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# Jungle Dam and Yarlbrinda South Drilling Update

## **Jungle Dam**

- Encouraging silver and iron intersections from final assays of 2008 drilling
  - 40cm @ 313 parts per million (ppm) silver in an interpreted epithermal vein
  - 62m @ 36.3% iron within 8km long gravity target.
- Upgraded targeting concepts and exploration potential for shallow iron oxide-related deposits over a large 80km<sup>2</sup> prospective area.
- New soil geochemistry combined with gravity data defines additional targets for uranium, gold and base metals.
- Follow up aircore drilling is planned on specific targets with drilling of an accessible target already undertaken in December.

## **Yarlbrinda South**

• A scout traverse of aircore drilling across the Narlaby palaeochannel intersected prospective sediments upstream from the historical Yarranna uranium prospect.

Southern Uranium Limited (ASX Code: SNU) is continuing a steady and successful program of selective drilling in the Gawler Craton of South Australia in pursuit of its objective to convert from a well-placed grassroots explorer into a brownfields uranium producer.

Managing Director Mr John Anderson said up to \$4.6 million had been allocated to fund exploration work in FY2009, including a further aircore drilling campaign in the new calendar year to follow up exciting new uranium and iron ore targets within the Jungle Dam prospect.

"At Jungle Dam under Lake Gilles EL EL3479 on Eyre Peninsula, the final analyses from the drilling completed in September have provided very encouraging results," Mr Anderson said.

"The initial results of a major soil geochemical survey working out from Jungle Dam are also very promising. So we look forward to more soil results and new targets for our large ground holding on the Eyre Peninsula," he added.

### New Jungle Dam drill results

The principal targets at Jungle Dam are hydrothermal uranium and multi-commodity deposits related to iron oxide copper gold uranium (IOCGU) systems exampled by Olympic Dam. The project area offers a prospective subvolcanic environment at the intersection of the Moonta Granite Corridor with the Gilles Structure (refer to ASX release 12<sup>th</sup> June 2008 – "Major uranium and iron ore focused drilling programme commences at Jungle Dam on Eyre Peninsula").

The scout drill program intended in 2008 was limited to 1 diamond core hole and 9 reverse circulation percussion (RCP) holes (Table 1) using the only drill rig available at the time. The program investigated: 1) a uranium soil anomaly centred on the original Jungle Dam multicommodity prospect developed by Acacia Resources seeking base metals in magnetic horizons during 1994-1998; and 2) an adjacent regional gravity anomaly (Figure 1).

The drilling predominantly intersected quartzites, dolomitic marbles, calcsilicates and banded iron formations of the Hutchison Group. These units host the Menninnie Dam and Telephone Dam base metal prospects, Hercules iron ore prospect and Wilcherry uranium prospect along the continuation of the Gilles Structure being investigated at Jungle Dam.

From the new results, a narrow silver-rich interval intersected in the diamond hole JDDH002 (Table 2; Figure 1) is correlated with and confirms a prior equivocal silver intersection of 1m @ 70 ppm Ag at the bottom of Acacia aircore hole JDAC007 located 300m away.

The sample of the JDDH002 intersection is oxidised, disaggregated and had poor recovery. However the sulphidic mineralisation has chalcedonic and brecciated wallrocks and is interpreted to be within a weathered epithermal vein that supports a prospective subvolcanic setting. The vein structure projects southeast along a major gravity discontinuity that extends for at least another 1000m and provides opportunities for new hydrothermal targets at depth and along strike.

Broad intervals of anomalous uranium (to 127ppm), silver and iron were also intersected in JDDH002 with the best coherent interval of 2.6m @ 69ppm U, 0.66ppm Ag and 27.6% Fe (Table 2). These further support the potential for multi-commodity iron oxide related deposits.

#### **Additional Jungle Dam targets**

New soil geochemical data collected by Southern Uranium have successfully enhanced the definition of uranium, gold and copper targets in the wider Jungle Dam area. Bulk leach and partial leach analytical techniques were applied to maximise the detection of metal anomalies derived from the bedrock through a pervasive 20 – 40m thick cover of transported clays and sands that previously hampered exploration.

The geochemical patterns show NW and NNE orientations that mimic the regional structural model (Figure 1). This and the characteristic IOCGU metal associations with rare earths and other metals give confidence the geochemical anomalies are bedrock targets.

Of particular interest are: 1) uranium targets extending southeast along the projected epithermal structure intersected in the recent drilling; and 2) a number of large coherent targets coincident with 1-2 milligal gravity anomalies that may be caused by hydrothermal iron.

