Quarterly Exploration Activities Report

For the Period Ending 31 March 2012

TUC Resources Ltd (ASX:TUC) provides its Exploration Activities Report for the quarter ending 31 March 2012.

Highlights

Stromberg Heavy Rare Earth (HREE) Prospect

Step Change in Processing Options

- ✓ Excellent results have been gained from the latest metallurgical test work with up to 77% HREE** recovered by a direct acid leach route of clay material. Leaching of HREEs directly into solution potentially gives a more direct processing route allowing TUC to develop a more competitively valued intermediate product when compared to other concentration methods.
- ✓ Xenotime has been identified by high detail microscopy as the dominant HREE bearing mineral in the clay material. Xenotime is known for its excellent recovery and processing characteristics and is therefore highly sought after by the rare earth processing industry.
- ✓ The presence of Xenotime in clay material at Stromberg has positive implications for TUC's exploration model allowing TUC to draw some geological comparison to some of the lower cost Southern Chinese Clay REE deposits.

REE Industry Cornerstone Investment Strategy

- ✓ Discussions are advancing with a number of rare earth industry parties with respect to cornerstone equity investment in TUC. Interest has been bolstered by attendance of a number of national and international conferences including PDAC 2012 in Toronto.

  TUC considers early alignment with a major industry player as a valuable advantage, due to the downstream processing and marketing requirements associated with these metals.

New HREE Land Position

- ✓ TUC has recently strengthened its land position around the Stromberg area to 2330km^2 by pegging new ground based on the Stromberg exploration model. In addition, EL28970 was granted in the quarter allowing new access to Stromberg HREE district targets.

Stromberg HREE District Stakeholder Engagement

- ✓ TUC has re-commenced discussions with the Traditional Owners, through the Northern Land Council, with respect to access to the important Stromberg district tenement ELA27151. It is hoped that if discussions are positive; access to this exploration ground will significantly increase the chances of finding additional HREE material.

Photo 1 - TUC Resources Geologist mapping and sampling for HREE in the NT (April 2012).

ASX Code: TUC

Quarterly Report

27 April 2012

To:
Manager Announcements
Companies Announcements Office
Australian Stock Exchange Limited
10th Floor, 20 Bond Street
SYDNEY NSW 2000

Registered Office

TUC Resources Ltd

15 Lovegrove Close

MOUNT CLAREMONT

WA 6010

Tel: 08 9384 3284
Fax: 08 9284 3801

E: info@tucresources.com.au
W: www.tucresources.com.au

ABN: 94 115 770 226

Darwin (Main) Office

Unit 2/59 Winnellie Road
Winnellie NT 0820

Tel: 08 8947 0944
Fax: 08 8947 5217

Exploration Activities Report

The following exploration activities have been undertaken during the Quarter (see Figure 1 for prospect locations):

- Metallurgical and mineralogical analysis of composite samples representative of a range of grades from the Stromberg HREE Prospect;
- Rock chip and soil sampling programs at other HREE targets in the Stromberg and Daly Projects (assays pending);
- Analysis, interpretation and 3D geological modeling of Stromberg Heavy Rare Earth Prospect drill results;
- Pegging of new ground based on TUC's current HREE exploration model;
- Review and processing of available public and company domain geophysics covering TUC's expanded Stromberg district license holding.

