



# UraniumSA



**TECHNICAL REPORT**

**2011 AGM**

6<sup>th</sup> October 2011

## Disclaimer



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*The results reported herein, insofar as they relate to mineralisation, are based on information compiled by Russel Bluck who is a Member of the Australian Institute of Geoscience and an employee of UraniumSA Limited with sufficient experience relevant to the style of mineralisation and type of deposits being considered and to the activity which is being reported 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). He consents to the inclusion in the report of matters based on his information in the form and context in which it appears.*

## CORPORATE OVERVIEW



ASX code USA

- 147m shares
- ~\$5.8m cash at bank
- Top 20 shareholders ~41%
- Largest shareholder ~ 6%
  
- We only do one thing – uranium exploration and development
- We only operate in one jurisdiction - South Australia
  
- Inferred Mineral Resource 67.2 Mt @ 284 ppm for 19,000 tonnes  $U_3O_8$  (42M lb)
- Blackbush deposit going to field trials leading to production
- Blackbush field trials scheduling to commence 1<sup>st</sup> Qtr 2012

- **discovery**      2007 UraniumSA drill hole MRM 001 intersected uranium mineralisation with “redox” alteration
  
- **resources**      5<sup>th</sup> May 2009, Blackbush maiden resource estimate 5 Mlb U<sub>3</sub>O<sub>8</sub>  
  
8<sup>th</sup> April 2011, total resource estimate 42 Mlb U<sub>3</sub>O<sub>8</sub>
  
- **production**      ISR field trials planned and scheduling for production in 2013
  
- **exploration**      we still have our IPO tenure to explore; crews mobilising to recommence exploration work in the Tarcoola JV this week  
  
the geological controls on mineralisation in granite at Samphire are unknown, but there is significant exploration potential

### **Blackbush deposit, Samphire uranium project**

the emphasis is on sequential de-risking to advance the project to production  
as we progress through the testing and regulatory process there may be time slippage

- 1<sup>st</sup> Qtr 2012 – schedule commencement of field trial
- 1<sup>st</sup> to 2<sup>nd</sup> Qtr 2012 – field trial data inputs to resource upgrade and mine design
- 2<sup>nd</sup> Qtr to 3<sup>rd</sup> Qtr 2012 – submission of mining proposal with production plans
- 3<sup>rd</sup> Qtr to 4<sup>rd</sup> Qtr 2012 – lead time items and commencement of site works
- 4<sup>th</sup> Qtr 2012 to 1<sup>st</sup> Qtr 2013 – licencing completed
- 2<sup>nd</sup> Qtr to 4<sup>th</sup> Qtr 2013 – ramp up towards planned production

