Date:1st October 2009

Acceleration of new SA project on Hillside trend

- **Regional extensions to Hillside trend secured on South Australia's northern Yorke Peninsula.**
- **Two discrete magnetic targets already identified with Hillside attributes.**
- **Minimal gravity data and past drilling show wider potential for other iron oxide- hosted copper gold uranium (IOCGU) targets at shallow depths.**
- **Extensive gravity surveying to identify additional targets for early drill testing.**

Southern Uranium Limited (ASX Code: SNU) has raised the exploration priority of the company's new 100 per cent-owned Northern Yorke Peninsula tenement EL4278 and brought forward planned gravity surveying and drill testing of the project.

The 1,000 sq km tenement area east of Bute township was granted to Southern Uranium on June 30 this year and includes at least 30km of the northern extension to the Pine Point Fault Zone (PPFZ).

The PPFZ hosts the new Hillside copper gold and uranium discoveries made by Rex Minerals Limited (Rex) that are situated 60km south of EL 4278 (Figure 1). These discoveries elevated the prospectivity of the PPFZ as an important regional structure with IOCGU potential.

Southern Uranium identified the extensions to the PPFZ and applied for the Northern Yorke Peninsula project area in January this year immediately following Rex's announcement of significant exploration progress at Hillside.

Managing Director John Anderson said Southern Uranium had already identified two magnetic targets in the PPFZ, referred to as the Ridgeback targets, with signatures of similar dimensions to the Hillside target.

"However we expect to define other shallow IOCGU targets with extensive gravity surveying planned to start soon," Mr Anderson said. "The Hillside discovery in 2008 supported an industry-wide assessment that more IOCGU discoveries would be made in the Gawler Craton following the Prominent Hill and Carrapateena discoveries respectively made in 2001 and 2005. Our project on northern Yorke Peninsula is in one of the prime IOCGU prospective positions in the Gawler Craton and we will be drill testing at the earliest opportunity."

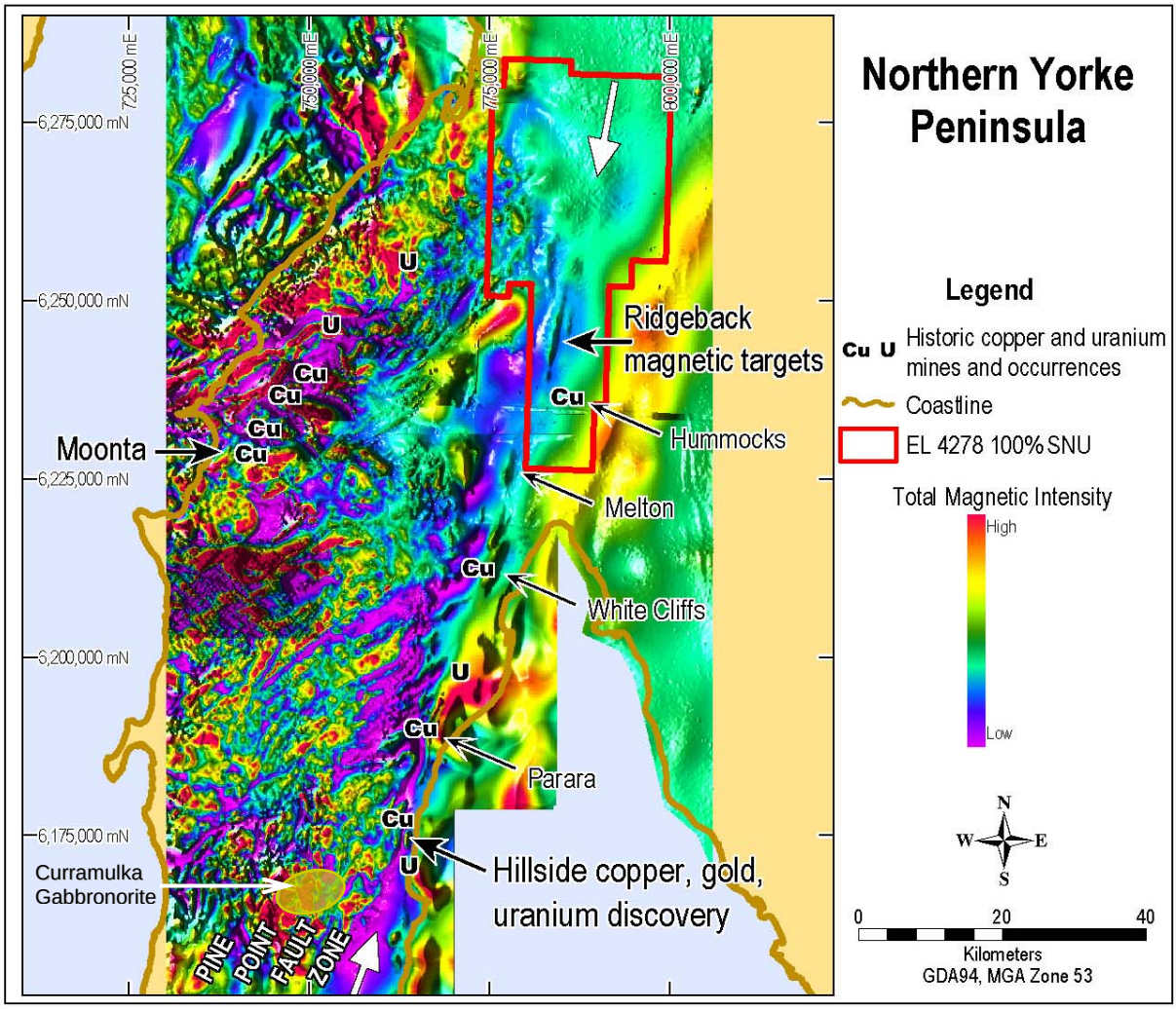
Southern Uranium's gravity surveying will seek gravity signatures for non-magnetic haematite-dominant targets adjacent to the new Ridgeback magnetic targets, but these non-magnetic haematite metal targets may also occur elsewhere in the PPFZ.