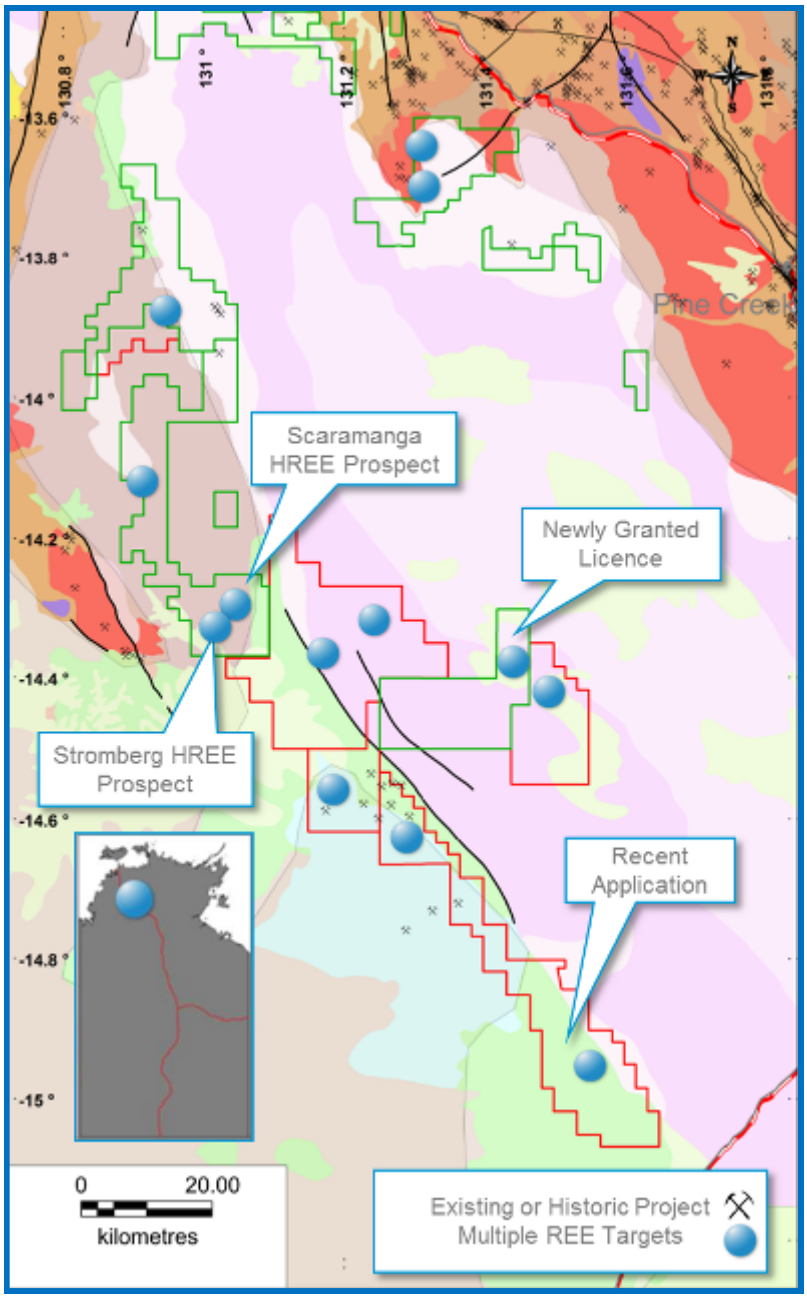

Figure 1 - Stromberg and Scaramanga Prospect locations in relation to TUC's other active rare earth prospects, tenements, known mineral occurrences in the highly prospective Pine Creek basin and geology. Granted tenements (Green), and Application tenements (Red).

Exploration Activities Report continued...

Stromberg Heavy Rare Earth Prospect

Daly Project, *EL25222*

The Stromberg HREE Prospect is located in the Daly Basin on the western margin of the mineral prospective Pine Creek Orogen. Figure 1 shows Stromberg's position relative to TUC's surrounding tenements along with rare earth element (REE) prospects, targets, and basic geology.

TUC's 2011 work confirmed the presence, through drilling, of significant near surface HREE mineralisation. RC drilling intersected a number of shallow, coherent mineralised zones giving excellent assay results over the full 2.3km strike length of the Stromberg HREE Prospect. Significant at surface intersections included STRC53 - 8m @ 0.72% Total Rare Earth Oxides (TREO*) (93.5% HREE, Dy 7.9%/TREO).

Importantly, intersections indicate high proportions of HREE with an average of 85.8% HREE. Of this HREE content, the critical and valuable Dysprosium and Yttrium average 7.5% and 64.9% of TREO respectively. Terbium comprises ~1% of the mix. These elements currently remain highly sought after on the global market, as new and efficient technologies continue to drive demand for these metals against a limited global supply.

