metallurgical work continued and is reported below.
2. **Exploration Licence 5440, Murninnie** was granted 8 July 2014 for a period of two years. The tenement is contiguous with the Samphire EL 4979 lying on its south western boundary. Refer ASX release 23 May 2014.
3. **Exploration Licence 5426 Midgee (replacement for EL 4242) was renewed during the quarter.** The title covers the same area as EL 4242, it is held by Stellar Resources Ltd (UraniumSA earning 73%) and it contains the un-drilled southern extensions of the Plumbush deposit.

A map of exploration tenure is given on the next page.

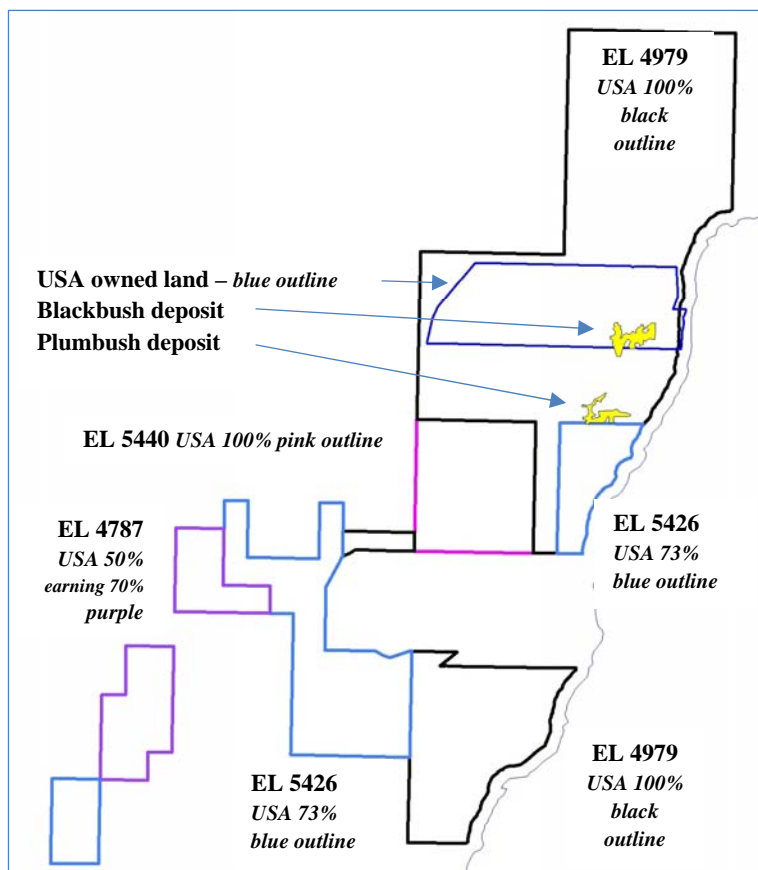
4. **Placement** – On 1 April 2014 UraniumSA announced a placement to a sophisticated investor to raise \$300,000. The subsequent issue of 15,000,000 ordinary fully paid shares (with attaching 5,000,000 unlisted options) resulted in the subscriber becoming both the Company's largest and only current substantial shareholder. Your directors recognise and appreciate this support.

FINANCE

Exploration expenditure for the period \$166,000. Cash position at the end of the period \$0.503m (no debt, unaudited). Estimated expenditure for the September 2014 quarter is \$275,000.

ACTIVITIES

SAMPHIRE PROJECT



The Samphire project comprises Exploration Licence 4979 (Samphire, USA 100%), EL 5426 (Midgee, previously EL 4242, Stellar Resources Ltd 27% ASX: SRZ, USA earning 73%) and the newly granted EL 5440 (Murninnie, USA 100%).

For internal exploration purposes the southern block of EL 4979 is grouped together with the western blocks of EL 5426 and EL 4787 and known as the Charleston project.

