ASX Release **ASX: RSL**
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RESOURCE STAR DEFINES TARGETS AT HAYES CK SOUTH & MARRAKAI URANIUM PROJECTS, NT

Well-defined targets generated by aeromagnetic and multi-spectral radiometric surveys over key parts of Resource Star's Northern Territory uranium exploration portfolio.

Uranium channel radiometric anomalies lying along, or disrupted by, faulting seen in the aeromagnetics have been defined at both Marrakai and Hayes Creek South.

Key Results:

- **Improved geophysical dataset acquired**
- **Existing uranium targets refined and new targets generated:**
  - Discrete, fault-related targets defined at **Hayes Ck South**, including a 2.5km long anomaly, potentially structurally linked to the recent nearby Thunderball uranium discovery
  - Broader features, with associated fault disruptions at **Marrakai**

Upcoming Activities:

- Mapping and sampling of the defined anomalies
- Systematic shallow reconnaissance drilling planned during 2010 for each project

Resource Star Ltd (ASX: **RSL**) today announced that it has defined uranium channel radiometric anomalies lying along, or disrupted by, faulting defined in aeromagnetics forming the focus of ground exploration during the upcoming field season, to commence shortly.

Interpretation of the recently completed airborne geophysical survey over two of RSL's 100%-owned project areas in the Northern Territory has significantly improved definition and enhanced the quality of targets.

The strongest of the Hayes Creek South anomalies are interpreted to be on a splay of the Hayes Creek Fault Zone.

The processing and interpretation of the final, larger phase of the survey at the Edith River Uranium Project is still underway, and will be completed and reported shortly.

Background

Resource Star holds a number of mineral tenements in the Northern Territory for uranium exploration in the prospective Pine Creek Orogen, and has recently completed a detailed low level airborne geophysical survey over a number of these projects.

The 3,250 line kilometre program was conducted by GPX Surveys, with 100 metre spaced flight lines and 60 metre flight height. This work is a more detailed multi-spectral radiometric and magnetic survey than previously completed, and it has significantly enhanced definition of previously identified areas of interest.

Interpretation of data from this survey has generated a range of high priority uranium targets. None of these targets have been previously explored. Preliminary reconnaissance will be completed, to be followed by mapping, sampling and shallow drill testing as appropriate.

The magnetic data has confirmed structures, which are associated with the known regional uranium occurrences, including the nearby Thunderball discovery (ASX: THX).

At **Hayes Creek South** (EL24432) previous analysis had defined areas of interest (Fig 1) along fault traces mapped as being splays associated with the regionally important Hayes Creek Fault Zone.