"Southern Uranium is giving the Northern Yorke Peninsula project its highest priority and aims to be drilling the Ridgeback magnetic and anticipated new gravity targets over the coming summer," Mr Anderson said.

"Ridgeback is a great acquisition for Southern Uranium that complements our ground breaking geochemical approach on Eyre Peninsula and adds to our drive to diversify into copper gold as well as uranium exploration.

"We are looking forward to developing the area's potential by applying our team's extensive exploration experience at Mount Isa and Broken Hill to our proposed program at Ridgeback."

Figure 1: Magnetic image showing Pine Point Fault Zone, associated mineralisation and magnetic targets including the Ridgeback targets within SNU tenement EL4278.
(Magnetic image: Reprocessed public airborne magnetic data – filtered, reduced to pole (RTP) total magnetic intensity (TMI); western sun angle. Acknowledgement – Matt Hutchens, AsIs International)



Discussion

Southern Uranium's analysis of public and past exploration data for the northern Yorke Peninsula has confirmed the significant potential within the Company's tenement. Advanced processing of airborne magnetic data refined the location of the PPFZ and immediately identified two magnetic targets of 2.5km and 1km length within the tenement (Figure 2). These magnetic anomalies, referred to as the Ridgeback targets due to their proximity to the Barunga Range, are similar in size to the signal over the magnetite body hosting the Hillside structures and associated copper gold and uranium deposits.

A series of such magnetic targets is now identified by explorers at regular intervals along the PPFZ; from Hillside in the south, on to Parara, White Cliffs, Melton and then Ridgeback at the northern end of the PPFZ (Figure 1). These are likely to represent positions along the PPFZ where fluids of the Hiltaba mineralising event were focussed and deposited iron oxides and metals in potentially large and high grade deposits. Small historic copper and uranium occurrences are encouragingly coincident with the southern magnetic targets along the PPFZ, but are absent at Ridgeback due to a cover of younger Adelaidean sedimentary rocks preventing prospecting of the northern end of the PPFZ (Figure 3). A copper occurrence at the Hummocks within EL4728 is hosted by Adelaidean sediments well above the unconformity with the basement rocks, so it is not directly related to the IOCGU targets being sought.

