



14 May 2008

## Southern Uranium Farms Into New Exploration Projects In The Gawler Craton

### Highlights

- Farm-in adds large area to Southern Uranium's exploration portfolio in the highly prospective Eyre Peninsula region of the Gawler Craton.
- Multi-commodity exploration targets including uranium, base metals and iron ore potential.
- Exploration underway with opportunity to apply modern exploration ideas and techniques to historic data and prospects.
- Initial rights to earn up to 70% interest by A\$1.05million exploration expenditure within four years.
- The new project further reflects Southern Uranium's intent to build its exposure to quality uranium exploration in the region.

### Summary

**Southern Uranium Limited** (ASX Code: SNU) today announced the signing of a Farm-in and Joint Venture Agreement with Ellembey Resources Pty Ltd to explore for all minerals within the areas of the Kimba and Caralue tenements.

The tenements are situated in the Kimba district on the northern Eyre Peninsula approximately 270km northwest of Adelaide and in the southern part of the uranium-rich Gawler Craton.

Southern Uranium's Managing Director John Anderson said the Joint Venture adds 1,225 sq km of ground to Southern Uranium's exploration focus on the highly prospective Moonta corridor trending northwest across the Eyre Peninsula (Figure 1).

"The Company considers the corridor to be very prospective for deposits of the same age and of related styles to the iron oxide copper gold uranium (IOCGU) deposits in the Olympic Dam district in the northern part of the craton," Mr Anderson said.

"The Farm-in and Joint Venture agreement are in-line with the Company's strategy to maximise exposure to the recognised opportunity. Southern Uranium has established a strong tenement position and exploration program in northern Eyre Peninsula."

The Farm-in and Joint Venture Agreement enables Southern Uranium to apply its local expertise to additional tenements within the prospective region. The areas to be explored contain a number of prospective elements consistent with the regional target indicators.

Southern Uranium has initiated a first pass program of gravity and soil geochemical sampling to explore the entire area of the two exploration licences.

Mr Anderson said the intent of the initial program was to prepare targets for follow-up gravity and geochemistry detailing. This will allow for preliminary target testing using air core drilling later in 2008 with a view to deeper target drilling in the next 18 months.

"Southern Uranium welcomes the opportunity to explore the tenements with Ellembey and is looking forward to developing these two exciting Project areas together."



## Regional Potential - the northern Eyre Peninsula

The key prospective attributes of the northern Eyre Peninsula are:-

- Potentially mineralising uranium-anomalous Hiltaba granites and associated mineral deposits that are now interpreted to have formed above and on the margins to the granites during the same craton-wide “Hiltaba” mineralising event that deposited Olympic Dam, Prominent Hill and Carrapateena.
- A structural interpretation of northwest and northeast faults that predicts favourable locations for the formation of large mineralised systems.
- Multi-commodity deposit styles already detected through the thin cover including uranium (e.g. Wilcherry prospect), iron ore (e.g. Ultima Dam and Bungalow prospects), gold (e.g. Weednanna) and base metals (e.g. Menninnie Dam).
- Focus by previous explorers on base metal and diamond targets using magnetic techniques or gold targets using calcrete geochemistry that generally did not analyse for uranium. This work did however provide a legacy of valuable data that can be reapplied to the newly recognised opportunity for IOCGU-related targets.

For example:-

- Abundant intersections of mafic and ultramafic intrusives considered necessary for IOCGU formation and previously thought to only be present in the Olympic Dam region of the craton.
- Numerous base metal prospects such as Menninnie Dam and Jungle Dam that are possible lead-ins to adjacent hydrothermal systems with uranium and other metal potential in non-magnetic graphitic, haematitic and carbonate hosts.
- The pervasive but thin cover in the region offers the opportunity to extend the exploration coverage away from the historic prospects using new applications of gravity and geochemical techniques to build on the prior magnetic targeting.

## Potential in Joint Venture Tenements

The Farm-in and Joint Venture Agreement enables Southern Uranium to apply its local expertise to additional tenements within the prospective region. The Exploration Licence (EL) areas contain a number of prospective elements consistent with the regional target indicators.

Buried Hiltaba granites are interpreted from new gravity data to extend beneath both EL areas (Figure 1). The Kimba EL (EL3645) area lies on the southern side of the large Wilcherry granite complex that underlies the major Menninnie Dam base metals, Ultima Dam iron ore and Weednanna gold prospects. Southern Uranium considers the mineralising granite extends southeast to the Cowell area where the Company has other uranium and iron ore prospects.

Anomalous uranium discovered in shallow drill holes near the Caralue EL area (EL3644) support the potential for the interpreted granite there to be also mineralising. The Driver River prospect to the south of the Caralue EL area was discovered in 1969 by Minad, who found uranium bearing Tertiary sediments assaying up to 1,880ppm  $U_3O_8$ . A current explorer reported up to 6m at 342ppm  $U_3O_8$  in the Ulysses and KO11 prospects to the west of the Caralue EL area.

Untested radiometric anomalies offer direct uranium indications in both EL areas.

The Kimba EL area also contains two historic base metal prospects at Goongoona, discovered by WMC in 1985, and the Galah prospect explored by Pasminco in 1990's. An unexplored jaspilite offers iron ore potential in the south-west corner of the Kimba EL area.

Diamond explorers located ultramafic and diorite intrusives with potential for Archaean base metal or gold targets in the Caralue EL area.



## Exploration Underway

Southern Uranium has initiated a first pass program of gravity and soil geochemical sampling to explore the entire 1,225 sq km area of the two ELs. The majority of the EL areas are under freehold farms and landowners are being contacted to arrange access.

Contracts are being finalised for the collection of gravity readings and soil samples on the same initial 1km grid pattern, adjusted to avoid infrastructure and heritage vegetation. The soil samples will be assayed by partial leach techniques for a large range of elements including pathfinder elements defined by recent research.

