



## ASX RELEASE

22 February 2008

### SOUTHERN URANIUM COMMENCES DRILL CAMPAIGN ON FLAGSHIP GAWLER CRATON PROJECTS

#### HIGHLIGHTS

- Drilling commenced at Waxings Dam IOCGU target near Kimba in northern Eyre Peninsula
- Drill rig mobilised from WA to undertake 5,000 metre drill campaign for Southern Uranium
- Campaign will include drill testing of Cocky Swamp IOCGU target near Woomera and uranium, base metal, gold and iron ore targets at Jungle Dam, near Kimba

#### Summary

Southern Uranium Limited (ASX: SNU) (Southern Uranium) today announced the commencement of a drilling campaign to test iron oxide copper gold uranium (IOCGU) targets, and related target styles, in the Gawler Craton of South Australia.

Drilling of the Waxings Dam IOCGU target near Kimba on the northern Eyre Peninsula commenced on 21 February 2008.

The campaign will also drill test the Cocky Swamp IOCGU target near Woomera, as well as multiple targets at the Jungle Dam prospect - with potential for uranium, base and precious metals and iron ore in the Wilcherry area also near Kimba. The locations of the drill prospects are shown on Figure 1.

Contractors, Wallis Drilling, will undertake at least 5,000 metres of reverse circulation percussion and diamond cored drilling. They have transferred a multipurpose drill rig from Perth to carry out Southern Uranium's work.

Southern Uranium continues to develop a pipeline of uranium-focussed targets in South Australia using substantial local expertise and up-to-date ideas.

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## **IOCGU Opportunity and Exploration Strategy**

Southern Uranium believes the excellent potential for further discoveries of IOCGU and related styles of uranium and multi-commodity deposits is being re-invigorated on the Gawler Craton.

Managing Director John Anderson said the Company was maximising this potential by applying its team's extensive South Australian experience.

"The most prospective geological settings are being selected through a combination of advanced targeting techniques and the abundance of historical drill data supplied by previous base metal and gold explorers," Mr Anderson said.

"Gravity surveying is the primary technique to define IOCGU targets beneath the extensive cover over the Craton. We are using the latest geological ideas and all the new and old data we can get our hands on to prioritise a large number of targets. The exploration opportunity for this region is fresh, large discoveries."

First pass gravity surveying was completed at 1 km station spacing for all of Southern Uranium's IOCGU projects in January this year. Analysis of this data is continuing to define initial targets throughout the Craton. Promising gravity anomalies are being followed up with infill gravity surveying usually at 250 metres station spacing to enable accurate modelling of the target geometries.

The Waxings Dam and Cocky Swamp targets were the first IOCGU targets defined by infill gravity undertaken during 2007 and early 2008.

## **New prospects on the northern Eyre Peninsula**

Southern Uranium has established a strong tenement position along a prospective northwest structural corridor extending from the historic Moonta deposits (Figure 1).

This corridor is now recognised to have the same prospective elements of the Hiltaba geological event that formed the IOCGU deposits in the Olympic Dam corridor. The potential of the Moonta corridor is confirmed by the discoveries reported by other companies at Menninnie Dam (zinc lead silver), Weednanna (gold iron), Hercules (iron) and Wilcherry (uranium). Southern Uranium considers these deposits are related to the Hiltaba event.

Thin but ubiquitous cover had previously hindered good geological mapping and exploration along the Moonta corridor. Past explorers relied on shallow drilling across magnetic trends for base metal targets or calcrete geochemistry specifically aimed at gold targets. This has provided a large database for the opportunity of revitalised exploration for shallow hydrothermal systems containing uranium and related IOCGU styles of deposits.

A first pass gravity survey of Southern Uranium's tenements was undertaken in 2006. This survey supplemented the coverage of the South Australian Government's 2 km spaced gravity survey conducted under the PACE exploration initiative programme in 2005.