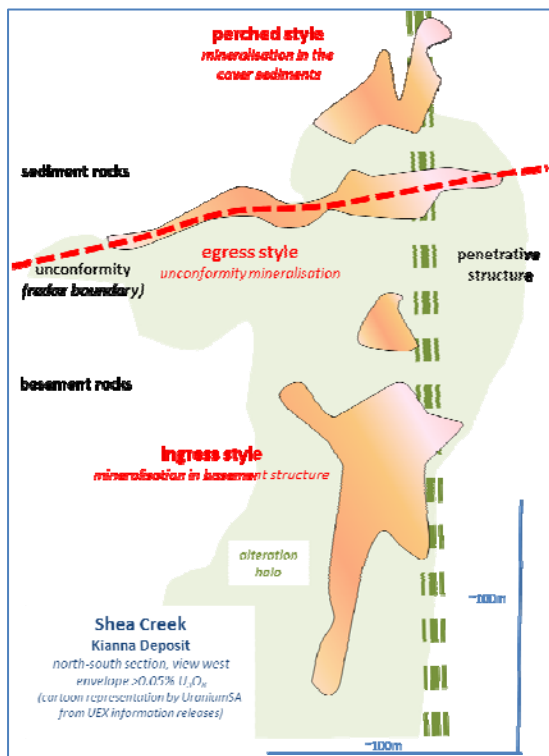
Land in the Samphire project is used for grazing on unimproved native vegetation and held under Perpetual Leasehold title.

TARGETS FOR HIGH GRADE URANIUM

UraniumSA has been working since 2012 to identify ways to define targets which could increase the contained tonnes and grade of the blanket of mineralisation at the Eocene unconformity in the Western Zone at Blackbush. A release to ASX 25 July, 2014 summarised the progress of the work, with a description of the data and methodology used posted to the UraniumSA website at www.uraniumsa.com.au the same day. The following text is a synopsis of these materials.

High grade uranium deposits at unconformities supply ~30% of global demand and are some of the highest grade and lowest cost uranium mining operations – and they are clearly high-value exploration targets. Variations of a “systems exploration” approach are now widely and successfully used to conceptualise and direct exploration in Australia. The discovery of the Samphire project and Blackbush and Plumbush deposits was the result of an adaption of a systems model approach - the same basic approach has been used again to identify opportunities at the Eocene unconformity in the Western Zone, Blackbush. The work indicated that the structural, geochemical and geological physiochemical features and fundamental mineralising processes and deposit morphologies for a high grade unconformity mineralisation are present, and can be used to target drilling.

At Blackbush West



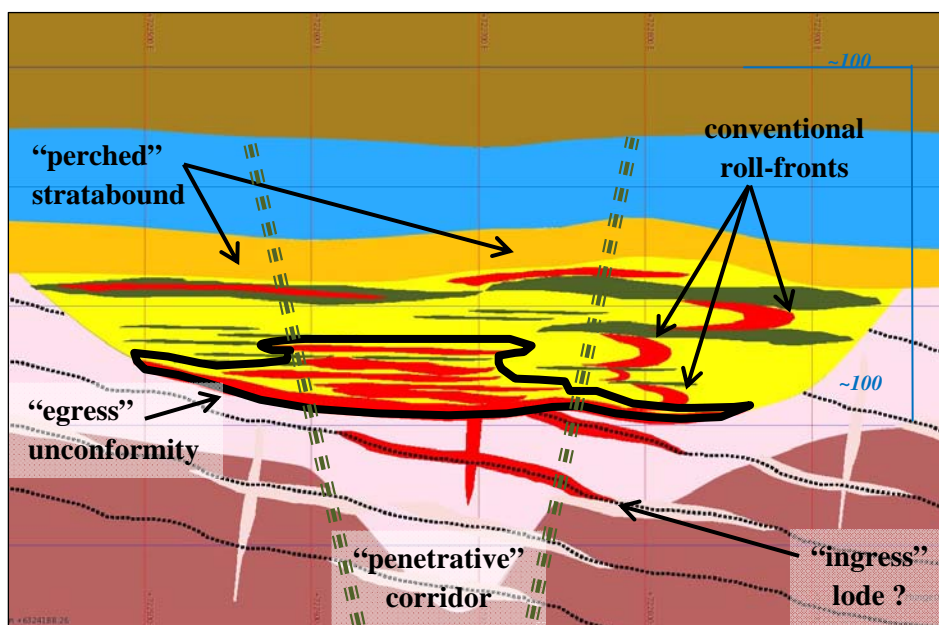
“perched style” mineralisation is postulated as stratabound mineralisation in Eocene sediments

