

Friday, 8 April 2011

AUSTRALIAN SECURITIES EXCHANGE
 COMPANY ANNOUNCEMENTS PLATFORM
 ASX CODE USA

MAIDEN RESOURCE ESTIMATE

PLUMBUSH DEPOSIT Mullaquana Uranium Project Eyre Peninsula, South Australia

UraniumSA is pleased to advise that it has achieved its objective of establishing a resource inventory of 42 million pounds of U_3O_8 within its Mullaquana Uranium Project south of Whyalla on the Eyre Peninsula in South Australia.

This milestone has been achieved with the announcement (herein) of a maiden Inferred Resource estimate of mineralisation for the Plumbush Deposit, the second prospect within the area for which a resource has now been achieved. The estimate comprises:

- **21.8 million tonnes of mineralisation**
- **estimated to contain some 6,350 tonnes of U_3O_8**
(14.0 million pounds)
- **volume weighted average grade 292 parts per million e U_3O_8**
- **average thickness of mineralised intersections 6.88m**

Drilling at Plumbush has been significantly delayed by rain. The envelope of mineralisation extends some 2.5km to the southwest and remains open to the north and north-east. Drilling is continuing in these extensions to increase the size of the resource.

With this maiden Inferred Resource of mineralisation for the Plumbush Deposit, the total inventory of mineralisation for the Mullaquana Project is now:

	Million tonnes mineralisation	Average grade ppm e U_3O_8	Estimated contained tonnes U_3O_8	Estimated contained M lb U_3O_8
Blackbush Deposit	28.0	280	12,700	28.8
Plumbush Deposit	21.8	292	6,350	14.0
Aggregate	49.8	285	19,050	42.8

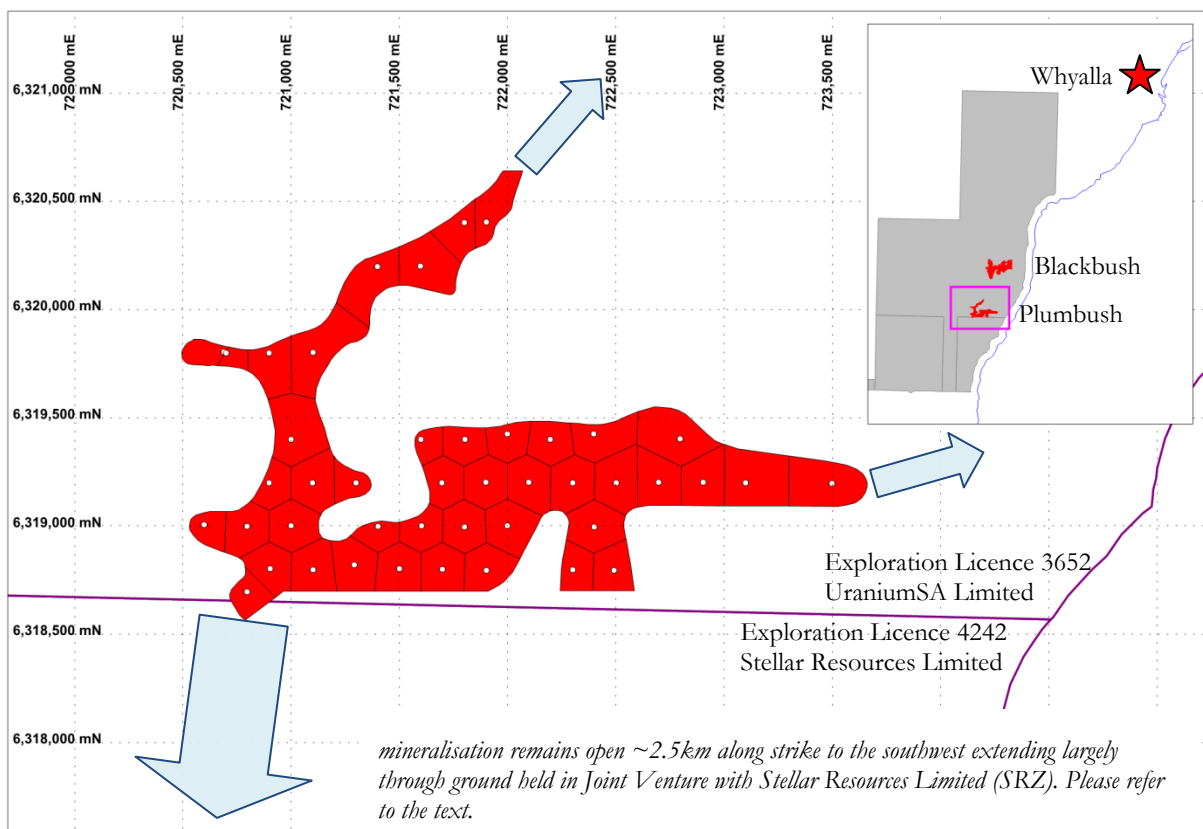
These are Inferred Resource estimates. The cut-off grade applied is 100 ppm e U_3O_8 over a minimum intercept thickness 0.40m. Refer to Table 2 herein for a schedule of assumptions applied to the estimation.