This new data enabled better location of the low density granites as gravity lows that are more extensive than mapping of the poor outcrop indicated. Most of the outcropping granites in the

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area contain anomalous uranium (greater than 15 parts per million U), so these and the covered granite extensions are potential sources for uranium mineralisation (Figure 1).

Gravity highs in the Waxings Dam and Jungle Dam areas were selected as being most prospective for IOCGU-related mineralisation at the margins of, and in the roof above, the source granites (Figure 2). The Menninnie Dam base metal and Weednanna gold iron prospects are considered to have formed in a similar geological environment above the interpreted roof of the Wilcherry Granite. Southern Uranium will continue to investigate other gravity anomalies delineated over the remapped Wilcherry and Charleston Granites with infill gravity and soil geochemical surveying.

### **Waxings Dam target**

The Waxings Dam target is situated on freehold land 35 km northwest of Kimba on northern Eyre Peninsula. The target is secured by Exploration Licence (EL) 3594 held 100% by Sunthe Uranium Pty Ltd, a wholly owned subsidiary of Southern Uranium.

The target was initially selected from the first pass gravity data collected in 2007 as a 2.5 milligal anomaly at the boundary between the Cunyarie and Wilcherry Granites (Figure 2). Detailing of the initial first pass anomaly was undertaken with 250 metre spaced infill gravity surveying during January 2008.

The target was modelled from the new data by geophysical consultants Asis International as a 650 to 750 metres deep body with a density of 3.4 to 3.7 grams per cubic centimetre. The modelled body disrupts a north-northwest magnetic trend interpreted to be an iron formation (Figure 3). The setting, density, 1km by 2km size and northwest orientation of the modelled body are favourable for the target to be a haematite-rich hydrothermal system of the IOCGU style.

Drill hole WD – DDH1 is collared and inclined to intersect the modelled target at about 850 metres downhole depth. It is anticipated the drill hole will be completed within three weeks.

### **Jungle Dam Prospect**

The Jungle Dam prospect is situated within the area subject to EL 3479 also held 100% by Sunthe Uranium Pty Ltd.

The Jungle Dam prospect was initially delineated as a magnetic trend with base metal anomalism established by past explorers. The prospect is interpreted to be the southern extension of the trend containing the Hercules iron prospect and Wilcherry uranium prospect recently identified on adjacent tenements (Figure 2).

In January, infill gravity surveying at 250 metre and 500 metre-spaced stations was completed at Jungle Dam over four gravity anomalies. The new data are being modelled and combined with magnetic and past exploration data to refine the drill targets.

EL 3479 is underlain by a Pastoral Lease and is subject to Native Title negotiations. Heritage Surveying will be undertaken ahead of drill access planned for April 2008.

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### Cocky Swamp target

The details and access arrangements for the Cocky Swamp IOCGU target in the Olympic Dam district were reported in the ASX Release dated 6 February 2008.

The target is secured under EL 3603 held 100% by Sunthe Uranium Pty Ltd. The EL is subject to a Joint Venture whereby Southern Uranium is the operator of the Joint Venture and wholly owned subsidiary of Crescent Gold Limited, Uranium West Pty Ltd, may earn to 50% interest by sole funding the current program.

The Woomera Test Facility has approved drill access until mid-April 2008. Drilling of the planned 1,250 metres hole will commence after the completion of the Waxings Dam drill hole.

*The information in this report that relates to Exploration Results is based on information compiled by John Anderson (BSc(Hons)Geol) who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. Mr Anderson is a full-time employee of Southern Uranium Limited. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Anderson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears*

