Resource Star Ltd (ASX: RSL) today announced that in first pass sampling it has confirmed the presence of significant levels of uranium in outcrop at the Tennysons Prospect in the Edith River Project in the Northern Territory.

The granite-hosted area shows veining, foliation, haematite-carbonate-albite alteration and localised brecciation associated with ground radiometric anomalous haematite breccia samples from Tennysons Prospect:

- Peak result = 0.44% U₃O₈
- Average of all nine samples = 0.18% U₃O₈
- Chemical signature indicates primary, but non-magmatic source

Strongly-localised ground radiometric responses mapped at both Hayes Ck South and O’Shea Hill along structural features associated with potential host rocks.

Upcoming Activities:

- Exploration programs being developed to test potential
- Drilling planned during 2010 at Hayes Ck South and Edith River - Tennysons
Resource Star holds a portfolio of mineral tenements for uranium exploration in the Northern Territory over parts of southwest margin of the prospective Pine Creek Orogen (Fig 1). Earlier in 2010 the Company completed a detailed low-level airborne multi-spectral radiometric and magnetic survey over a number of these projects, which provided a focus for recently completed field exploration by CSA Global Pty Ltd.

The Company believes that the recent exploration work reported here strengthens its portfolio of uranium and specialty metals (heavy rare earths and niobium-tantalum) assets in Australia and Africa.

Figure 1: Edith River Project prospects on the recently acquired airborne geophysics.

An interim report on this work, including analytical results of the reconnaissance samples collected, has recommended a number of areas for follow-up. The details of these proposed programs are being finalised at present, but drilling is planned in at least two areas before the end of 2010.

Initial interpretation of data from the Edith River Project (Fig 2) prioritised a number of high priority uranium targets, and initial mapping, reconnaissance ground geophysics and sampling of these targets has been completed at Tennysons, Balaclava and O’Shea Hill.
Figure 2: Edith River Project prospects on the recently acquired airborne geophysics.

At Tennysons (EL 23568) earlier ground reconnaissance has suggested that there are significant zones of outcropping foliation, alteration, veining and brecciation here that could provide an early understanding of the mineralisation style. No uranium exploration work has been carried out here since the 1960s, and this announcement reports the first modern multi-element chemical analysis completed for the area.

This area has been mapped and sampled in detail, and a number of significantly uranium mineralised haematite breccia rock-chip grab samples have been returned (Table 1).

**Table 1: Tennysons haematite breccia U\(_3\)O\(_8\) ppm analytical results** – 4 acid ICP, Amdel Adelaide

<table>
<thead>
<tr>
<th>No. Samples</th>
<th>Max</th>
<th>Min</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>4,362</td>
<td>259</td>
<td>1,837</td>
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The results for the haematite breccias returned uranium assays ranging from 259 - 4,362 ppm $\text{U}_3\text{O}_8$, and analysis of the trace element data shows that there is good correlation with phosphorous, calcium and sodium but no correlation with iron, magnesium or potassium, which suggests that the haematite breccias have not scavenged the uranium but that the uranium may be related to albitisation (sodium metasomatism).

The analysis also indicates that the radiogenic lead, lead derived from the decay of uranium, far exceeds that of non-radiogenic lead, as the correlation between lead and uranium is very high. This indicates that the uranium has been in situ for a geologically significant period of time, and that the mineralisation is likely to have happened soon after the intrusion of the granite, rather than due to surficial remobilisation.

There is no correlation with elements such as thorium and caesium which implies that the mineralisation event was not magmatic and did not occur during the intrusion of the granite; and, there is an interesting, but moderate, uranium-arsenic correlation, which suggests a potential sedimentary component to the metals enriched in the haematite veins.

At O'Shea Hill (EL 26219), some 15km to the SE of Tennysons, one of the strongest uranium channel responses from the recent survey with a combined strike length of 3km, ground reconnaissance has found the peak response of more than three times background to be in an area of ferruginous chert and silicified limestones at the intersection between two regional lineaments (Fig 3).

**Figure 3:** O'Shea Hill prospect ground radiometrics anomaly superimposed on remote sensing imagery showing the regional lineament intersection.
At Hayes Ck South (EL 24432) some 60km to the NW of the Edith River Project on what is interpreted to be a splay of the Hayes Creek Fault Zone (Fig 4), the fault-coincident radiometric anomaly from the recent airborne survey has been assessed on the ground for the first time.

![Map showing Hayes Ck South targets on interpreted geology](image)

**Figure 4: Hayes Ck South targets on interpreted geology**

The largest of the radiometric targets in the lease, with a strike length of 2.5km and, the area of recent work runs along a clear boundary between two geophysically-defined terrains. The anomaly has now been mapped by ground radiometrics, and an outcrop of Depot Creek Sandstone has been located (Fig 5).
These areas are all planned to be included in follow-up field activities, including drilling likely at Tennysons and Hayes Ck South, during the remainder of 2010.

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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, south-east Africa.

The Company’s main assets are the 100%-owned Edith River Uranium Project and the Hayes Creek South tenement in the Northern Territory, and joint ventures with Globe Metals & Mining on the Machinga Niobium-Rare Earths Project and the Livingstonia Uranium 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 is managing the Livingstonia Project in a similar earn-in deal, and recently announced a Mineral Resource estimate indicating an Inferred Resource of 7.7Mt @ 270ppm U₃O₈, for 4.6 Mlb U₃O₈.
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 an 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. General 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.