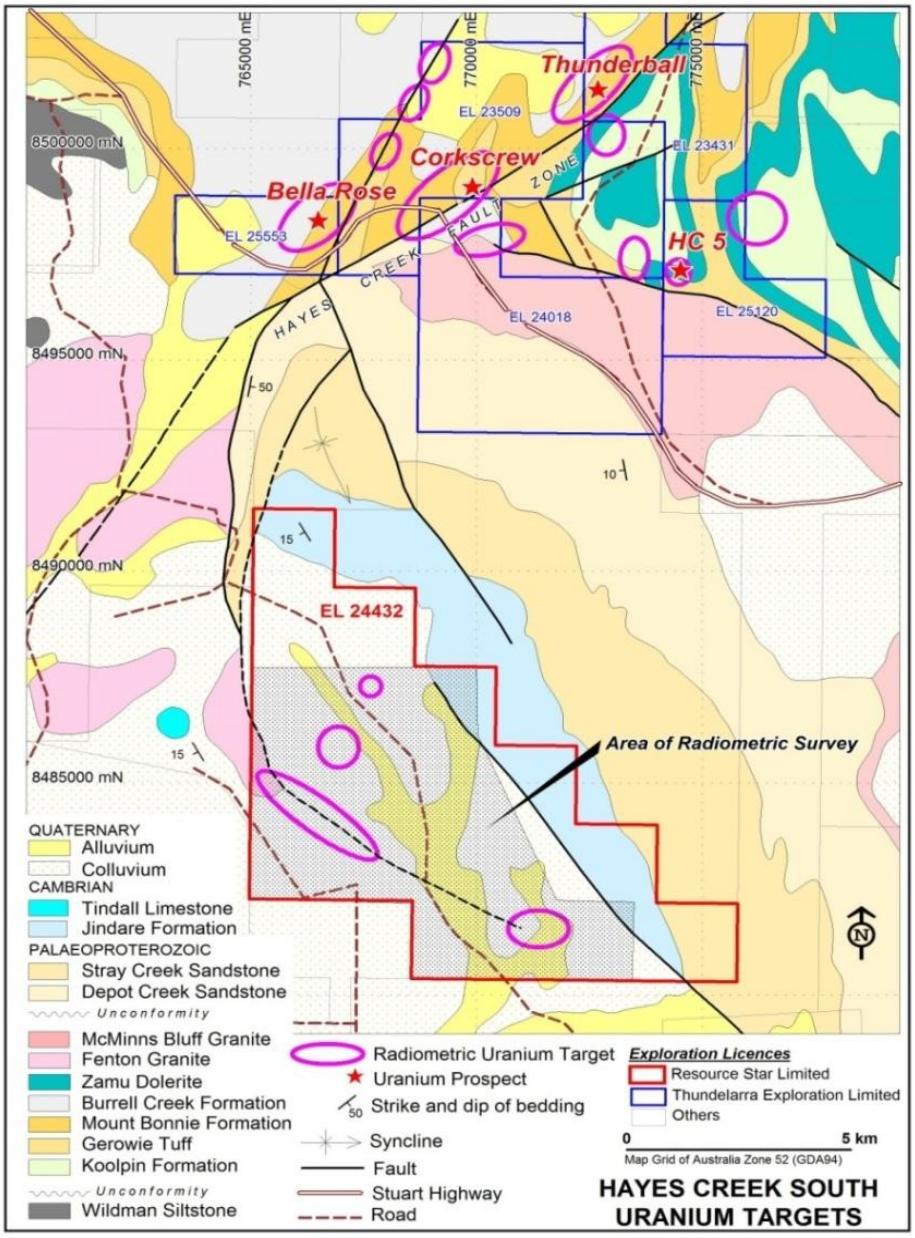

Figure 1: Structural and Geological setting of the Hayes Ck South Project defining areas of interest based on government mapping and regional geophysical surveys

The detailed airborne geophysical work in the **Hayes Ck South** lease has significantly enhanced the quality of original main target, and increased the priority of the previous poorly-defined anomalies; the original target will now be able to be rapidly and more accurately assessed, and new targets have been defined that would not previously have been investigated.

Most of the earlier areas of potential interest are now well defined as discrete uranium channel anomalies (yellow ovals, Fig 2b), with the strongest responses confirmed to lie along interpreted fault traces defined in the aeromagnetic data.