A significant portion of the southwest extension of Plumbush’s mineralisation lies within ground which is Joint Ventured from Stellar Resources Limited (ASX code SRZ) which holds a 23% entitlement free carried to the delineation of an Inferred Resource.

FIGURE 1

**Voronoi Polygons used in the Inferred Mineral Resource estimate
Plumbush Deposit, Mullaquana Project**

*Mineralisation remains open in several directions (blue arrowheads)
View north, scale given by 500m graticules*



The Plumbush Deposit resource envelope remains open in several directions. The estimate given above is based on a total of forty three (43) rotary mud holes drilled at 200m separations east-west, and variable 200m and 400m traverse separations north-south. In areas where the mineralised host sequence is constrained by basement Voronoi polygon boundaries were determined from drill data and interpretation of geophysical data sets. Elsewhere, the Voronoi polygon boundaries are assumed at half the proximal hole separation.

UraniumSA Limited will continue drilling to build the size of the Plumbush Deposit resource and increase the total inventory of the Mullaquana Project. However, the rate

of increase in the current total resource base of the Mullaquana Project will now slow as attention is focussed on the development towards production of the flagship Blackbush Deposit. Over the next six months as work intensifies at Blackbush portions of its established Inferred Resource will be migrated from the Inferred to Indicated category, and the total inventory of mineralisation within the Mullaquana Project will continue to grow.

TABLE 1
Plumbush Deposit
drill hole summary

Hole ID	Easting	Northing	End of hole (m)	Top of mineralisation (m)	Cumulative thickness (m)	Mean Grade (U ₃ O ₈ eppm)	Peak Grade (U ₃ O ₈ eppm)	Grade Thickness (GT m%)
MRM096	722401	6318997	96	55.00	11.16	169	516	0.19
MRM097	721601	6319000	84	57.00	3.58	187	395	0.07
MRM098	720796	6318998	110	64.00	13.56	286	2246	0.39
MRM109	721999	6319002	120	60.50	9.49	143	268	0.14
MRM111	720599	6319007	78	61.04	4.38	431	1813	0.19
MRM115	721600	6319401	78	58.28	4.19	342	2213	0.14
MRM116	722000	6319425	100	57.00	6.28	244	567	0.15
MRM117	722397	6319426	120	56.57	3.62	294	1268	0.11
MRM118	722798	6319402	120	55.14	3.98	203	619	0.08
MRM1001	721598	6320200	96	62.50	5.07	346	2664	0.18
MRM1002	721399	6320198	96	65.00	14.51	305	1897	0.44
MRM1004	720691	6319804	78	60.00	5.98	567	3346	0.34
MRM1006	721102	6319801	99	64.50	15.96	183	981	0.29
MRM1007	720899	6319799	96	64.00	4.58	457	2719	0.21
MRM1008	720701	6319798	84	60.00	6.63	483	2724	0.32
MRM1009	722198	6319400	102	56.03	11.08	215	1340	0.24
MRM1010	721803	6319401	102	58.50	5.69	200	687	0.11

