

Quarterly Report



Southern Uranium

Our Corporate Focus

- Vision of becoming a copper gold silver and uranium developer through exploration and acquisition.
- Focus on the discovery of quality deposits in pedigree belts of Australia.
- Evaluating iron ore and vanadium opportunities also identified in established project areas.

Our Project Locations



Eyre Peninsula Iron Ore

1 Jungle Dam Prospect

Gawler Craton iron oxide copper gold uranium ("IOCGU") & related silver gold or uranium deposit styles

2 Ridgeback, northern Yorke Peninsula

3 East Eyre Peninsula (incl. Peterlumbo epithermal prospect and Yalanda Hill JV)

Eucla Basin roll front uranium

4 Challenger West & Tallaringa JVs; Warrior South

NT unconformity-style uranium

5 Rum Jungle

6 Calvert Hills (incl. Vanadis vanadium Prospect)

Queensland sediment- & volcanic-hosted uranium

7 Toolebuc.

8 Pandanus West

June 2010 Quarter

Key Points

- Successfully raised \$3.2M before costs in July through a 75% underwritten Rights Issue that increased cornerstone investors' holdings; CITIC Australia lifts to 20.75% and Talbot Group Holdings to 16.15%.
- Sadly, Ken Talbot died tragically in Africa on 20th June.
- Advanced modelling and access to Ridgeback copper gold targets in preparation for drilling next quarter. Awarded PACE collaborative drill funding to test these targets. Consolidated holdings over another prospective trend on northern Yorke Peninsula with award of contested Bute tenement application.
- Achieved strong iron grades at the Jungle Dam iron ore prospect. Further drilling planned to establish an inferred resource in the Central Zone.
- Mapping of new soil results identified three additional key prospects on Eyre Peninsula including an epithermal field at Peterlumbo with silver mineralised outcrops and extensive silver and gold soil anomalies.

MD's Summary Comment

SNU Managing Director John Anderson said:

"New funds raised via the Rights Issue will enable Southern Uranium to commence the drilling of the Ridgeback copper gold and Jungle Dam iron ore targets and to advance the exciting new silver gold prospects during the September quarter."

"Our strategy to utilise regional geochemistry and close prospecting is validated by the identification of the large and widely mineralised Peterlumbo area. We are taking the opportunity to improve on published maps by refreshing the geology and prospectivity using modern targeting concepts and exploration techniques."

"Southern Uranium's focus on the southern Gawler Craton in South Australia is successfully developing an expanding and diverse portfolio of discovery opportunities. To reflect this strategy, we propose to ask shareholders to consider changing the Company's name to Investigator Resources Limited at the AGM."

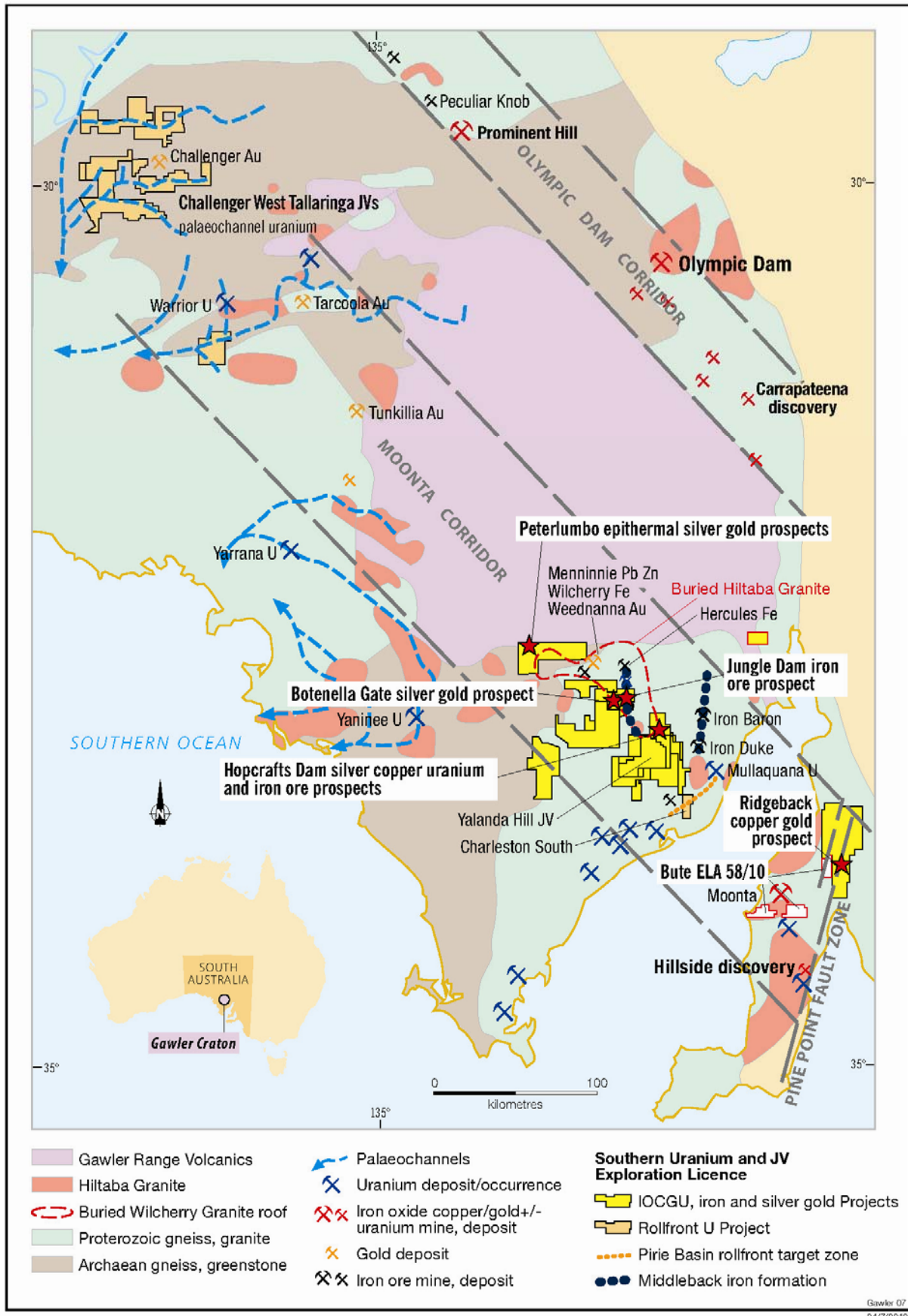
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Figure 1: South Australian project locations, regional targeting concepts and current prospects.