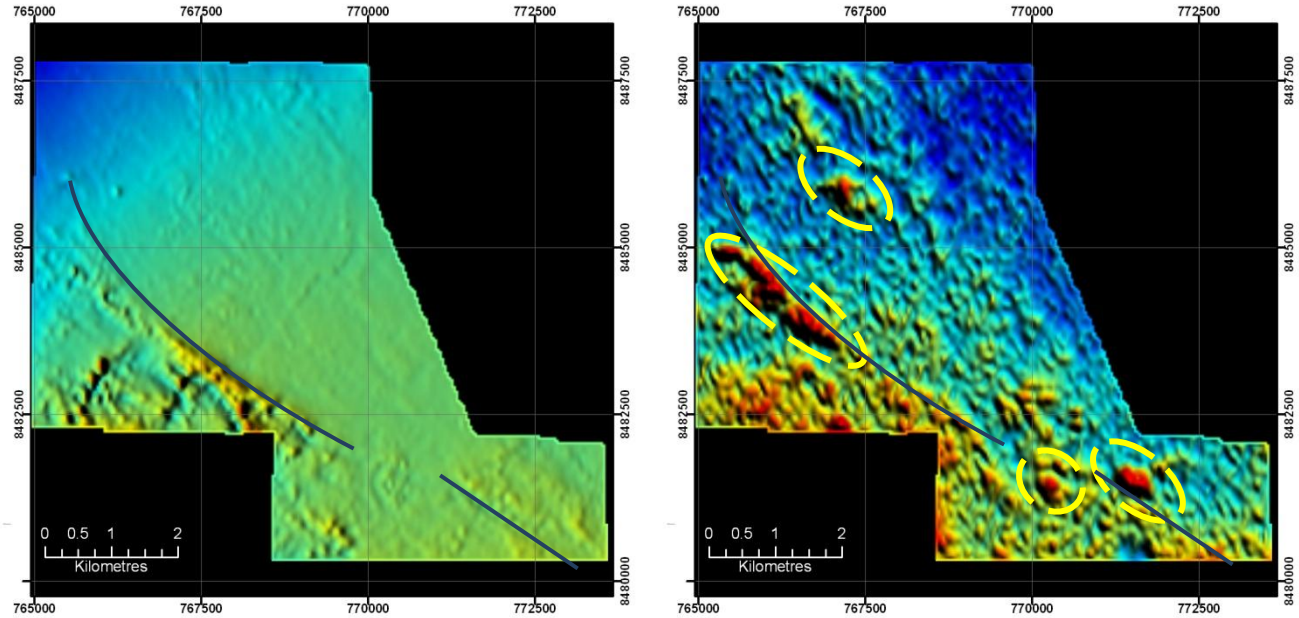

Figure 2: a) Total Magnetic Intensity defining subsurface rock types and structure (blue line = interpreted fault splay from HCFZ)**; b) Uranium Channel Radiometrics** defining discrete zones of relative uranium enrichment at surface (yellow ovals = primary targets)

The elongate uranium channel anomaly at the western edge of the survey area is 2.5km long, and remains the prime target in the lease. It lies along a distinct boundary between two magnetic domains interpreted to reflect a secondary component of the Hayes Creek Fault Zone.

There also appears to be a less pronounced set of north-northwest trending lineaments, visible both in the magnetic and radiometric data, associated with a number of smaller radiometric anomalies to the east of the larger one.

The strongest expression of this feature is seen in both datasets associated with a discrete uranium channel anomaly at the intersection with the interpreted splay from the Hayes Creek Fault Zone to the south east of the survey area. This increases the prospectivity of this anomaly being related to a structurally-controlled bedrock feature.

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At **Marrakai** (EL24614) located 30km to the northwest of the Rum Jungle Uranium Field, radiometric anomalism associated with the brittle-ductile deformation of a heterogeneous Proterozoic sedimentary and volcaniclastic package is the key target.

The new detailed geophysical data has helped resolve the radiometric anomalism, and better define the faulting disrupting the sedimentary package (Fig 3), with the strongest feature disrupted by a previously unknown break, near the intersection of a number of interpreted faults.

The fault-disrupted uranium channel anomalies will become the initial targets for further work in this area.

