

Blackbush Prospect cross-section

Mullaquana Project, Eyre Peninsula, South Australia

Following the ASX release of 23rd September 2010 which reported a significant increase in the Inferred Mineral Resource estimate for the Blackbush Prospect the Company has received requests to provide a cross sectional view through the mineralised area.

The Inferred Mineral Resource of for the Blackbush Prospect stands at 38.7 million tonnes of mineralisation at a bulk average grade of 275 ppm eU₃O₈ estimated to contain 10,400 tonnes of U₃O₈ (22.9 million pounds). Average thickness of mineralisation is 11.85m.

On the following pages the Company is pleased to provide a cross section through the Blackbush Prospect which illustrates several key aspects of the geology and mineralisation of the prospect including that the:

1. Potentially economic uranium mineralisation is confined to the Eocene sequence.
2. Uranium mineralisation extends for 1.7km east to west within the section.
The Blackbush Prospect as a whole has been drill tested for some 2km east-west and north-south and remains open in several directions.
3. The uranium mineralised Eocene sequence is overlain and isolated from the surface environment by laterally continuous Miocene Melton Limestone with interbedded clay, and Pliocene Gibbon Bed clay.

The drill holes which are included in the cross section on the following page have been reported in a previous ASX release (23rd September 2010) and have been attached on the following pages.