CORPORATE

Financial

On 14 July 2010 Southern Uranium successfully completed a 1:2 non renounceable rights issue at \$0.08 per share. The Company allotted 40,137,450 fully paid shares to raise \$3.21 million before costs of the issue.

The issue was 75% underwritten by Taylor Collison with a partial sub underwriting by cornerstone investor CITIC Australia Pty Ltd. After the issue, CITIC Australia's holding in Southern Uranium increased to 20.75%. Talbot Group Holdings Pty Ltd took up its entitlement and increased its holding to 16.15%.

The issue was completed despite the tragic news of Ken Talbot's death during June and the deep sadness this caused the Southern Uranium team.

Strategy

Southern Uranium continued to build on its strengths and develop targets in the southern Gawler Craton of South Australia. During the fund raising period, our team was focussed on negotiating access to the Ridgeback copper targets on Yorke Peninsula, developing the iron ore targets at Jungle Dam and ground truthing multiple soil geochemical anomalies elsewhere on Eyre Peninsula.

The successful identification of the Peterlumbo epithermal field and other prospects with soil geochemistry endorses the prospectivity and Southern Uranium's regional approach to targeting on Eyre Peninsula.

The returning focus to South Australia and the diversifying portfolio of resource opportunities held by Southern Uranium in that region are recognised by a proposal to change the Company's name to Investigator Resources Limited. The proposal will be put to Southern Uranium shareholders for consideration and a vote at the next Annual General Meeting.

Federal Mining Tax

The executive of Southern Uranium actively monitored and lobbied on the proposed Resources Super Profits Tax (RSPT) then the amended Minerals Resource Rent Tax (MRRT). The MRRT no longer directly affects Southern Uranium's potential operations. However we endorse the call for exploration and investment incentives like a Flow Through Share Scheme to apply to smaller exploration and mining companies to increase the opportunities for Australian exploration and resource discoveries.

OHS and Environmental

No incidents to report

EXPLORATION PROJECTS

Ridgeback Hillside-style copper gold prospect, EL4278 northern Yorke Peninsula SA (100% SNU)

Exploration Licence 4278 covers at least 30km of the interpreted northern extensions of the Pine Point Fault Zone (PPFZ) that hosts the new copper and gold discoveries at Hillside (Rex Minerals Ltd) about 60km south of the tenement (Figure 1). The prime Ridgeback targets are two magnetic anomalies located about 7km east of Bute with similar signatures to Hillside and modelled depths of 350 – 450m beneath the surface.

In recognition of the targets' potential, Southern Uranium was awarded collaborative funding of \$75,000 by the South Australian government in May to assist drill testing of the two magnetic targets.

Further modelling of the magnetic targets refined the optimal positions for the drill tests (Figure 2). Access was negotiated to the North Ridgeback magnetic target and preparations are underway to commence drilling the target in August-September.

Negotiations continue for access to the Southern Ridgeback magnetic target with the aim of drilling that target after harvest in December.

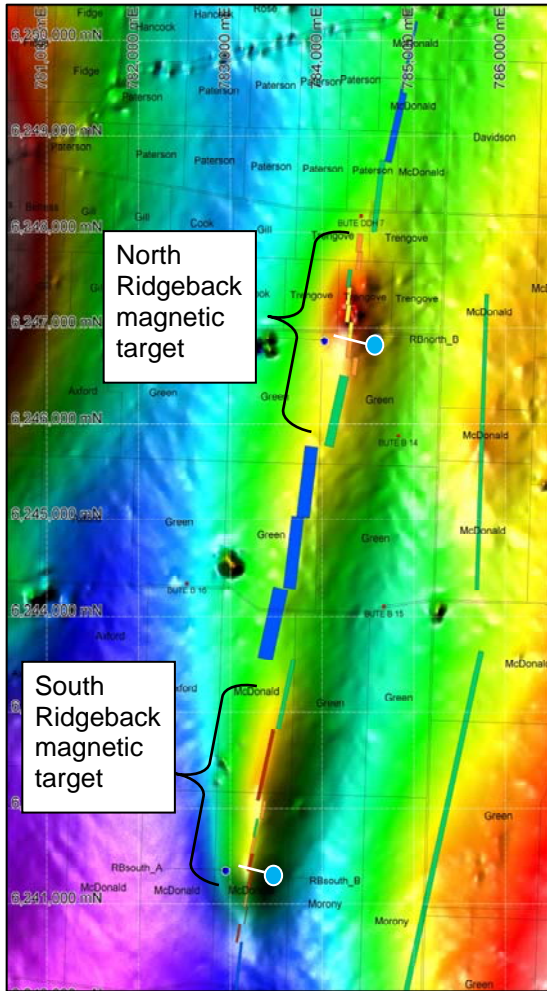


Figure 2: Magnetics Plan showing modelled Ridgeback magnetic targets and proposed optimal drill collars as large blue circles