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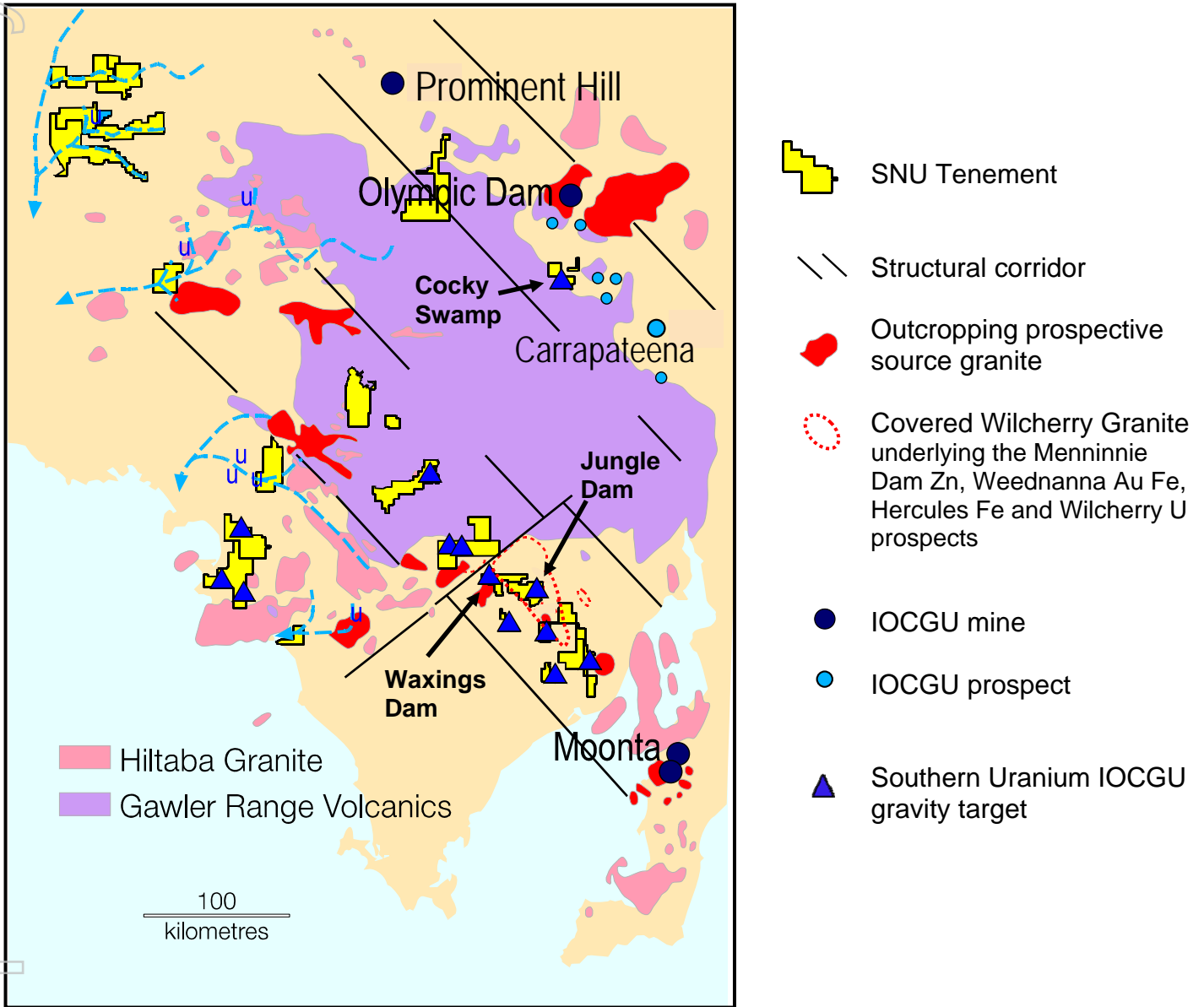
***Southern Uranium Limited is a uranium-focussed resources company with a strong platform of active exploration properties and drill targets in the highly prospective Gawler Craton of South Australia.***

***The Company aims to grow into a major uranium explorer and developer by seeking uranium opportunities globally.***

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**Figure 1:** Regional Location Plan - Waxings Dam, Jungle Dam and Cocky Swamp drill prospects, Gawler Craton