Blackbush Prospect Mullaquana Project

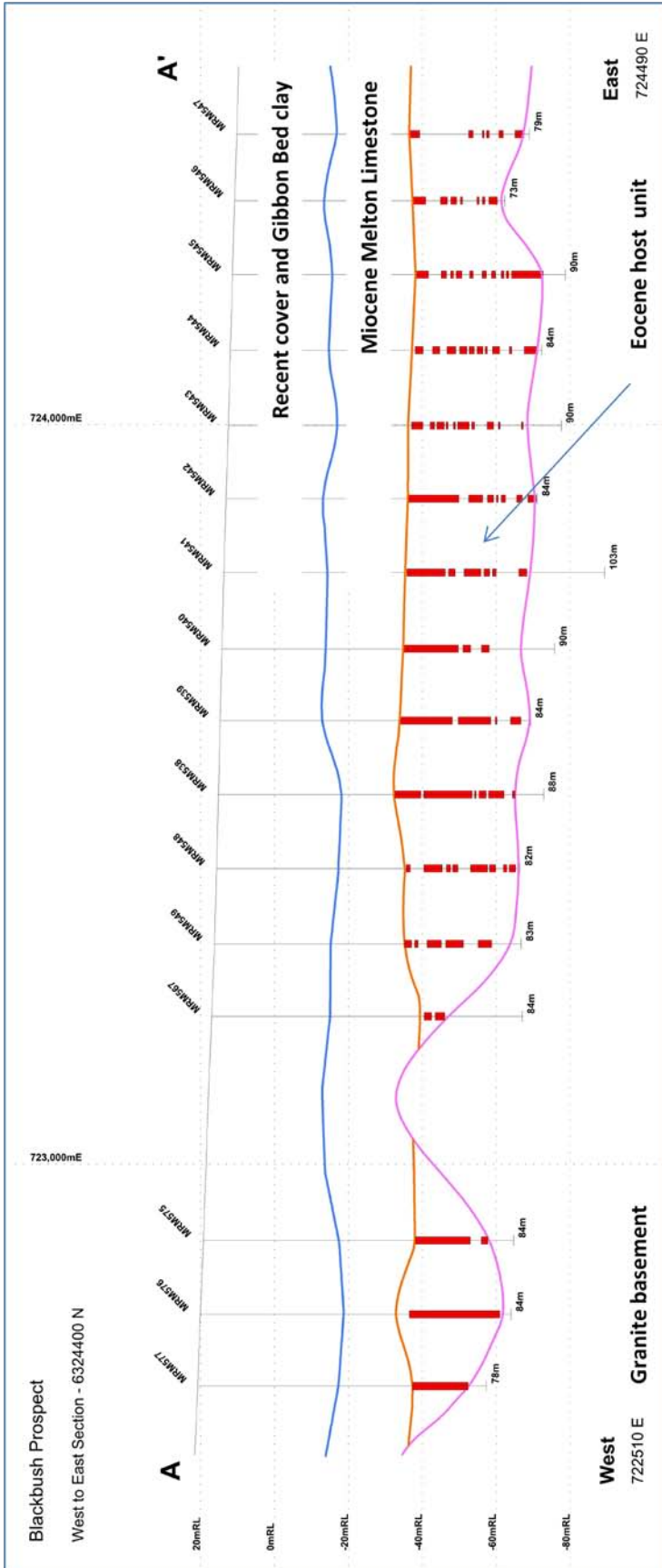
East – West Cross Section

Red bars on the drill holes are potential ore grade mineralisation

View north

Horizontal scale: drill hole separation 100m

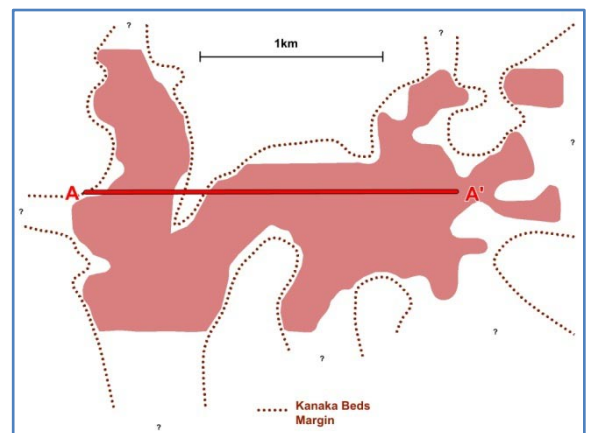
Vertical scale: as shown



Location of East-West cross section

Blackbush Prospect, Mullaquana Project

View north, scale as shown



hole ID	top of mineralisation m	cumulative thickness m	average grade ppm eU ₃ O ₈	peak grade ppm eU ₃ O ₈	GT m%	End of hole
MRM538	47.78	27.22	148	753	0.404	88.00
MRM539	48.50	26.38	143	502	0.377	84.00
MRM540	49.25	18.99	161	971	0.306	90.00
MRM541	49.43	21.40	133	492	0.284	103.00
MRM542	49.00	24.75	130	441	0.322	84.00
MRM543	49.53	13.77	132	387	0.182	90.00
MRM544	49.82	17.94	131	250	0.236	84.00
MRM545	49.50	20.38	163	1314	0.332	90.00
MRM546	48.19	10.91	126	499	0.137	73.00
MRM547	46.67	8.63	153	780	0.132	79.00
MRM548	51.24	17.41	152	789	0.265	82.00
MRM549	51.50	15.28	323	1582	0.493	83.00
MRM567	57.50	4.58	273	716	0.125	84.00
MRM575	57.50	16.45	363	1645	0.597	84.00
MRM576	56.52	24.48	518	5455	1.269	84.00
MRM577	58.00	15.00	454	2010	0.681	78.00

Summary results for the drill holes shown on the East – West Cross Section (previous page). These summary results are based on a cutoff grade of 100 ppm eU₃O₈, a minimum intercept length of 0.40m averaging in excess of the cutoff with a maximum 0.10m of internal dilution. These results are extracted from the report to ASX dated 23rd September 2010.

In the ongoing evaluation of the resource the assumed cutoff grade, intercept length and internal dilution will be varied and this will produce different results for the average thickness and average grade of mineralisation.

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 in its Mullaquana Project, 20km south of the industrial city of Whyalla on the eastern Eyre Peninsula. 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.

At the Blackbush Prospect in the Mullaquana Project there is an Inferred Mineral Resource of 38.7 million tonnes at a bulk grade of 275ppm eU_3O_8 with an estimated 10,400t (22.9 million pounds) contained U_3O_8 . Drilling of other prospects at Mullaquana is continuing to obtain intersections above deposit average grade and thickness.

The exploration objective is to expand the base of identified uranium mineralisation through incremental addition and new discovery to build the Mullaquana Project to a discovery of international significance. At the Blackbush Prospect, the Company is working to establish an in situ recovery field trial during 2011 with the objective of being able to commence production during 2012.

Russel Bluck
 Managing Director
 UraniumSA Limited

The exploration results and mineral resources reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr Russel Bluck, Managing Director, UraniumSA Limited who 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 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, 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.

Exploration Objective. Blackbush Prospects. May 2010.