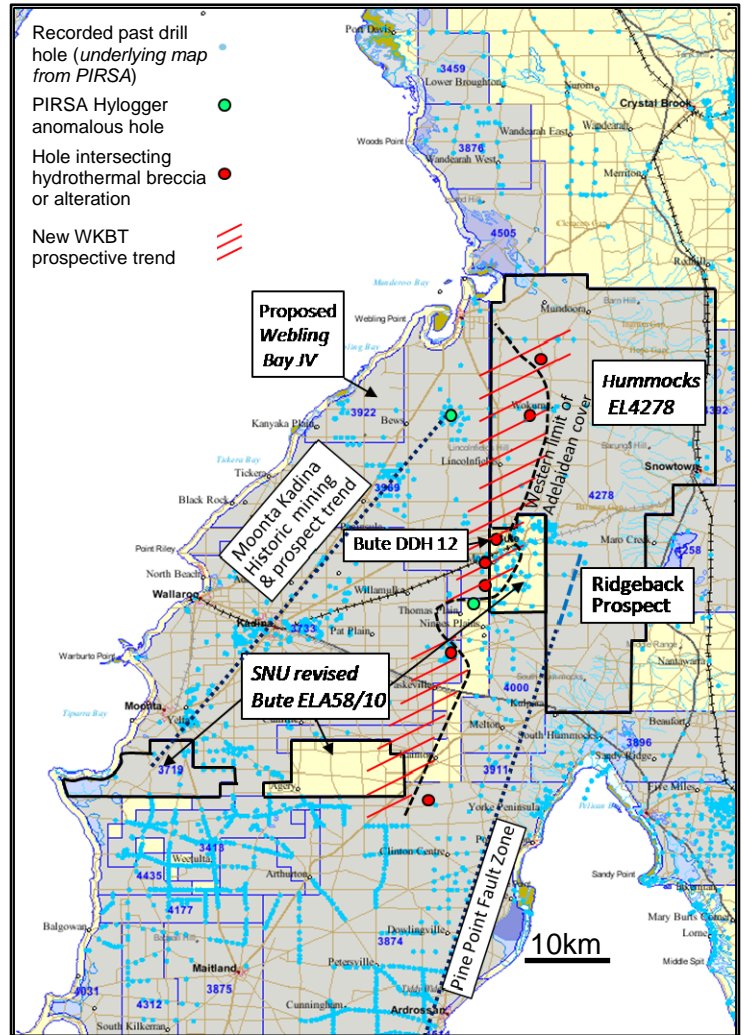


Figure 3: Summary Plan of northern Yorke Peninsula showing tenure and target zones

The environmental and cultural sensitivities of exploring farmland are recognised by Southern Uranium so the drilling will be designed and undertaken with consideration of and minimal impact on landowners' activities. A broader community relations plan is being developed to include our intention to expand our exploration activities in the Bute area.

Project development on northern Yorke Peninsula

Our focus on the IOCGU potential of NNE alteration trends was supported by a new report that two old holes scanned by PIRSA with their Hylogger spectral technology showed the most prospective alteration signatures adjacent to the WKBT trend. This trend was proposed by SNU as a new IOCGU prospective zone of old holes with alteration or brecciation and parallel to the Pine Point Fault Zone (Figure 3).

Our contested application for the southern extensions of the WKBT was largely successful with a revised grant offered as ELA58/10 for the highest priority Bute area. Here shallow holes centred on Bute DDH12 show haematitic brecciation, alteration and chalcopyrite mineralisation. The pending grant also covers the southern extensions of the Moonta-Kadina trend of historic mines and prospects where granite may provide opportunities for new IOCGU styles revealed by the Hillside discovery.

When granted, SNU will apply shallow exploration techniques to evaluate these high priority areas including the soil geochemistry approach developed on Eyre Peninsula.

The proposed joint venture at Webling Bay remains subject to conditions precedent being met.

Jungle Dam Iron Ore Prospect, EL 3479 Wilcherry Hill district, Eyre Peninsula (100% SNU)

The Jungle Dam prospect offers about 14km of prospective strike aggregated as four main target zones (Figure 4) in the Wilcherry district. Established magnetite and haematite resources are held by other companies to the north and northwest of Jungle Dam. The prospective stratigraphy is considered to be the Middleback iron formations that host the OneSteel operations 50km to the southeast of Jungle Dam. The Jungle Dam prospect is well located to transport infrastructure including the proposed shipping facility at Port Bonython.

Assays were received for drilling undertaken during the prior quarter. These confirmed the potential for shallow iron ore in the 3km Central Zone. A haematite blanket of 25 to 40m minimum true thickness was intersected on the three wide-spaced sections drill tested over about 2km strike length of the Central Zone. The haematitic zones start within 10 metres and extend on the sections drilled to about 70m below the surface (e.g. Figure 5). The iron assays for the haematite zones are generally greater than 40% with the best interval of 10m @ 54% Fe.

The underlying fresh magnetite iron formation is 20m to more than 45m wide with iron assays in the range of 20 to 30% Fe. The depth extent of the magnetite potential is open.

Drill samples have been reserved for preliminary DTR magnetic separation tests on the magnetite sections. Further drilling is planned to commence within two months to further investigate the widths and grades with the objective of establishing an inferred resource for the Central Zone. A core sample will also be sought to enable metallurgical testing of the haematite zone.

A helicopter airborne magnetic survey will commence next week to improve target definition for both the drilling in the Central Zone and for the other 11km of strike potential.