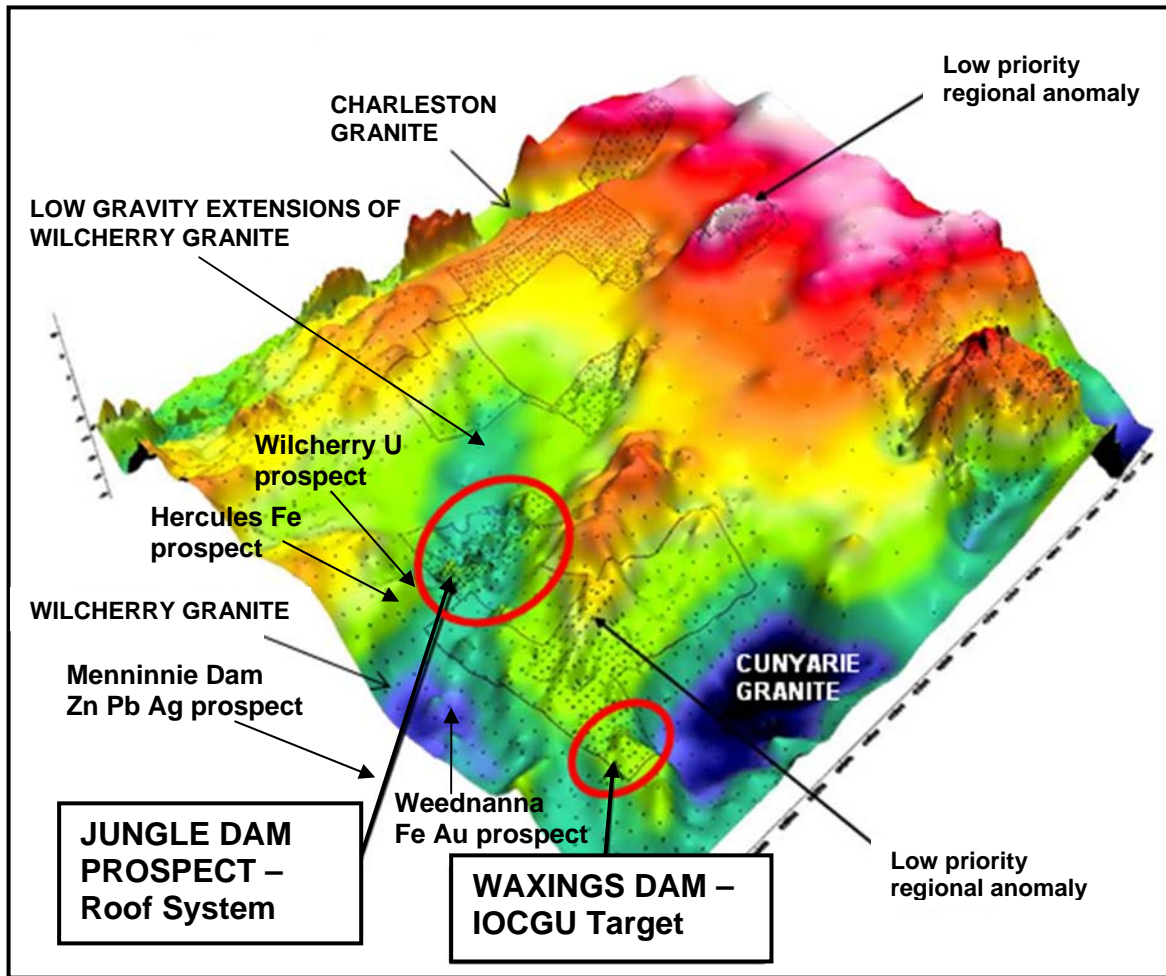


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**Figure 2:** Oblique View of revised Gravity Image for northern Eyre Peninsula – looking southeast along the Moonta corridor showing the location of the Waxings Dam drill target and Jungle Dam prospect. The distance across the view from corner to corner is approximately 150 kilometres.