“egress style” unconformity mineralisation is postulated as unconformity blanket mineralisation in the Western Zone

mineralisation in altered basement is present below the unconformity in clay lodes

“ingress style” mineralisation in basement is tentatively postulated in clay lodes

“penetrative structures” are apparent in mineralisation isopachs, geophysical imaging, hole-to-hole geological correlations and in stratigraphic upsets. Fluid flow is evidenced by clay alteration and veining.



Blackbush West Schematic. Samphire project.
view north, scale as shown. Underlying image ASX November 2013.

Interested persons should refer to the ASX release of 25 July 2014 and/or to the UraniumSA website for a discussion of the systems model.

MINERALISATION AND STRUCTURE IN THE SAMPHIRE GRANITE WESTERN ZONE, BLACKBUSH

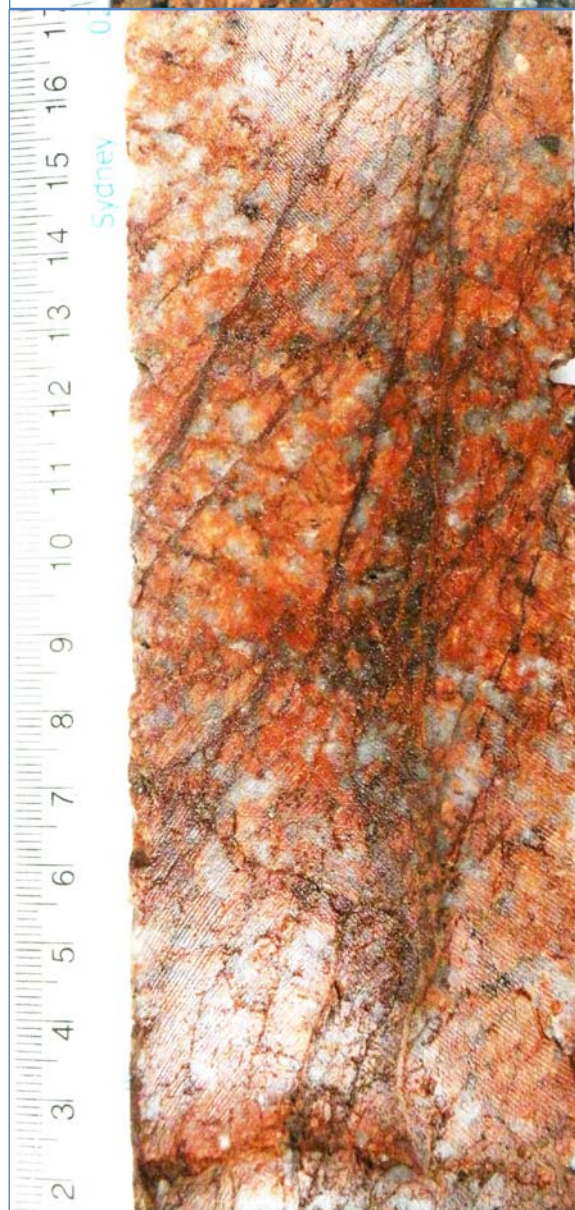


Uranium mineralised sub-vertical fracture vein
in hematized Samphire granite.