# DEVELOPMENT – GEOLOGY and RESOURCES

## Blackbush deposit Samphire uranium project

Inclined three dimensional image  
of the circulation trial well field

surface plan, six spot pattern and  
drill rig

### Solid geology

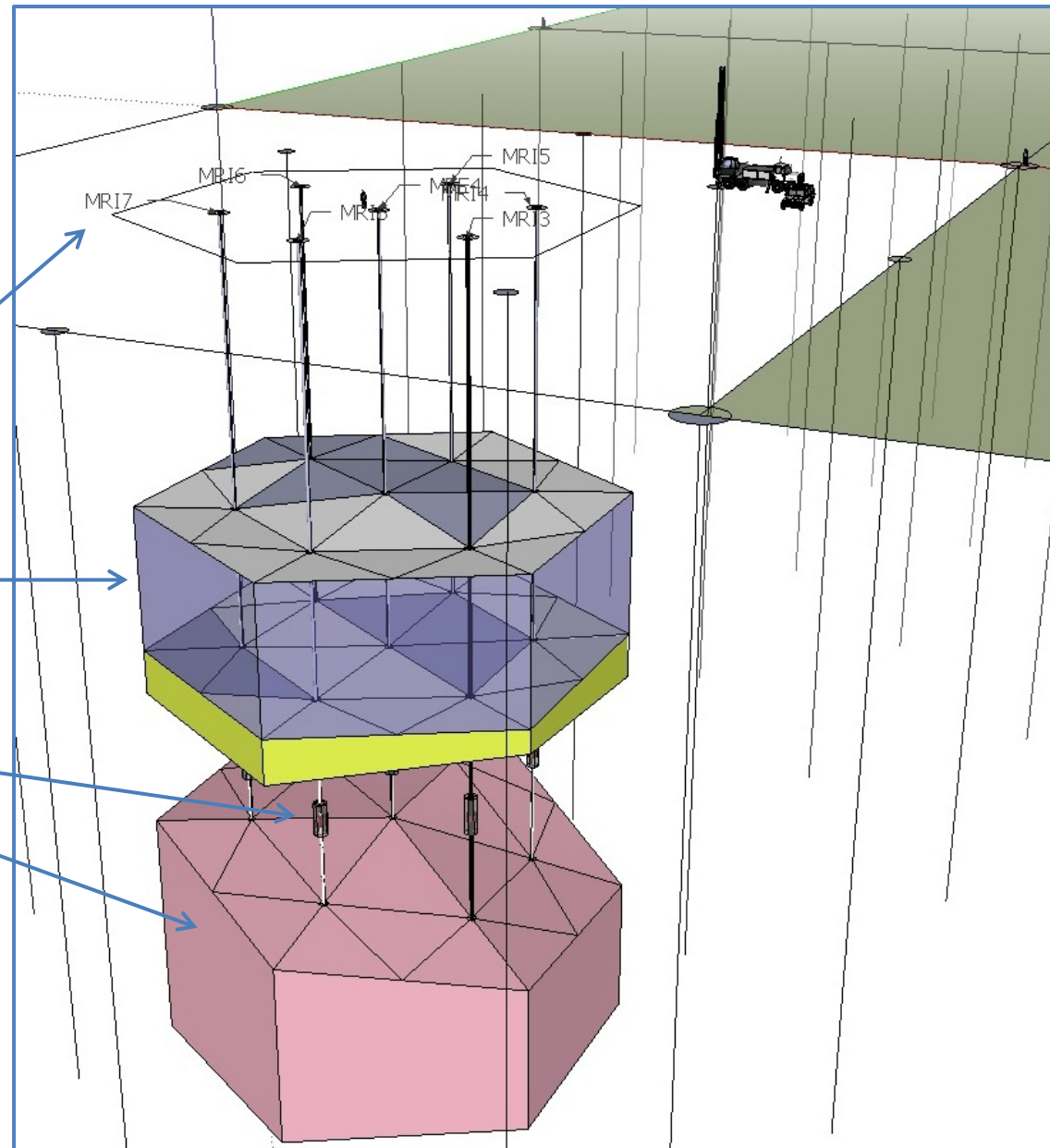
Melton Limestone

Melton Sand

Kanaka Beds

screened mineralisation

Mullaquana Granite



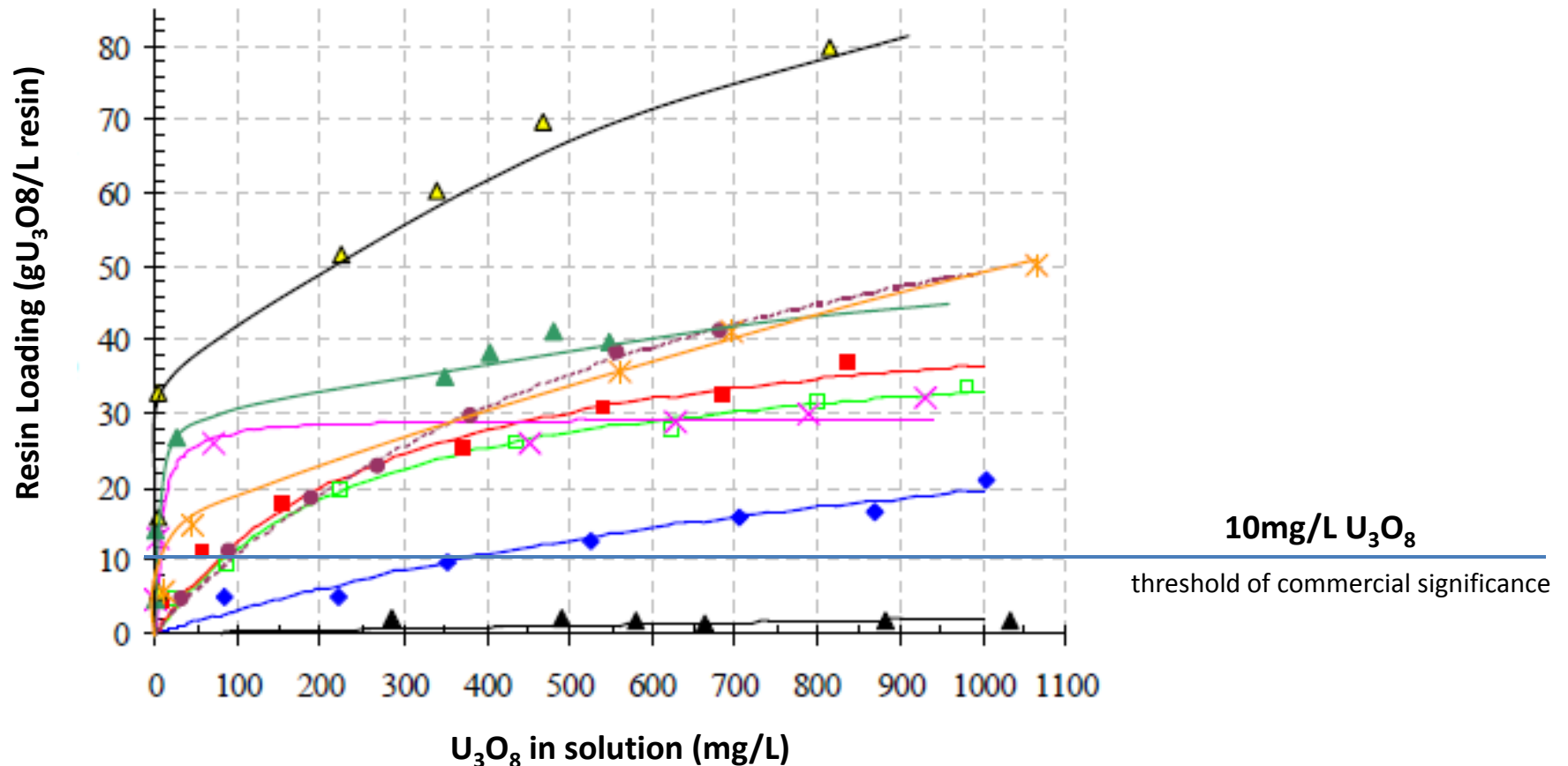
## DEVELOPMENT – METALLURGY

### Blackbush deposit, Sapphire uranium project

test results from the loading of uranium in acid saline solutions to selected resins

results shown for 9 resins from 6 different commercial resin suppliers

our innovation is to use existing product in a new application, mitigating technology risk



## Blackbush deposit, Samphire uranium project

the models are founded on technical and operating detail from our present work  
they are extensive and robust and will carry the project through into initial production

<b>Production model</b> (tonnes per annum)	<b>400tpa</b>	<b>600tpa</b>	<b>800tpa</b>
Project Capital AU\$	\$ 71.4M	\$ 75.8M	\$ 80.1M
Operating Cost AU\$/lb U <sub>3</sub> O <sub>8</sub>	\$ 30.30	\$ 25.90	\$ 23.90
Payback period, years	4.9	3.5	2.9

Net Present Value @ 8% discount rate	\$52.9M	\$134.7M	\$212.6M
Internal Rate of Return	22%	39%	52%

# the challenge

is to move as quickly and as cost-effectively as possible from

positive results

to new discoveries

to drums of  
ISR product





**Uranium**SA  
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