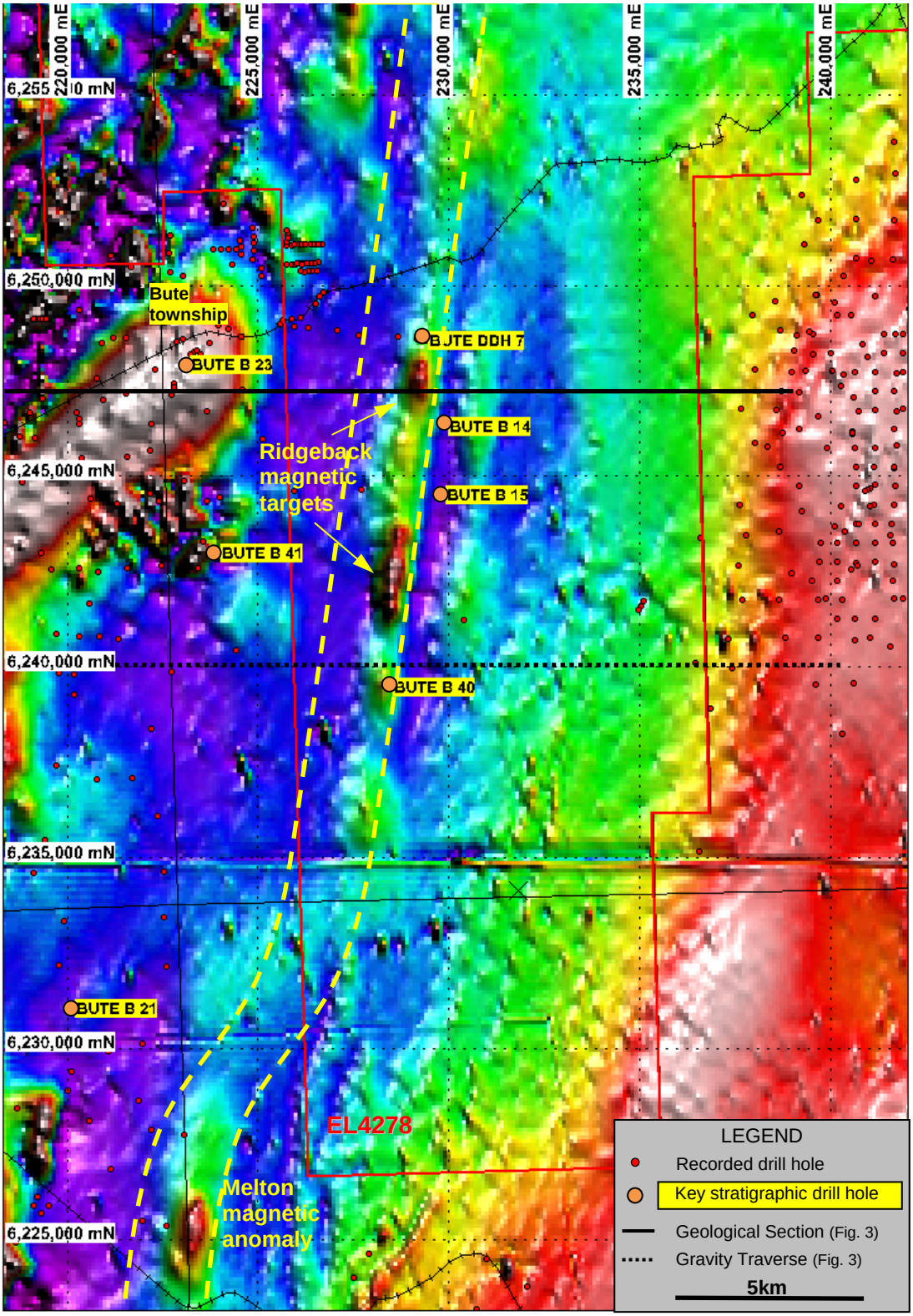
A number of key attributes give the Ridgeback area a highly elevated status with potential for a range of copper gold uranium styles. These include magnetite-hosted IOCGU deposits (e.g. Hillside and Ernest Henry); haematite-hosted IOCGU deposits (e.g. Prominent Hill) and possibly Mount Isa styles of silica-dolomite hosted, high-grade copper deposits.

Those attributes are:-

- Past drilling in the vicinity of the magnetic targets intersected very encouraging and extensive geology of copper-anomalous mafic intrusives as potential metal source rocks, dolomitic and haematitic siltstones as prospective host rocks and direct indications of iron oxide alteration and sulphide mineralisation (Figures 3 & 4).

  The key drilling (Bute B 7, 14, 15 and 40; Figure 2) was undertaken by the Geological Survey and North Broken Hill Limited in 1974 and 1976. This was largely aimed at Mount Isa style targets adjacent to the Torrens Hinge Zone, a major structure that separates the Stuart Shelf from the Adelaide Geosyncline. The Torrens Hinge Zone is now recognised to correspond with a NNW structure called the G2 that was a focus for the formation of several IOCGU deposits including Olympic Dam. As the IOCGU exploration model was not developed until some years after the Olympic Dam discovery in 1975, the investigators in the 1970's did not recognise nor test the IOCGU potential of the PPFZ as the southern extension of the Torrens Hinge Zone.