MRM 762, 149.59m.

2,900ppm uranium (range 700 to 5,400), n=6,
portable XRF, calibrated. Vein 1 to 5mm thick.

The fracture fill is 29% iron (range 6 to 70%, n=6,
portable XRF soils mode, not specifically calibrated
for iron). The mineral species does not have the
physical properties of magnetite or hematite and has
not yet been identified.



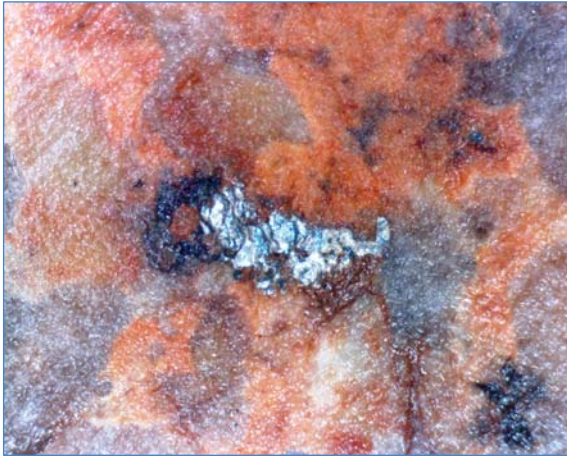
**Sub-vertical mosaic breccia fabric in hematized
Samphire granite.**

MRM 762, 141.59m to 141.39m

(note: the image is oriented correctly, the scale bar
is inverted).

Fracture veins individually ~1mm composited into
sets 5 to 10mm, infill earthy to steely hematite,
trace quartz.

The sub-vertical uranium mineralised fracture vein
and mosaic breccia occur below known shallow
east-dipping uranium mineralised lodes in clay-
altered granite which underlie the Western Zone
mineralisation at Blackbush. These structures and
mineralisation are consistent with footwall
alteration zones (a “penetrative corridor”)
underlying high grade unconformity uranium
mineralisation as proposed in the conceptual models
presented in the ASX release 25 July 2014.



Molybdenite interstitially disseminated in Sapphire granite. The grain is ~ 2.5mm across.

MRM 751, 140.47m

Re-logging of the existing granite core following on from the recently released conceptual work (ASX 25 July 2014) has already resulted in the recognition of a pronounced sub-vertical fracture plumbing system below the Western Zone mineralisation. The identification of uranium mineralisation in vertical vein sets is consistent with the concept and gives confidence that with ongoing work it can be developed to successfully target high grade/thickness mineralisation at the Eocene unconformity.

The recognition of interstitial disseminated copper and molybdenum sulphides and fluorite throughout the Sapphire granite in addition to the already known post-lithification epithermal fluorite/hematite and bassanite confirms the prospectivity of the Sapphire granite for IOCGU and associated sub-volcanic targets.

METALLURGY

UraniumSA was awarded \$50,000 under the State governments Innovation Voucher Program (IVP) to test three candidate resins for recovery of uranium from hyper saline leach solutions under conditions of locked cycle testing.