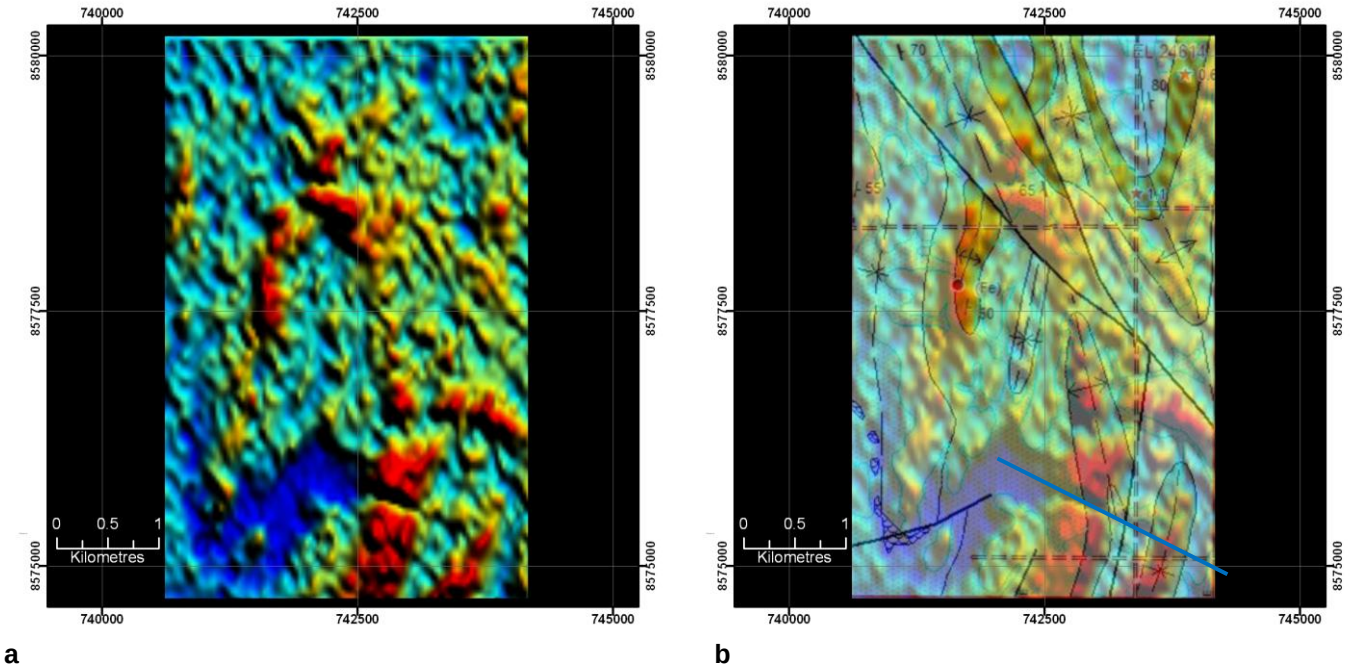

Figure 3: Marrakai tenement (a) U radiometrics; and (b) overlain on existing geological interpretation with indications of known (black) and previously unknown (blue) fault disruptions associated with anomalous features

Ground exploration work on Resource Star's portfolio of NT uranium projects, including those discussed here, is expected to commence during May 2010, weather and access conditions permitting.

At the largest of these, the Edith River Uranium Project, a similar detailed airborne geophysics program covering 40km of prospective geology has also been flown recently, with the data expected to be processed and interpreted shortly.

For further information please contact:

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About Resource Star Ltd

Resource Star Ltd is a publicly-listed Australian company (ASX: RSL) that has interests in uranium and uranium-associated exploration assets in the Northern Territory, Western Australia, Tasmania and Malawi.

The Company's main projects are the 100%-owned Edith River Uranium Project in the Northern Territory, and a joint venture with Globe Metals & Mining on the Machinga Niobium-Rare Earths Project in Malawi. Globe is managing the Machinga program, with input from Resource Star, and they are currently earning 20% equity through exploration expenditure. In a staged process Globe can earn up to 80% in the project by funding all activity up to and including a feasibility study.

Resource Star recently issued a Prospectus and completed a Public Share Offer in conjunction with Allegra Capital, to allow the Company to comply Chapters 1 and 2 of the ASX Listing Rules, and the Company relisted in February 2010.

Competent Person Statements

The information in this report that relates to Exploration Results is based on information compiled by Mr Richard Evans, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Evans is a full-time employee of the Company and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, 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 Evans consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This report contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information might include, among other things, statements with respect to the Company's business strategy, plans, objectives, performance, outlook, growth, shareholder value, projections, targets and expectations, Mineral Reserves and Resources, results of exploration and related expenses, property acquisitions, mine development, mine operations, drilling activity, sampling and other data, grade and recovery levels, future production, capital costs, expenditures for environmental matters, life of mine, completion dates, uranium prices, demand for uranium, and currency exchange rates. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast' and similar expressions. Persons reading this report are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information. Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to the risk factors set out in the Company's Annual Report.

This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully and readers should not place undue reliance on such forward-looking information. The Company disclaims any intent or obligations to update or revise any forward-looking statements whether as a result of new information, estimates or options, future events or results.