Jungle Dam Iron Project - Central Zone Intersections (XRF assays)											
Section	Hole		from (m)	to (m)	downhole interval (m)	Fe (%)	Al (%)	Mn (ppm)	P (ppm)	S (%)	Dominant iron mineralogy
6355250N	JDRC009		7	73	66	40.4	3.57	21321	2665	0.08	haematite
			78	98	20	19.8	2.33	1429	1648	0.05	magnetite
6356000N	JDRC012		0	16	16	33.5	3.17	338	2004	0.09	
		incl.	1	9	8	42.9	2.10	268	2888	0.05	haematite
6356000N	JDRC013	&	11	16	5	30.8	4.12	524	1436	0.17	haematite
			22	29	7	26.1	5.09	157	2199	0.14	haematite
6357250N	JDRC014		34	72	38	23.0	1.96	5914	1283	0.10	haematite
		incl.	77	102	25	41.8	1.17	12279	2212	0.16	transition
6357250N	JDRC015	&	102	112	10	31.3	0.75	8732	1707	0.17	magnetite
			63	106	43	37.4	1.26	4281	2178	0.08	
		incl.	63	87	24	45.9	1.96	4635	2557	0.11	haematite
		Incl.	69	79	10	54.0	2.10	3521	2264	0.10	haematite
		&	87	106	19	26.7	0.38	3833	1700	0.05	magnetite

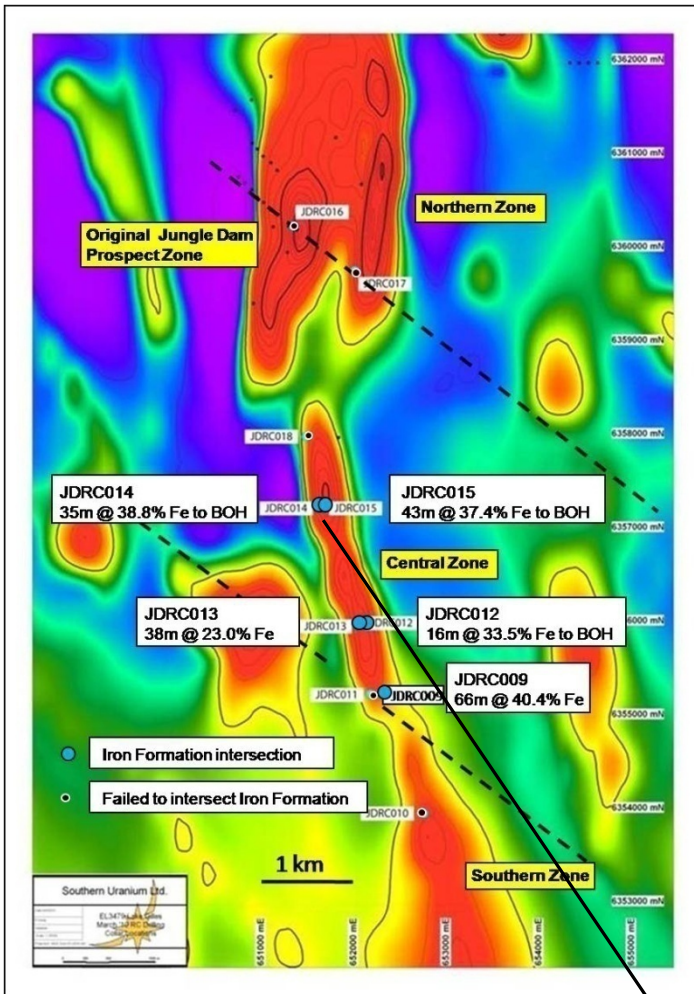


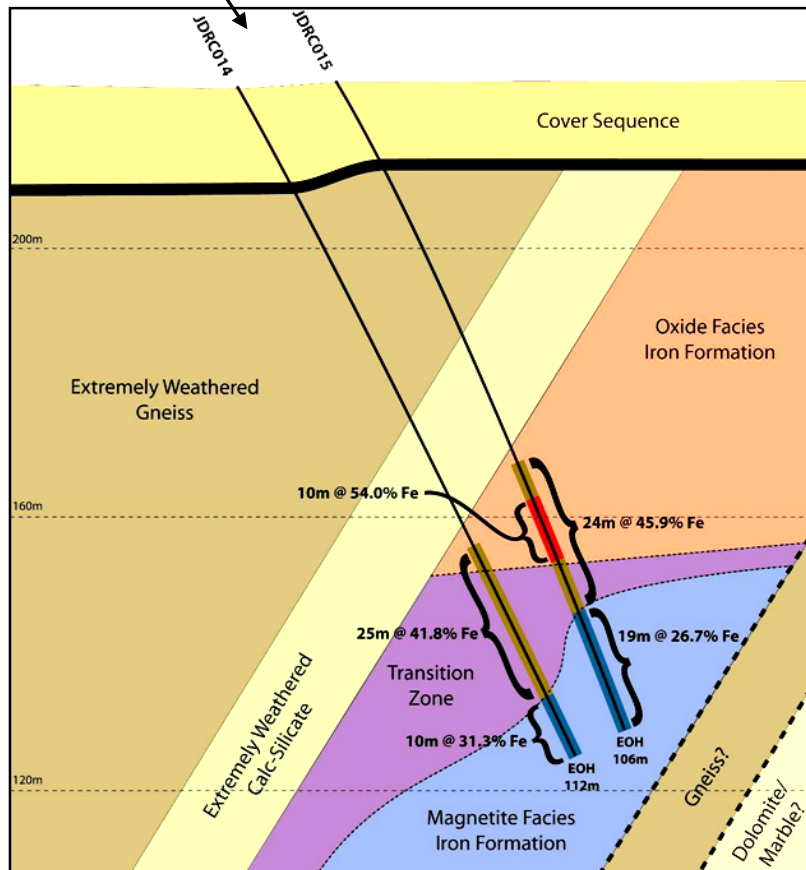
Figure 4: Jungle Dam Iron Ore Prospect – Drilling on magnetic image showing iron intersections and interpreted faults (dashed lines) disrupting the iron formation trends

● Iron formation intersection with +30% iron



Photo: CITIC representatives examining magnetite and haematite intervals in drill cuttings at Jungle Dam.

