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Southern Uranium locates new high-grade iron ore prospect at Jungle Dam on Eyre Peninsula

- New outcrops and detailed magnetic surveying delineate Central West prospect at Jungle Dam
- Rock chip samples assay 55.5% to 59.6% iron from limited outcrops within 2km-long magnetic zone
- Jungle Dam strategy revised to focus on potential for Direct Shipping Ore
- Detailed gravity survey planned to prepare for early drill testing at Central West and other similar new magnetic targets.

Southern Uranium Limited (ASX Code: SNU) today announced it has located new high-grade iron outcrops that further advance the iron ore prospects of the company's Jungle Dam project on the Eyre Peninsula of South Australia.

New prospecting, detailed magnetic surveying and a revised prospectivity model have upgraded the potential for shallow haematite as Direct Shipping Ore (DSO).

Managing Director John Anderson said Southern Uranium had revised its strategy at Jungle Dam to focus on the potential for higher grade and shallow haematite as DSO. It planned to commence drilling of highpriority areas at the earliest opportunity. The company's objective is to determine whether an iron ore resource could be established to Inferred Category by early 2011.

"Our prospecting located new high-grade outcrops of iron formation assaying from 55% to nearly 60% iron within a large magnetic zone named Central West," Mr Anderson said. "This significantly increases the prospectivity for shallow high-grade haematite at Jungle Dam.

"The new magnetic data maps the Central West Zone as a fold nose where the outcropping high iron grades and interpreted thicknesses indicate the original iron formation is structurally enhanced."

"In contrast, our initial drilling along the less disrupted iron formation in the Central Zone to the east showed grades of 20 to 40% iron and horizontal widths of up to 45 metres. Importantly, that drilling demonstrated that a 70m thick weathered blanket of higher-grade haematite overlies the primary magnetite iron formation."

The higher outcropping iron grades have refocussed Southern Uranium's exploration on the Central West Zone and other similar magnetic zones showing structural complexity. These areas have excellent potential for shallow high-grade haematite. Preliminary modelling of the new magnetic data at Central West indicates the weathered haematite blanket extends to 100m depth beneath the outcrops.

"Southern Uranium is preparing to do a detailed gravity survey over the Central West zone to better map the haematite-prospective areas," Mr Anderson said. "This will assist the prioritisation of targets for the next round of drilling planned to start as soon as a drill contractor is secured."





Southern Uranium Limited ABN 90 115 338 979

Tel: +61 7 3870 0357 www.southernuranium.com.au PO Box 343 Toowong, QLD 4066 info@southernuranium.com.au

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Jungle Dam project

The Jungle Dam iron ore project is held 100% by Southern Uranium Limited under Exploration Licence 3479 "Lake Gilles" (Figure 1) on east Eyre Peninsula (Figure 2). Over 14km of prospective iron formation are delineated by magnetics to extend south of the Hercules iron ore resource held by another company (Figure 3). The geological sequence is correlated with the Middleback iron formation at the OneSteel mining operations situated about 50km to the southeast of Jungle Dam.

Previous drilling was mainly in the relatively undeformed Central Zone (Figure 1) where magnetite dominant iron formations were found to be up to 45m wide and assaying 20 to 30% Fe (iron). An oxidised blanket of haematite extending from near-surface to about 70m depth generally assayed 30 to 40% iron with the best intersection of 10m @ 54% Fe.

New surveys and prospecting

The location of previously unmapped outcrops of iron formation at the Central Zone encouraged Southern Uranium to prospect for other outcrops in magnetically anomalous areas. A detailed magnetic survey was conducted over the wider Jungle Dam prospect area to better define the iron formation zones for further drill positioning. The survey was conducted with a helicopter flying at low-level on 100m line spacings in contrast to the prior government regional data acquired by higher flying fixed-wing aircraft on 400m line spacings.

The new magnetic data (Figure 4) revealed a complex structural pattern with multiple zones of iron formation including fold structures interpreted as anticlines (domes) and synclines (troughs), fold noses and attenuated limbs. A preliminary interpretation is shown in Figure 1.

New undrilled prospects – Central West, Farwest and Southern Zones

Prospecting located new outcrops of iron formation within the Central West anticlinal nose interpreted from an arcuate magnetic anomaly of about 2km in length. Three grab samples of the outcrops assayed 55.5 to 59.6% Fe which is substantially higher than the 20 to 40% Fe grades achieved for the outcrops and drill intersections in the Central Zone to the east. The initial assays also show acceptable levels of silica and phosphorus (Table 1) for the new Central West outcrop samples.

Sample	GDA94_	GDA94_							
ID	Z53mE	Z53mN	$AI_2O_3\%$	CaO %	Fe %	Mn %	Р%	S %	SiO ₂ %
393292	650989	6356198	2.1	0.73	58.51	0.555	0.25	0.065	2.87
393293	650984	6356176	3.56	0.14	59.55	1.115	0.095	0.035	4.3
393294	650386	6356214	4.84	0.82	55.52	0.174	0.092	0.106	6.57

Table 1: Assays, Rock Grab samples, Central West Zone

The outcrop grades and pattern of the magnetic anomaly indicate potential for a structurally thickened sequence of shallow higher-grade haematite iron ore at Central West. Preliminary modelling of the underlying unweathered magnetite iron formation provides width estimates for the iron formation of up to 100m and an indirect estimate of a vertical thickness of 100m from surface for the interpreted haematite blanket.

Similar diffuse and disrupted magnetic patterns in the new magnetic data (Figure 4) also indicate potential for haematite deposits over structurally enhanced iron formation positions at the Farwest and Southern Zones.

The three new prospective and undrilled zones are interpreted to lie within the same structural corridor containing the Wilcherry Hill skarn magnetite deposits and Weednanna gold deposit held by another company to the northwest (Figure 3). The high-level granites that formed these deposits are also likely to have contributed to the hydrothermal enhancement of the Middleback stratigraphy at Jungle Dam and the formation of the Southern Uranium's new Botenella Gate gold silver prospect (Figure 1) in the same corridor.



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Tel: +61 7 3870 0357 www.southernuranium.com.au PO Box 343 Toowong, QLD 4066 info@southernuranium.com.au ASX Code: SNU Page 4 of 5 **Figure 4:** Total Magnetic Intensity image for the new detailed helicopter-borne magnetic survey, Jungle Dam. Showing the northwest corridor of diffuse magnetic signatures interpreted as disrupted and potentially enhanced iron formation with overlying haematite potential



Priority – Central West

Southern Uranium's first priority is to follow up the strong outcrop assays at Central West. Further mapping and sampling is underway and a detailed gravity survey is being implemented to better define the haematite-prospective areas at Central West. This will facilitate drill planning and testing intended to commence within a month. A drill contractor is being sought.

The Company's objective remains to determine if an iron ore resource can be established to Inferred Category by early 2011.

For further information contact:

Mr John Anderson Managing Director Southern Uranium Limited Phone: 07 3870 0357 Rhyll Cronin Principal Consultant, Three Plus Pty Ltd Phone: 07 3503 5700 Mobile: 0412 846 202



Southern Uranium Limited is a minerals explorer with a focus on the diverse resource opportunities for copper, gold, silver, uranium and iron ore in the southern Gawler Craton of South Australia. The Company's highest priority exploration projects are Ridgeback with Hillside-style and IOCGU targets on northern Yorke Peninsula; the Jungle Dam iron ore prospect and numerous targets including the emerging Peterlumbo epithermal field with silver and gold potential on Eyre Peninsula.

Competent Person Statement: The information in this report that relates to Exploration Results and Mineral Resources 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 "Australasian 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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