Hole ID	Easting	Northing	End of hole (m)	Top of mineralisation (m)	Cumulative thickness (m)	Mean Grade (U ₃ O ₈ eppm)	Peak Grade (U ₃ O ₈ eppm)	Grade Thickness (GT m%)
MRM1012	721000	6319399	101	63.50	18.07	188	1021	0.34
MRM1015	721801	6318997	108	57.50	4.00	342	1400	0.14
MRM1016	721401	6318998	84	59.52	2.82	378	1067	0.11
MRM1017	721001	6319000	114	64.00	15.18	565	7274	0.86
MRM1021	720797	6318697	90	58.05	5.76	187	524	0.11
MRM1032	721801	6320402	108	60.00	13.94	467	1716	0.65
MRM1033	721901	6320403	84	58.56	10.28	689	4644	0.71
MRM1069	721699	6318801	108	59.71	4.19	197	466	0.08
MRM1070	721500	6318803	114	59.12	3.77	212	504	0.08
MRM1071	722699	6319201	126	55.00	2.96	210	478	0.06
MRM1072	722502	6319198	114	54.50	2.89	284	671	0.08
MRM1073	722301	6319199	102	55.00	3.32	286	680	0.09
MRM1074	722098	6319202	108	54.17	3.58	165	312	0.06
MRM1075	721900	6319201	108	57.00	4.26	156	322	0.07
MRM1076	721697	6319200	108	57.00	5.87	283	1645	0.17
MRM1078	721299	6319200	78	58.93	9.66	214	1514	0.21
MRM1079	721100	6319198	84	63.00	2.71	451	1863	0.12
MRM1080	720898	6319198	108	65.50	15.17	639	8824	0.97
MRM1083	720903	6318802	84	60.00	1.75	489	1396	0.09
MRM1084	721101	6318798	102	61.65	2.70	314	624	0.08
MRM1085	722903	6319201	102	52.50	3.75	157	301	0.06
MRM1086	723099	6319198	96	52.50	4.12	145	340	0.06
MRM1087	723499	6319197	102	65.70	4.01	169	546	0.07
MRM1088A	721292	6318821	102	60.01	2.48	454	1636	0.11
MRM1089	721902	6318795	114	58.71	3.35	186	324	0.06
MRM1091	722301	6318798	124	57.50	4.66	160	345	0.07
MRM1092	722491	6318794	126	54.54	7.54	211	1031	0.16

TABLE 2

Plumbush Resource Estimate

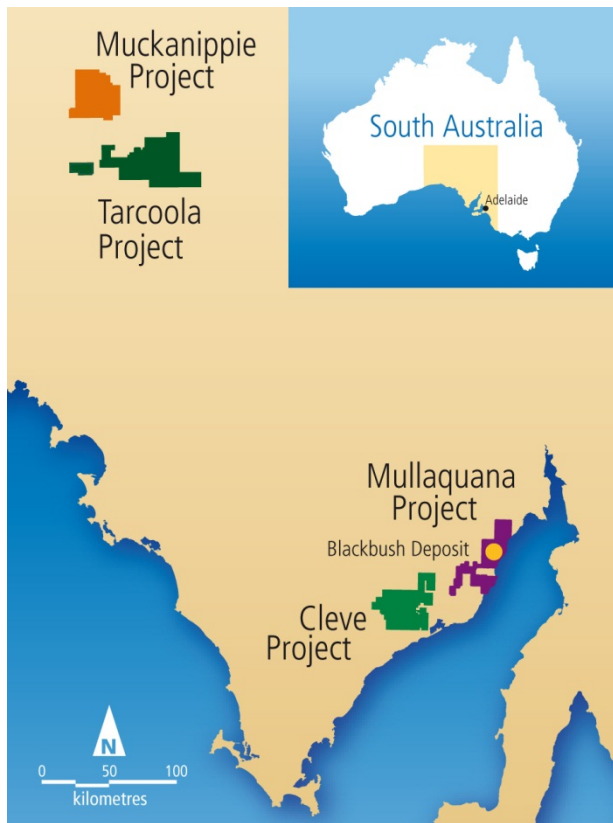
Schedule of Variables

Variable	Explanation
Tenure	The Plumbush Deposit is contained within Exploration Licence 3652 held by Gingertom Resources Pty Ltd, a wholly owned subsidiary of UraniumSA Limited. The apparent extension of the prospect to the southwest are into ground Joint Ventured from Stellar Resources Limited (ASX code SRZ).
Data	The drilling, geological and geophysical data which forms the basis of this resource estimate has been internally validated and is held within a Maxwell Geoservices Datashed database system. All of the data in this resource estimate has been collected by, or on behalf of, UraniumSA Limited.
Geological setting	Uranium mineralisation at the Plumbush Deposit the subject of this resource estimation is confined to the Eocene Kanaka Beds which locally comprise intercalated fine to coarse grained sands and clay/lignite overlying coarse grained fluvial sands. The sands are generally angular with high to very high porosity.
Geological continuity	Mineralisation is confined to the Eocene Kanaka Beds. It is stratabound and intercept to intercept correlation of mineralisation between drill holes at 200m and 400m separation is achievable at acceptable levels of confidence. Sequence variability is known to be present at the metre and decimetre scales.
Mineralisation	There is no information on the uranium mineral species present in the Plumbush Deposit. Mineralisation in the geologically similar Blackbush Deposit appears to be predominantly uraninite and coffinite (ASX release 3 rd September 2010).
Geometry of mineralisation and drill holes	The sand and lignite units of the Kanaka Beds correlate from hole to hole indicating that the sequence is flat lying. Drill holes are vertical and at the hole depths involved (80 to 120m) azimuth deviation is not considered to be a significant factor impacting on the estimate of intercept length.
Drilling method	Holes included in the resource estimation are rotary mud holes drilled using a 5 1/8 th inch drag bit with a circulating mud built on hypersaline formation waters. Rotary mud drilling is used as the host sediments are unconsolidated and water saturated. Materials recovered from rotary mud drilling are not suitable for assay as the collection method does not provide a statistically representative sample. Drilling was done by UraniumSA Limited and under contract by Thompson Drilling Pty Ltd.
Drill hole density	Within the boundary of the Plumbush Deposit 44 holes have been drilled of which 43 have been used in the resource estimation (one hole being a repeat). Holes were drilled at approximate 200m centres east-west along traverses at 200 to 400m separations. Drill collars are located post-completion with a hand-held GPS to a horizontal accuracy of 1 to 5 metres. The land surface in the mineralised area is 15 – 20m above AHD with a gentle easterly slope. Variation in collar elevation does not impact this estimation.