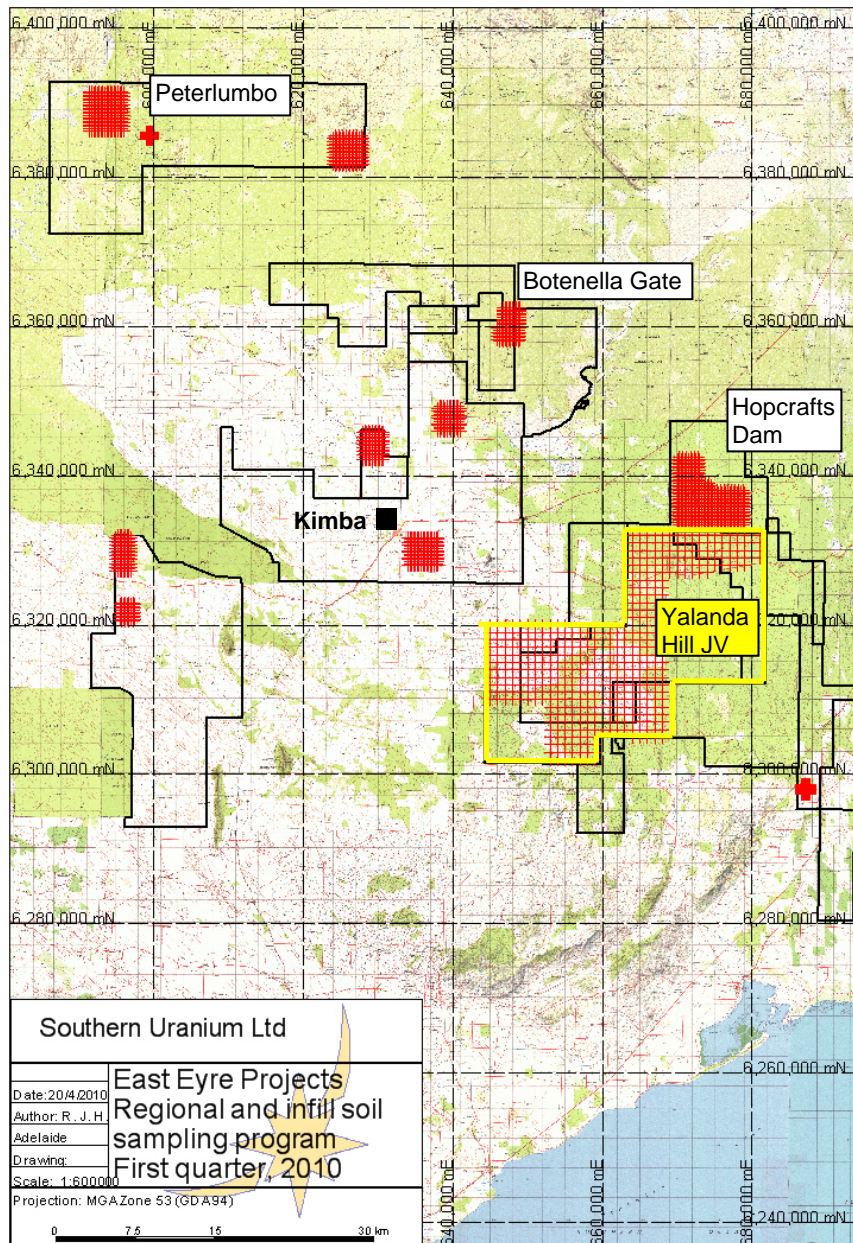
Figure 5: Section 6357250mN



East Eyre Peninsula Regional Programs (100% Southern Uranium tenements plus various joint ventures)

The soil geochemical program advanced during the quarter with all the analyses received for the nine infill areas and also the first pass sampling undertaken so far for the Yalanda Hill Joint Venture area (Figure 6). Strong coherent targets were defined in the Peterlumbo, Botenella Gate and Hopcrafts Dam areas.

Figure 6: East Eyre Peninsula soil sampling during the March Quarter



Peterlumbo Joint Venture EL4228 (75% SNU; 25% Mega Hindmarsh Pty Ltd)

Ground prospecting of soil anomalies identified a new epithermal field at Peterlumbo including low outcrops, subcrop and float of variously silver and gold mineralised altered rhyolitic volcanics and breccias over a 5km square area (Figure 7). Prospects delineated thus far are Helen Dam where outcrops assay up to 102ppm silver; other altered and sulphide mineralised volcanics yet to assayed and extending southwest of a silica alunite altered rhyolite breccia at Nankivel and another large zone of alteration and brecciation at Nankivel Northwest. Extensive soil anomalies indicate potential beneath soil covered extensions to the weak and sporadic outcrops. Northwest and northeast structural controls are evident in the outcrop and geochemical patterns that will assist the prioritisation of targets.

Peterlumbo is elevated to a priority project adding a quality silver gold opportunity to Southern Uranium's diverse portfolio. Further prospecting is continuing to follow up on the initial success.

A helicopter airborne magnetic and radiometric survey will be conducted in late July over the entire tenement area shown in Figure 7. The objective is to map structures in support of the targets initiated by the soil anomaly trends.

Hopcrafts Dam (part of EL3552 Moonabie) 100% SNU

At Hopcrafts Dam, large coherent silver, uranium or copper gold anomalies (Figure 8) only show rare quartz float in sand blanketed terrain. The Lonesome Pine, Torpedo Punt and Sturt targets show the northwest and north to northeast patterns predicted by the Moonta Corridor model and are first rank candidates for aircore drilling in 2011.