Stromberg HREE Metallurgy and Mineralogy Results

A suite of samples was submitted for metallurgical testing in late 2011 to provide an early assessment of the physical processing properties of the mineralised material including:-

- Possible processing methods;
- Minimum cut-off grade and;
- Achievable concentrate grade.

Samples representative of the whole of the Stromberg HREE Prospect at a variety of grades have undergone a number of tests (composite samples represent 0.1-0.2% TREO; 0.2-0.4% TREO; 0.4-0.7% TREO and +0.7% TREO). Initial screening and HMS (heavy medium separation) work on four bulk samples at a range of size fractions was followed by acid leach test work, alongside supporting mineralogical analysis.

Results of initial screening indicate that firstly, significant levels of HREE are associated with clay, and secondly that more than 70% of REE are associated with the less than 45µm screen or the finest clay fractions (Figure 2). This finding suggests that the Stromberg material is suitable for direct leach of the heavy rare earths from the clay without first undergoing any physical mineral processing. Leaching of the HREE directly into solution results in a more direct route to a carbonate/intermediate material, which may allow TUC to generate a more competitively valued product when compared to other concentration methods or products.

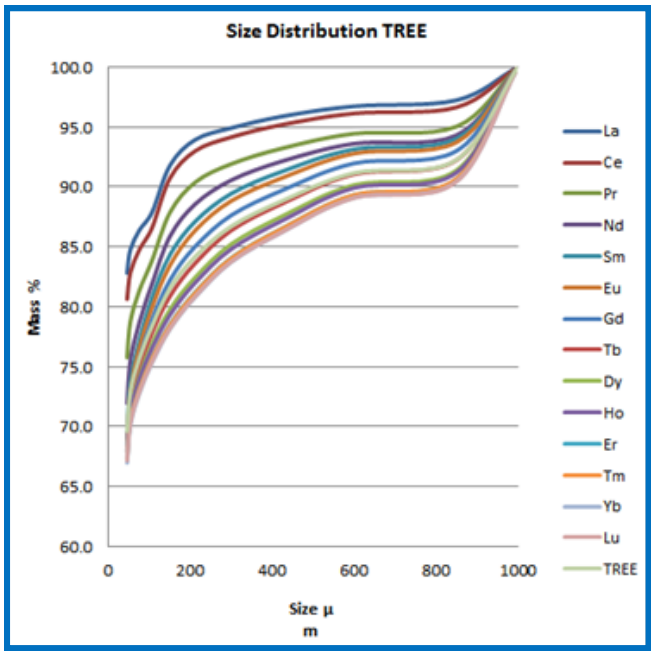

Figure 2 - Screening results sample 6000102, Stromberg Prospect. Note that 95% of the contained HREE is within a particle size of approximately 200µm.

Exploration Activities Report continued...

Positive results were received from subsequent single stage acid leach test work with up to an impressive 77% recovery of REE. In addition, grade recovery curves for the work are flat highlighting the potential for a greater tonnage of treatable material with lower grade mineralised material (0.1 to 0.2% TREO) returning a 69% recovery.

Important to the development of secondary products, leaching recovered 85% of uranium mineralisation, possibly giving another revenue stream. The deleterious element Thorium (Th), already at a very low level at Stromberg (<4ppm Th) was not extracted by this leaching process. Leaving Thorium behind in the leached material will likely be a positive effect on the marketability of any product if eventually produced.

High resolution scanning electron microscope (SEM) analysis of the before and after leach samples (Figures 3 and 4) indicated that Xenotime, a highly sought after mineral in REE processing terms, is the main HREE bearing mineral in this clay fraction.

This SEM study shows that Xenotime is present at sizes ranging from 70 to sub 0.5µm (very fine) as discrete grains and agglomerations around clay and other particles. Figure 3 and 4 illustrate how the Xenotime is not within the clay mineral. This free physical state and the fine nature should make the material more amenable to leaching.