Variable	Explanation
Geological logging	Cuttings collected from the drill collar are laid out to a sample field to represent 2m intervals. The sample field materials are geologically logged and a ~30gm sample retained in a chip tray. On completion of drilling and geophysical logging the remaining material is returned down the drill hole or to the bottom of the mud sump. The geological chip logs are used in conjunction with geophysical logs to fix the stratigraphic boundaries which are used, in part, to constrain the area and volumes of mineralised material.
Geophysical logging	All holes were geophysically logged using a natural gamma tool and equivalent uranium grades expressed as % eU ₃ O ₈ are assigned to each logged interval. Geophysical tools are regularly calibrated at the Department of Land, Water and Biodiversity Conservation's calibration facility in Adelaide. Geophysical logging was carried out by UraniumSA Limited and by Geoscience Associates Australia Pty Ltd.
Disequilibrium	A number of drill holes have been logged by Geoscience Associates Australia Pty Ltd (GAA) using a prompt fission neutron tool (PFN). At this time the data has not been fully assessed.
Data verification	Initial picks of mineralisation are made in the field on the basis of geological and geophysical logs. The data is subsequently verified by another geologist to confirm the identification of the geophysical equipment used against the conversion algorithm, and the stratigraphic picks checked against geological and geophysical logs. Verified drill hole information is entered to the Datashed database by the UraniumSA Limited Resource Geologist.
Cut-off	The lower limit for mineralisation to be included into the calculation of a significant intercept in this resource estimate is 0.01% eU ₃ O ₈ .
Significant intercept	For the purpose of the present estimate, the minimum intercept is 0.40m above a 0.01% eU ₃ O ₈ cut-off, with isolated 0.10m intervals below 0.01% eU ₃ O ₈ allowable within an intercept provided the average grade of the whole intercept exceeds 0.01% eU ₃ O ₈ .
GT	GT is the product of the thickness of an individual drill hole intercept and its average grade for that intercept.
GT accumulation	For each drill hole, individual GT's are summed to produce a GT accumulation for that drill hole. Drill holes reporting a GT accumulation 0.05 m % eU ₃ O ₈ or greater have been included into this resource estimate.
Density	A wet bulk density of 1.73 tonnes/cubic metre has been adopted for this resource estimate. This figure is assumed from the Blackbush Deposit.
Recovery	No recovery factor is applied to this resource estimate.

Variable	Explanation
Average grade	Average grade assigned to each polygonal area is the length weighted average of the drill hole intercepts above significance. In the resource estimation this average grade is weighted by polygonal volume.
Estimation method	Voronoi polygons were constructed using MapInfo software constrained within the host Kanaka Beds, excluding holes in which the combined intercepts resulted in a Grade Thickness (GTm%) of less than 0.05m% eU ₃ O ₈ . Estimates were derived from the polygonal area and the GT accumulation for each associated drill hole.
Classification	<p>In accordance with Clause 19 of the JORC Code the Competent Persons consider that on the basis of the bulk grade, geological continuity of mineralisation and indicated hydrogeological characteristics of the host formations, together with the initial mineralogy and bottle roll tests “there are reasonable prospects for eventual economic extraction”.</p> <p>The estimate given herein is classified as an Inferred Resource in the absence of applicable recovery data and economic modelling to define a deposit specific cut-off grade.</p>

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 inventory of uranium mineralisation in the Mullaquana Project within the Blackbush and Plumbush Deposits is some 19,050 tonnes of U_3O_8 (equivalent to approximately 42 million pounds).

The Blackbush Deposit is being advanced towards the commencement of a field trial for an in-situ recovery operation with a production objective of late 2012 to early 2013.

Continued drilling of the Plumbush Deposit will grow the resource base and the updated estimates will be released during 2011.

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 mineral resources reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr Russel Bluck an employee 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, 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.