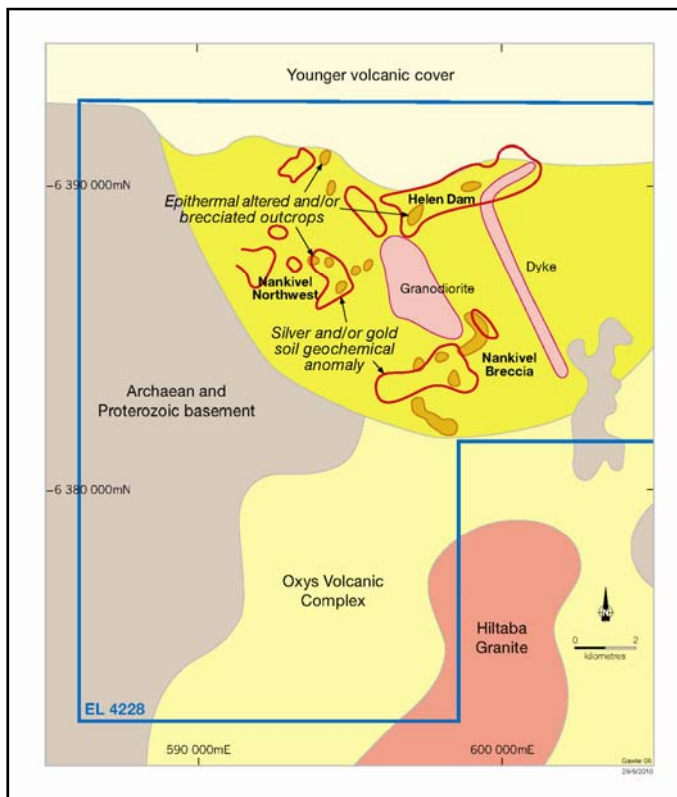
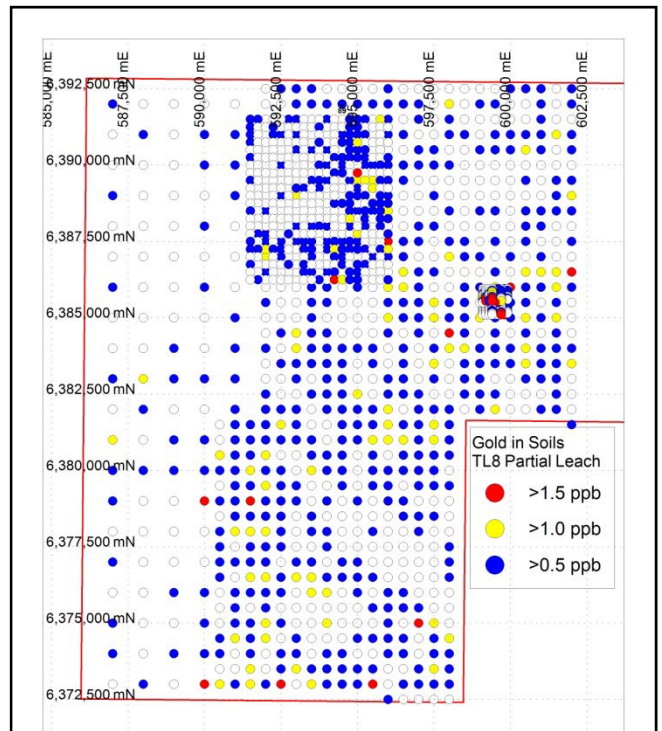
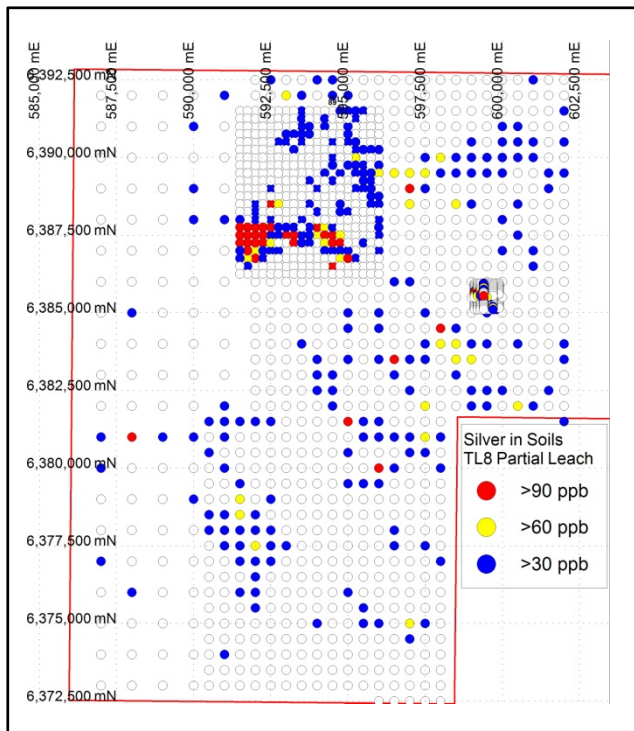
Iron and manganese rich rocks were recognised in two small outcrops at the original Hopcrafts Dam prospect mapped by a prior explorer. These are coincident with the southern end of a 10km long low amplitude gravity anomaly delineated by SNU's proprietary survey on a coarse 1km square grid. The gravity anomaly corresponds with a sand covered ridge and sporadic copper anomalies in the soil data. Further prospecting will be conducted to evaluate the iron, manganese and possible copper potential and need for further gravity surveying.

Botenella Gate EL4257 (100% SNU)

A coherent silver and gold target was defined over a 3km by 500m area by soil sampling on an infill 250m grid. Prospecting did not locate any surface indications through the soil cover. The northwest orientation, coherence and amplitude of the silver and gold anomalies indicate a structurally controlled bedrock source. The target is located 3km west of the Jungle Dam silver prospect where SNU intersected 0.4m @ 314ppm Ag in an interpreted northwest oriented vein under much weaker soil anomalies.

A close-spaced calcrete sampling program is underway to better define the geochemical target for likely drill testing.