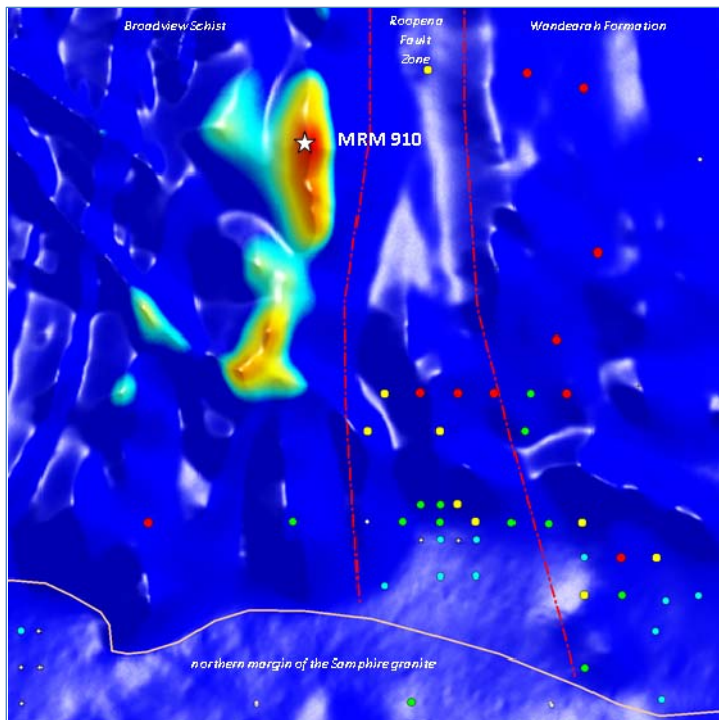
The first round of lock-cycle testing on three candidate resins has been completed. On the basis of an initial appraisal of early results some variables were changed and improved outcomes achieved. Laboratory and materials issues have impacted progress and there has been some time slippage, however costs remain on target. Data interpretation and some limited laboratory work continue.

The main findings of the IVP funded testwork were;

- i. The three resins perform differently and require different flowsheets for a commercial operation.
- ii. The different loading mechanisms require further investigation.
- iii. The uranium uptake (or loading) for each resin is strongly influenced by ferric ion concentration of leach solution
- iv. More testwork is required to determine optimum ferric ion concentration

STOCK DAM AEROMAGNETIC ANOMALY

At Stock Dam the conclusions from the drilling, geology and geophysical modelling are:



- i. Estimated depth to top of the magnetic source is 75m, depth extent is 340 – 400m and strike ~900m.
- ii. The source body is ~220m wide and dips steep east about 85°.
- iii. It is potentially a zoned system with a magnetite dominated core and hematite halo. Geophysically, the source would be accounted for by a body of 10 – 30% magnetite with unknown hematite content.
- iv. Depth to top of source throughout the modelled strike extent is ~75m.

MUCKANIPPIE PROJECT

UraniumSA owns 100% of Exploration Licence 4694. No significant work was completed in the quarter to the end of June 2014.

OTHER PROJECTS

CHARLESTON PROJECT

- Pine Hill JV (Centralian Mining Pty Ltd, USA earning 70% EL 4787).
- Midgee western block of SRZ JV (Stellar Resources Ltd, USA earning 73% EL 5426).
- No significant work was completed during the Quarter.

WILD HORSE PLAIN

- USA 100% uranium, Archer Exploration Limited (ASX: AXE) 100% other minerals, EL 4693.
- Archer Exploration is continuing its work on the project. No work was done by UraniumSA.

FORWARD WORK PROGRAM TO END SEPTEMBER 2014

SAMPHIRE PROJECT

Blackbush uranium deposit

- Identifying high probability targets for significant grade/thickness mineralisation in the Western Zone at Blackbush.
- Mapping out epithermal alteration and base metal/uranium mineralisation within the Hiltaba suite Samphire granite age targeting conventional IOCGU systems.
- Continuation of the metallurgical program in conjunction with our strategic partners.

Plumbush deposit and SRZ-JV

- Ongoing discussions with the landowners and in the Wardens Court aimed at a resolution of access issues for follow up exploration of the Plumbush deposit.

MUCKANIPPIE PROJECT

- Ongoing appraisals of existing metallurgical and geochemical data.