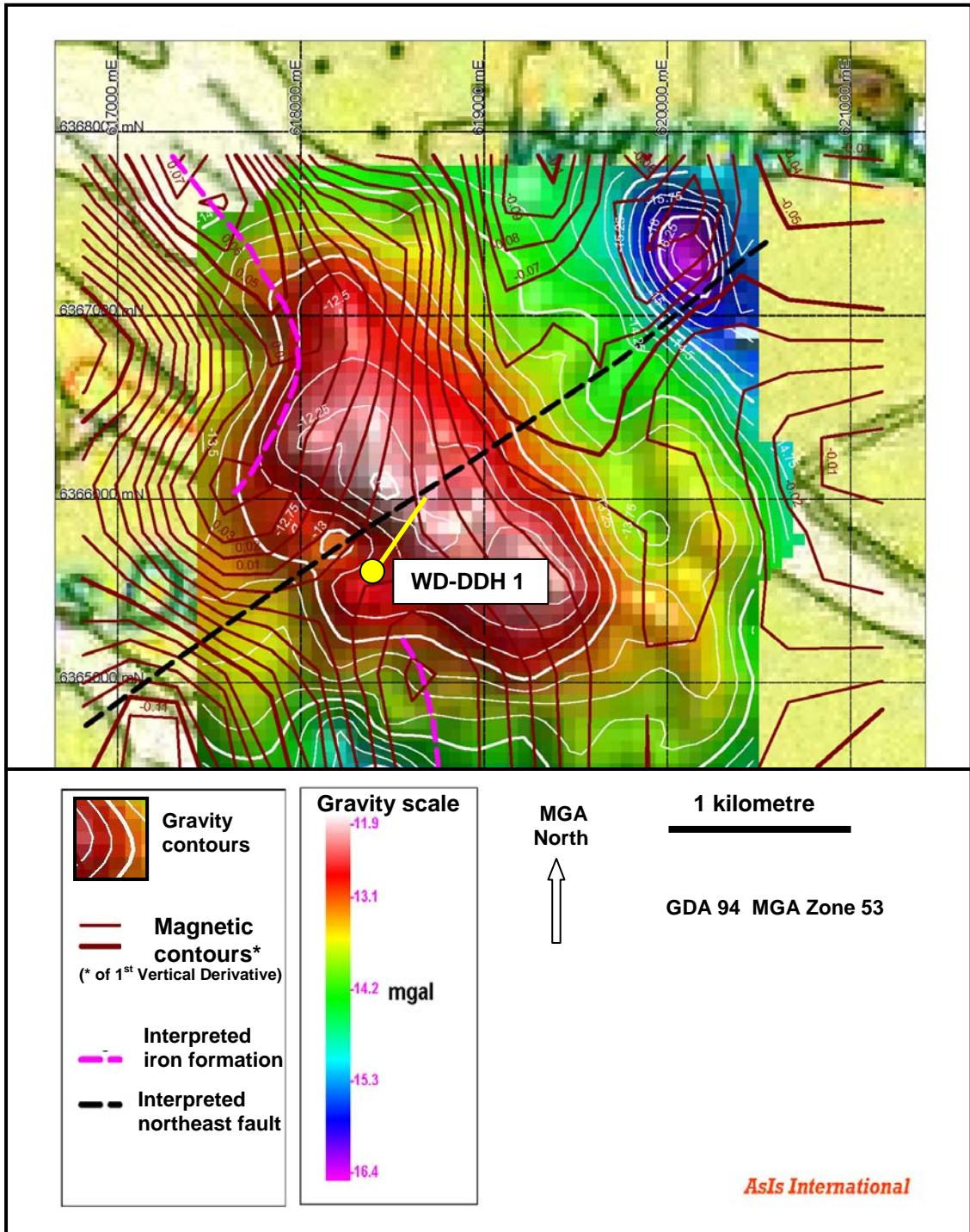
The image incorporates Southern Uranium’s first pass gravity data shown as the fine stipple within the tenement outlines. The new data enabled a revised interpretation of the extent of prospective Hiltaba Granites as labelled.



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**Figure 3:** Plan of Gravity and Magnetic Contours – Waxings Dam IOCGU target showing the trace of planned drill hole WD- DDH 1.



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