Figure 7: Soil geochemistry targets & preliminary geological interpretation of the Peterlumbo epithermal prospects



Photos:

A - Gold anomalous volcanic float within the Nankivel Northwest soil anomaly;
B - Silver and sulphide mineralised breccia subcrop at the Helen Dam prospect

Figure 8: Soil geochemistry targets & residual gravity image for the Hopcrafts Dam area

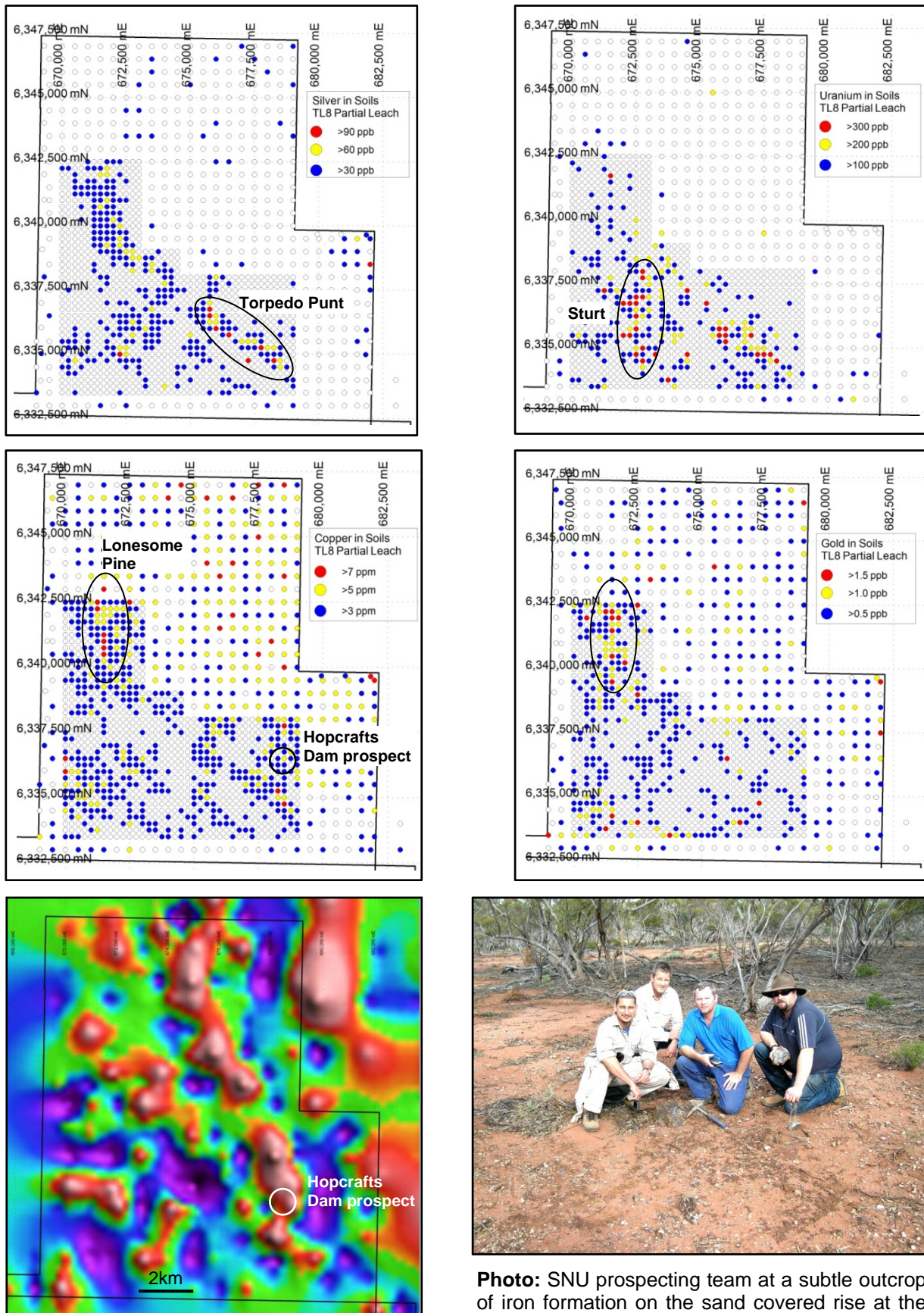


Photo: SNU prospecting team at a subtle outcrop of iron formation on the sand covered rise at the Hopcrafts Dam prospect

Yalanda Hill Joint Venture ELs 3473, 4316 & 4351 (Adelaide Resources Ltd. 60%; Southern Uranium 40% and increasing to 60% through \$250,000 expenditure over two years commencing September 2009.)

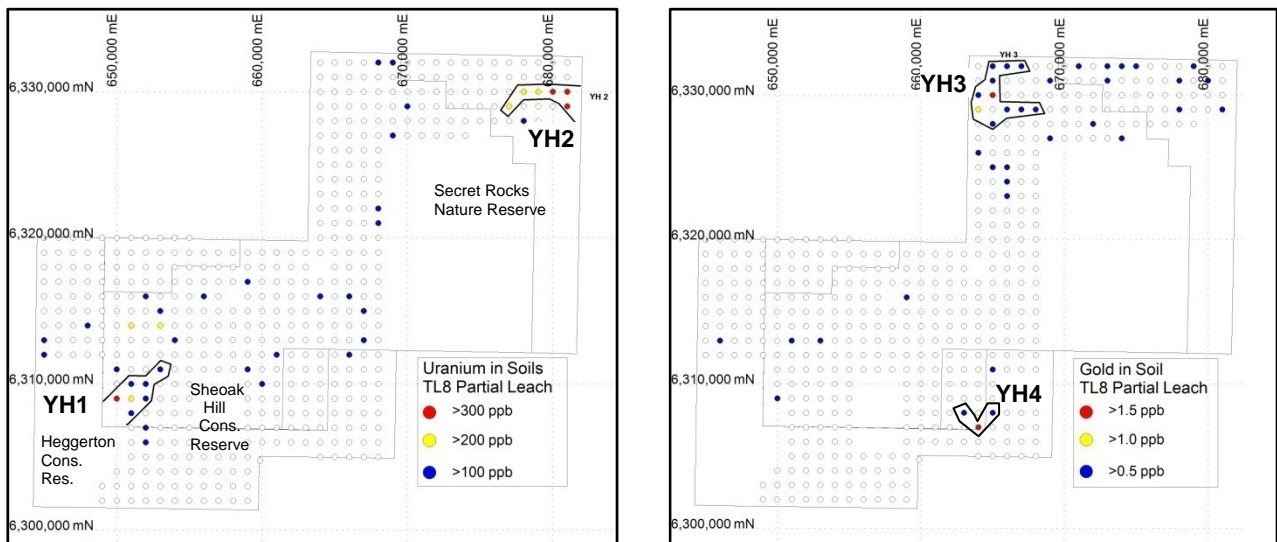
The first pass soil sampling of the remaining 35% of the JV area was delayed by access protocols required for nature and conservation reserves. These are being designed with the aim of recommencing the first pass sampling in the September quarter.