Figure 2: Enlarged and further processed magnetic image showing the interpreted extension of the Pine Point Fault Zone and the Ridgeback magnetic targets at the south end of EL 4278**.**
(Magnetic image: RTP first vertical derivative (1VD) of TMI; Acknowledgement: Matt Hutchens, AsIs International.)



The dolomitic siltstones of the Wandearah Formation intersected in holes such as B21 and B41 are similar in rock type and age to the host rocks at Mount Isa. The intersected mafic intrusives were collectively named the Bute Metadolerite by the Geologic Survey and are correlated with the Curramulka Gabbronorite near Hillside (Figure 1). Such mafic intrusives are considered as an important component of the Hiltaba Suite that is generally interpreted to have produced most of the heat, fluids and metals to form the IOCGU deposits in the Gawler Craton including the largest example at Olympic Dam. Copper sulphides are also present in the basal sediments of the Adelaidean cover, possibly remobilised along the unconformity from target mineralisation in the basement.

- The past drilling also showed the Adelaidean cover progressively deepens to the east with expected cover depths of 200 to 450 metres over the Ridgeback targets. This is relatively thin compared with recent deep holes drilled by many companies through similar cover on the Stuart Shelf closer to Olympic Dam. The thinner cover at Ridgeback is more permissive for economic deposits particularly for the Hillside and Mount Isa target styles which have the potential for higher grades of over 3% copper.

Figure 3: Interpretive geological section showing the conceptual Ridgeback targets for variants of the IOCGU deposit model. This is based on magnetic interpretation, past drilling and projection of the nearest gravity profile located at the southern end of the target zone.

