

## Laboratory confirms commercial-grade uranium

**TRAVIS MACRAE**

ADELAIDE-based uranium explorer UraniumSA has produced its first commercial-quality yellowcake product, a major step towards the anticipated 2012 production date of its Blackbush deposit.

The yellowcake was produced in a laboratory using mineralisation taken from Blackbush, which is within the company's wholly-owned Mullaquana uranium project, south of Whyalla on South Australia's Eyre Peninsula.

Discovered in late 2007, early indications suggested the uranium mineralisation within the highly prospective Gawler Craton could be one of the most significant uranium discoveries in recent Australian exploration history.

UraniumSA is considering the deposit for development using the low-impact solution mining technique known as in-situ recovery.

The latest field trial was to ascertain if the uranium could be extracted at a commercial grade and quantity, and will determine the mining process and strategy for development should the discovery progress.

A bulk core sample was leached using an acidified seawater solution and the dissolved uranium was then recovered from the leach solution using two different resins.

The two resins were then separately

stripped of uranium and a yellowcake product precipitated.

UraniumSA said the resulting uranium yellowcake product was high-grade, containing 85 per cent uranium metal.

It was within general commercial specification and had minimal off-target contamination.

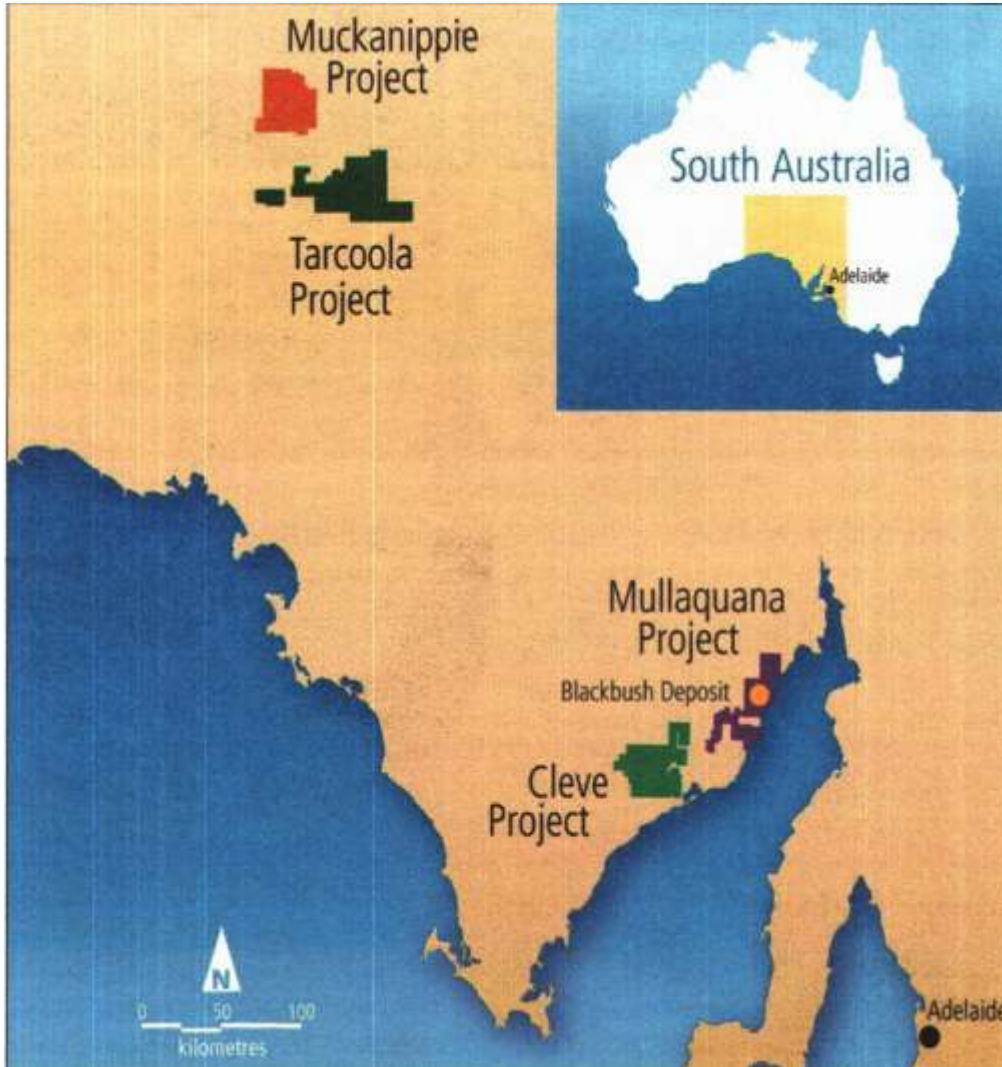
UraniumSA has identified a number of resins that have demonstrated a capacity to extract uranium from acidified seawater solutions at potentially commercial loading rates.

Two of six resins being evaluated were fast track tested to establish elution and precipitation regimes for more comprehensive test work.

The results comprised an initial proof-of-concept for the extraction of uranium from typical mineralisation into acidified saline solution, extraction of the dissolved uranium from acidified hypersaline solution to resins, stripping of uranium from resins, and the precipitation of a uranium yellowcake product.

During this test work, there was no significant loading of the resins by off-target elements.

The uranium was stripped from the resins using conventional reagents and methods, and a peroxide product was precipitated.



Uranium SA's exploration projects