Two iron-rich intersections of goethite and martite along the 8km long, 3-4 milligal gravity anomaly also demonstrate substantial potential for iron ore deposits in altered and weathered banded iron formations (Table2; Figure 1).

## Planned follow up drilling at Jungle Dam

Mr Anderson said Southern Uranium intended to undertake wider and more comprehensive testing of the new targets throughout the Jungle Dam area using aircore drilling.

"This is expected to be less expensive and more effective in penetrating the transported cover than the prior drilling," Mr Anderson said. "Suitable drill rigs and crews are now available to do this drilling to the company's timetable."

Accordingly, an available drill rig and current work permits enabled an 11 hole aircore program to be undertaken early in December. This investigated the NNE oriented gold-anomalous structure adjacent to the original Jungle Dam prospect. Analyses are expected late January.

The other 12 soil targets primarily selected for uranium or copper anomalism but variously associated with elevated iron, silver, rare earth and other metals are nominated for aircore drilling early in 2009.

## Yarlbrinda South drilling

A 26-hole 2,507m aircore drill program was also completed in December at Yarlbrinda South under EL3160. The drilling traversed the interpreted palaeochannel and conductive sediments mapped by prior airborne electromagnetics upstream of the historic Yarranna uranium prospect. Intersected graphitic units will be evaluated with selective analyses for uranium content.

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Competent Person Statement: 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 fulltime 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.

Table 1 – Jungle Dam drilling, 2008									
Hole ID	Drill Method	Dip	Azimuth (True)	GDA94 Z53 mN	GDA94 Z53 mE	RL	Depth		
JDDH02	RCP/DD	-60	90	6360250	651099	230	339.45		
JDRC01	RCP	-60	90	6360255	651261	228	108		
JDRC02	RCP	-60	90	6361203	651772	222	180		
JDRC03	RCP	-60	90	6360704	652050	220	88		
JDRC04	RCP	-60	90	6360703	652049	222	195		
JDRC05	RCP	-60	120	6359976	651250	214	189		
JDRC06	RCP	-60	90	6359429	650882	228	180		
JDRC07	RCP	-60	90	6360026	651573	212	171		
JDRC08	RCP	-60	90	6357997	651800	221	195		
JDRC09	RCP	-60	90	6355250	652228	216	123		

Table 2 - Jungle Dam drilling Significant results from final analyses								
Hole ID	Downhole Width	From	То	Assay				
JDDH002 core	2.6m	122.4m	125m	69ppm U, 0.66ppm Ag, 27.6% Fe				
JDDH002 core	0.4m	228.6m	229m	313ppm Ag, 1290ppm W, 1495ppm Zn, 435ppm Cu				
JDRC007	24m	57m	81m	39.3% Fe				
JDRC009	62m	7m	69m	36.3% Fe				

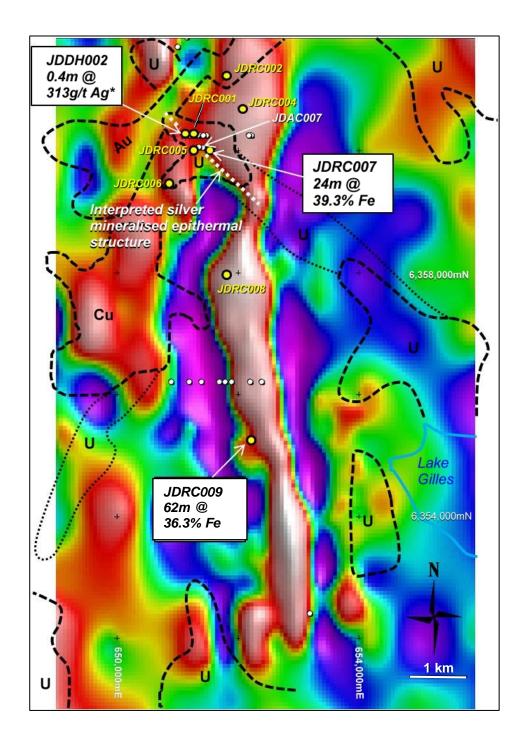


Figure 1- Gravity plan of Jungle Dam area showing 1994 Acacia drilling (white dots) and recent Southern Uranium drilling (yellow dots) with significant new analyses (\* see text for qualifications) and the interpreted epithermal vein structure. New soil geochemical targets (heavy black dash) and trends (lighter black dash) are also shown with the key anomalous element annotated.