Analyses were received for the 503 first pass soil samples collected on the 1km square grid thus far. High order uranium anomalies were identified as YH1 and YH2 shown on Figure 9. YH1 is a coincident uranium, rare earth and zinc anomaly with a peak uranium value of 1,569ppb U. The immediate extensions of YH1 are open to sampling underway on farmland between the anomaly and the Heggerton Reserve to the southwest. YH2 is a coherent area of uranium only anomalism.

YH3 is a zone of sporadic copper gold and silver anomalism and YH4 is a single point gold high that warrants ground checking in view of gold mineralisation located at similar anomalies elsewhere on Eyre Peninsula.

Field checking and infill soil sampling are planned for the four anomalies in conjunction with the completion of the first pass sampling. The proposed gravity surveying was delayed until the access protocols were trialled by the soil sampling in the reserve areas.

Figure 9: First pass soil anomalies, Yalanda Hill JV.



ROLLFRONT URANIUM PROJECTS, SA

Charleston South, Eyre Peninsula

The southern portion of Moonabie EL3552 at the south end of the Eyre Peninsula tenements (Figure 1) contains the western edge of the Pirie Basin about 60km southwest of the recent Mullaquanna uranium discoveries by Uranium SA Ltd.

A review of the past drilling for roll front uranium did not identify any immediate opportunities under the new Mullaquanna model so the project was de-prioritised for 2010.

Challenger West (49% SNU) and Tallaringa (30% SNU) Joint Ventures, Eucla Basin

The joint ventures continue to be managed by JV partner Mega Hindmarsh Pty Ltd. No developments were reported during the quarter.

Warrior South EL4471, Eucla Basin (100% SNU; uranium rights only)

No activity

UNCONFORMITY URANIUM PROJECTS Northern Territory

Calvert Hills Joint Venture Project EL24837 (Southern Uranium 75%; Uranium West 25%)

The project is situated 100km west of the Westmoreland uranium field and has similar geological and structural ingredients for shallow-covered unconformity-style uranium deposits.

During 2009, five areas with the highest uranium and vanadium potential were nominated including the Vanadis vanadium prospect. A mapping trip is planned before the end of the dry season with the priority of establishing a drill strategy for the Vanadis prospect.

Rum Jungle Joint Venture Project EL24867, Northern Territory (Uranium West Ltd 100%; Southern Uranium has right to earn to 50%)

The project covers the basal unconformity and prospective northeast structures in the area between, and not including, the Browns and Mount Fitch deposits.

No activity took place as possible drill targets are being considered.

VOLCANIC-HOSTED URANIUM PROJECT

Pandanus West Joint Venture EPM15041, North Queensland (Epsilon Energy 40%; Southern Uranium 60%)

The project covers two areas of historic uranium prospects and regional extensions with potential for Ben Lomond-style volcanic-hosted deposits. The only drilling was undertaken during the 1970's with a number of uranium intersections reported including the best intersection of 10m @ 0.53% U₃O₈.

No activity occurred as the potential for deep uranium targets remains under review.

Mount Brown Joint Venture, North Queensland (Mantle Mining Corporation 100%; Southern Uranium has right to earn to 51%)

The project area is located immediately to the east of the Pandanus West joint venture. The tenement package covers geology with potential for volcanic-hosted uranium deposits as exemplified in the region at Ben Lomond and Maureen.

Under review

SEDIMENT-HOSTED URANIUM PROJECT

Toolebuc Project, Cloncurry-Boulia Districts, Queensland (Southern Uranium 100%)

The aim of the project is to secure the most prospective parts of the uraniferous Toolebuc Formation where groundwaters draining the Eastern Succession basement are likely to form roll front-style deposits in reduced palaeochannel sediments.

Under review

Corporate

The quarterly corporate and administration costs were A\$341,000 and the direct exploration expenditures were A\$666,000.

The Company held A\$1.01 million in cash at the end of the report quarter. An additional A\$3.21 million was raised before costs via a Rights Issue in July 2010.

Capital Structure

As at 28th July 2010:

- Shares on issue 155,137,450
- Unlisted Options 2,200,000

Substantial Shareholders

As at 28th July 2010:

- Talbot Group Holdings Pty Ltd – 16.15%
 - CITIC Australia Pty Ltd – 20.75%
-

Directors & Management

Mr Roger Marshall OBE (Chairman)
Mr David Jones (Non Exec. Director)
Mr Bruce Foy (Non Exec. Director)

Mr John Anderson (Managing Director)
Mr Garry Gill (CFO and Company Secretary)
Mr Barry Willott (Exploration Manager)

Competent Person Disclosure:

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.

For further information please contact

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