OTHER PROJECTS

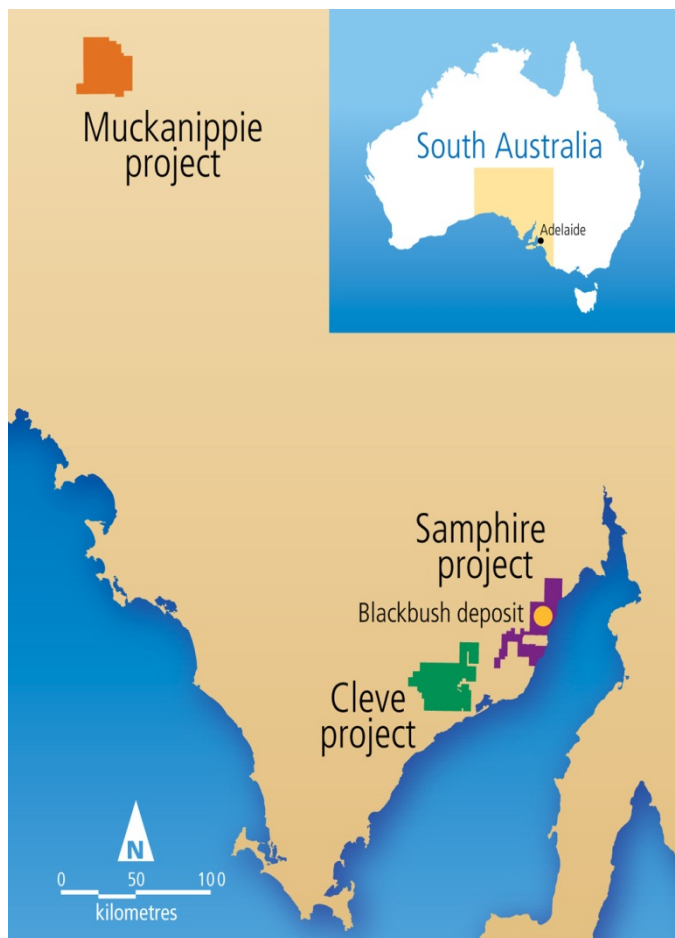
Charleston project

- No work scheduled.

Wild Horse Plains (Cleve) project, eastern Eyre Peninsula

- Archer Exploration will be continuing its work on the project. No work is planned by UraniumSA.

About UraniumSA Limited



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

The Company has discovered sediment hosted uranium mineralisation within Exploration Licence 4979, Samphire, which is located 20km south of the industrial city of Whyalla on the eastern Eyre Peninsula in South Australia. The exploration Licence is owned and operated by Samphire Uranium Pty Ltd, a wholly owned subsidiary of UraniumSA Limited.

The Samphire project contains the:

Blackbush deposit with an estimated inferred resource 64.5 million tonnes of mineralisation at a bulk grade of 230ppm containing 14,850 tonnes U_3O_8 at a 100ppm eU_3O_8 cut-off grade (JORC 2012).

Plumbush deposit with an estimated inferred resource 21.8 million tonnes of mineralisation at a bulk grade of 292ppm containing 6,300 tonnes U_3O_8 at a 100ppm eU_3O_8 cut-off grade (JORC 2004).

The estimated mineralisation is predominantly sediment hosted in Eocene age Kanaka Beds. Exploration has discovered uranium mineralisation in other geological settings and exploration is continuing.

An evaluation of mining methods to optimise the recovery of uranium from the identified resources of mineralisation is continuing. Application has been made for a Retention Lease for an in-situ recovery field trial at the Blackbush deposit.

Through its own tenure and by joint venture UraniumSA has exploration control over what it considers the most prospective portions of the Pirie Basin. The Board has continued its diversification of UraniumSA's exploration efforts into commodities and opportunities other than uranium. Work on the Blackbush deposit within the Samphire project will continue at a rate which reflects the current global uranium market, production opportunities and investor sentiment.

David Paterson
Acting Chief Executive Officer
UraniumSA Limited

The exploration results mineral resources reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr Russel Bluck a Director of UraniumSA Limited and Member of the Australian Institute of Geoscientists with sufficient experience relevant to the style of mineralisation and type of deposits being considered, and to the activity which is reported 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, 2012 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.