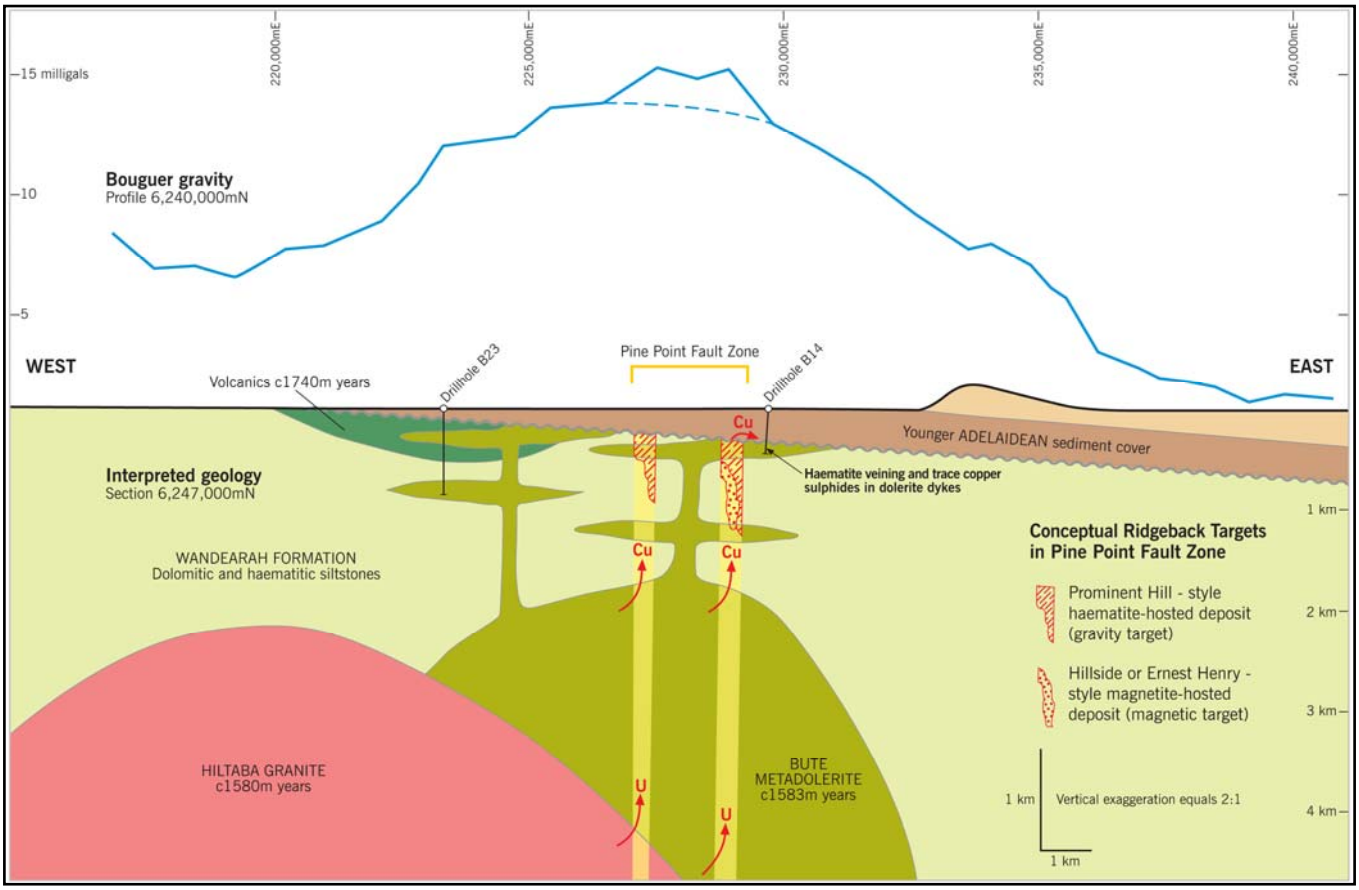


Figure 4:

Photo - Haematite chlorite silica and carbonate veins in an altered dyke of Bute Metadolerite. Drill hole Bute B14 - downhole depth is 387.6 metres. Trace copper sulphides in the dyke are not visible. The hole is interpreted to have tested 500m away from the main target zone.

Drilled in 1976 by North Broken Hill Limited for Mount Isa-style targets in the Wandearah Formation before the Olympic Dam/IOCGU model was developed.

- Limited past gravity surveying shows firstly, broad scale anomalies that may reflect additional large bodies of source Bute Metadolerite beneath the Ridgeback area and secondly, target scale anomalies that are yet to be fully delineated.

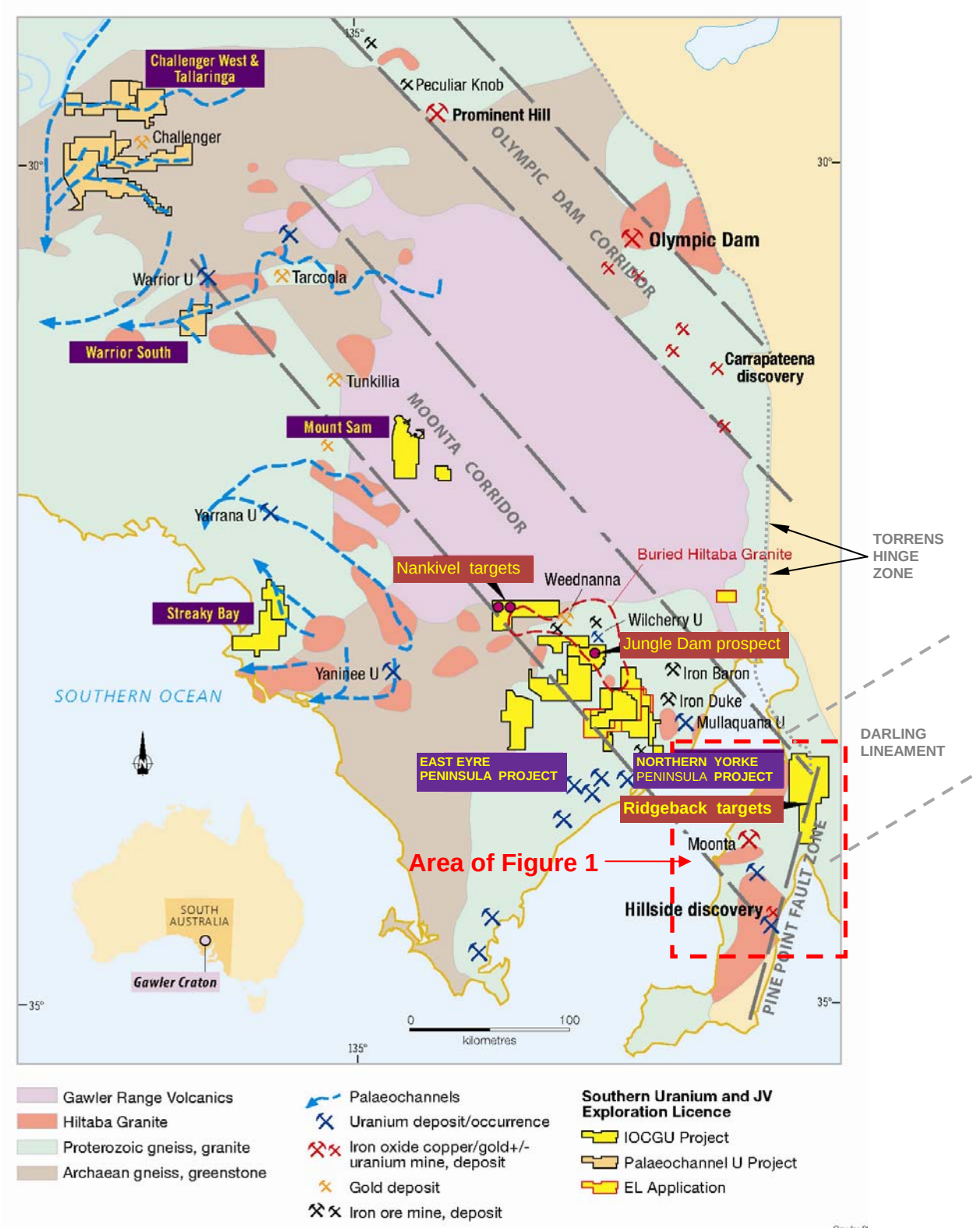
  The only effective surveying was an east-west traverse of gravity readings (Figure 3) along roads at the southern end of the magnetic targets (Figure 2). This shows a broad 9 milligal peak probably due to a large dense body of Bute Metadolerite beneath the drill intersections that is potentially a copper source to the targets in the PPFZ. Three data points along 2km of the gravity traverse show additional 1-2 milligal anomalous highs coincident with the PPFZ. This is highly encouraging for dense rocks with prospective haematite enrichment directly south of the main Ridgeback targets.