These tactics are based on the Company's recent experience with a variety of prospects and are being consistently applied throughout the northern Eyre Peninsula.

The initial program will prepare targets for follow-up gravity and geochemistry detailing. These targets will then undergo air core drilling later in 2008. The aim is then for deeper target drilling within 18-months.

## Terms and Conditions

The basic terms and conditions of the Farm-in and Joint Venture Agreement are:

- Phase I : Southern Uranium to spend A\$450,000 within two years, for 51%;
- Phase II : Southern Uranium to spend A\$600,000 within a further two years (total of four-years) for an additional 19%;
- Following Phase II, Ellembey would have the option to contribute pro-rata or reduce to a 10% free carry, with Southern Uranium contributing 100% of the exploration costs; and
- Southern Uranium will manage the Project.

Southern Uranium welcomes the opportunity to explore the tenements with Ellembey and is looking forward to developing these two exciting Project areas together.

*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*

### For further information:

Mr John Anderson  
Managing Director  
Southern Uranium Limited  
Ph: 07 3870 0357

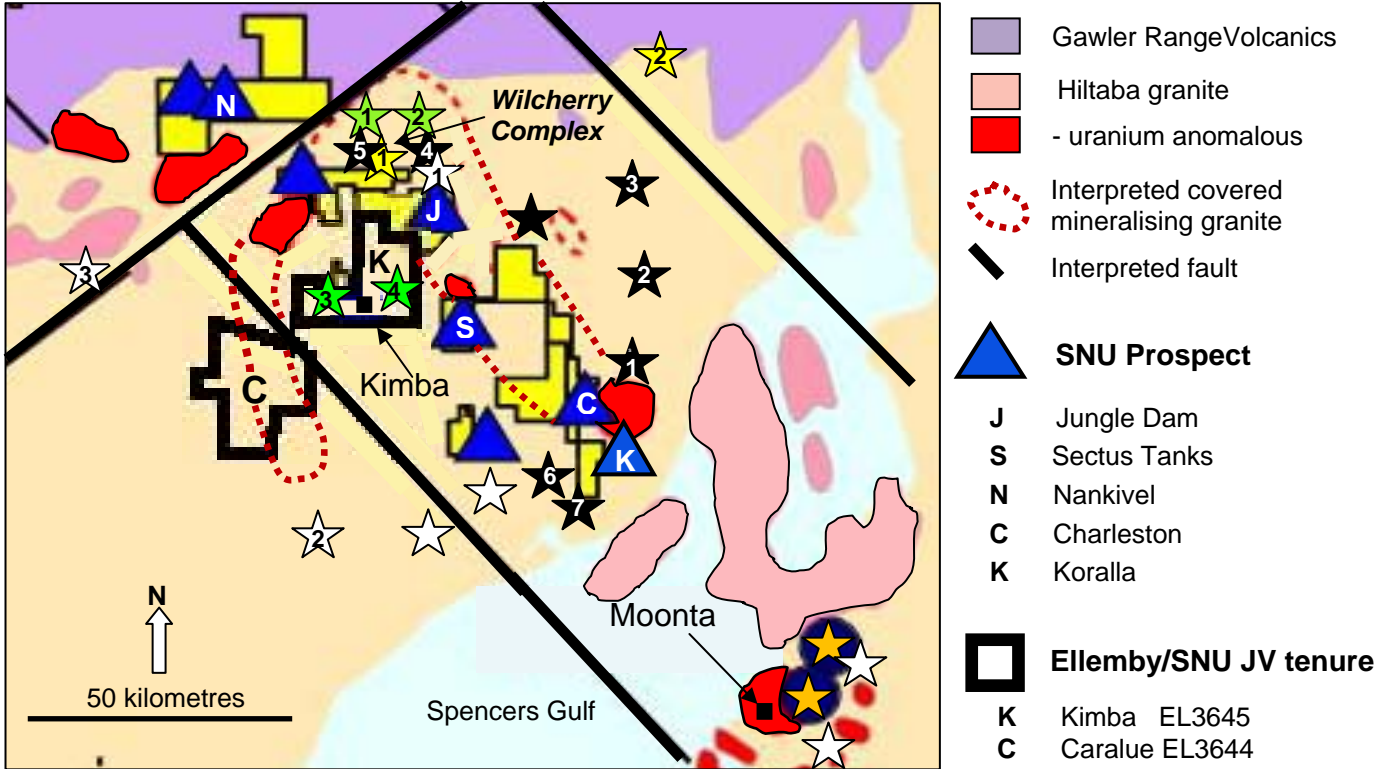
### Media:

Anna O'Gorman  
Principal Consultant  
Three Plus  
Ph: 07 3503 5700

**Southern Uranium Limited is committed to becoming a major developer of uranium resources through exploration and commercial acquisition and is seeking advanced projects globally.**



**Figure 1: Regional Location Plan – north eastern Eyre Peninsula showing ELs subject to Ellemby Joint Venture (in black outline) relative to current Southern Uranium ELs (in yellow)**



**Mineral Occurrences**

- ☆ Uranium prospects (1- Wilcherry, 2- Driver River, 3- KO11)
- ★ Iron Oxide Copper Gold (Moonta historic mines)
- ★ Iron Ore (1- Iron Duke mine; 2- Iron Baron mine; 3- Iron Knob; 4- Hercules prospect; 5- Ultima Dam prospect; 6- Bungalow prospect; 7- Cowell prospect)
- ★ Lead Zinc Silver (1- Menninnie Dam resource; 2- Telephone Dam prospect; 3- Goongoona prospect; 4- Galah prospect)
- ★ Gold prospects (1- Weedhanna; 2- Parkinsons Dam)