Another positive attribute of the northern Yorke Peninsula area is its location at the intersection of three major metal corridors (Figure 5). These corridors are firstly, the Torrens Hinge Zone (G2) structure projecting NNW through Olympic Dam; secondly, the Darling Lineament trending NE through Broken Hill; and thirdly, the Moonta Corridor of Hiltaba Granites and multi-metal deposits proposed by Southern Uranium to trend from Moonta across the Eyre Peninsula and parallel to another NW corridor containing the Olympic Dam and Prominent Hill deposits (Figure 5).

Mr Anderson said: “These metal corridors were recognised by the late Dr Tim O’Driscoll who used the targeting technique to contribute to the Olympic Dam discovery(1). We are pleased to be following his innovative work by using these corridors to confirm a new area with high IOCGU potential that has surprisingly so little gravity surveying. To paraphrase Dr O’Driscoll, northern Yorke Peninsula is at the cross roads.”

(1) *Reference: O'Driscoll, E.S.T., 'Broken Hill at the cross roads', Australasian Institute of Mining and Metallurgy. Broken Hill Conference 1983 (Parkville, 1983), 29-47. (Conference series no.12).*

Figure 5: Regional setting of the Ridgeback IOGCU targets, northern Yorke Peninsula showing the highly prospective position at interpreted structural intersections.



Further gravity surveying for haematite-rich metal targets is therefore highly desirable so Southern Uranium is planning to survey much of the southern part of EL4278 as soon as access is arranged with the landowners. This surveying will be extended north of the Ridgeback targets to include another magnetic anomaly that may be in an offset continuation of the PPFZ.

The gravity signatures of non-magnetic haematite-dominant targets will be sought adjacent to the Ridgeback magnetic targets but may also occur elsewhere in the PPFZ.

Southern Uranium will consider using ground-based electromagnetic geophysical surveying to refine targeting for high grade copper sulphide targets. The Southern Uranium team includes considerable experience with the geology and use of geophysical methods to target base metals and gold at Mount Isa, Ernest Henry and Broken Hill and will be applying their advantageous experience to the North Yorke Peninsula project.

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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.*

Southern Uranium Limited is a uranium, copper and gold focussed resources company with a strong platform of active exploration properties and drill targets in pedigree belts of Australia.

The Company aims to grow into a major explorer and developer by discovering new large resources that will compete for the anticipated shortfalls in global supply.