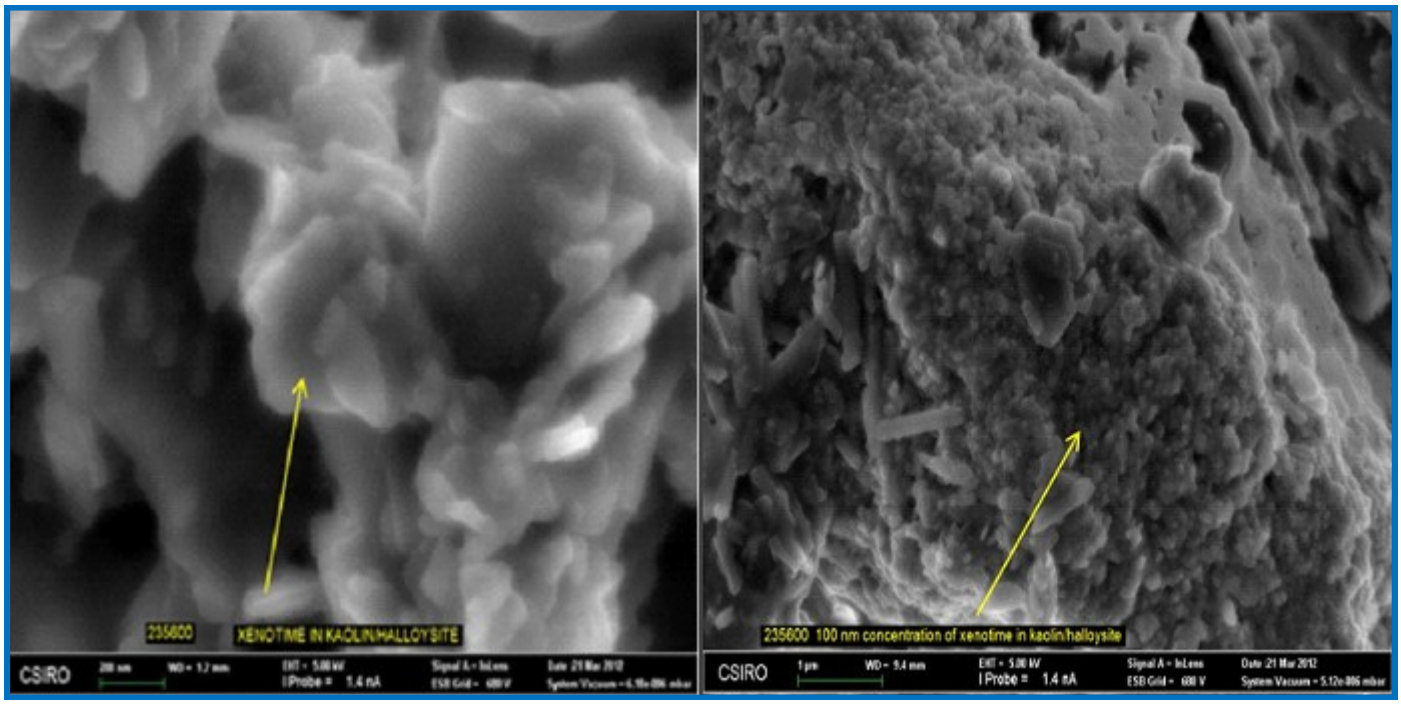

Figure 3 and 4 - Scanning Electron Microscope (SEM) images of HREE bearing Xenotime associations with clay (kaolin and haloysite), left - discrete grains, and right - agglomerations.

Current and planned work metallurgical work is aimed at increasing the efficiency of any processing route and reducing reagent consumption. Results of multi-stage leach work carried out in the later part of the quarter are awaited.

Exploration Activities Report continued...

Mineralisation at the Stromberg HREE prospect is situated at, or very near surface, in flat lying tabular bodies (see Figures 5 and 6). This gives the prospect two distinct advantages; firstly, it allows a reduced drilling time towards resource, and secondly, with continued successful drilling, a shallow low cost mining scenario may be possible due to lower possible stripping ratios and the deposit being in generally softer clay (easier to physically mine).

Interpretation of the weathered rocks at Stromberg and SEM based mineralogical study shows remarkably similar geological characteristics to descriptions of Southern China Clay rare earth deposits. These deposits are known for their efficient mineral processing options.

TUC considers that the application of this geological model substantially increases the prospectivity of the Stromberg District and Daly Project Area.

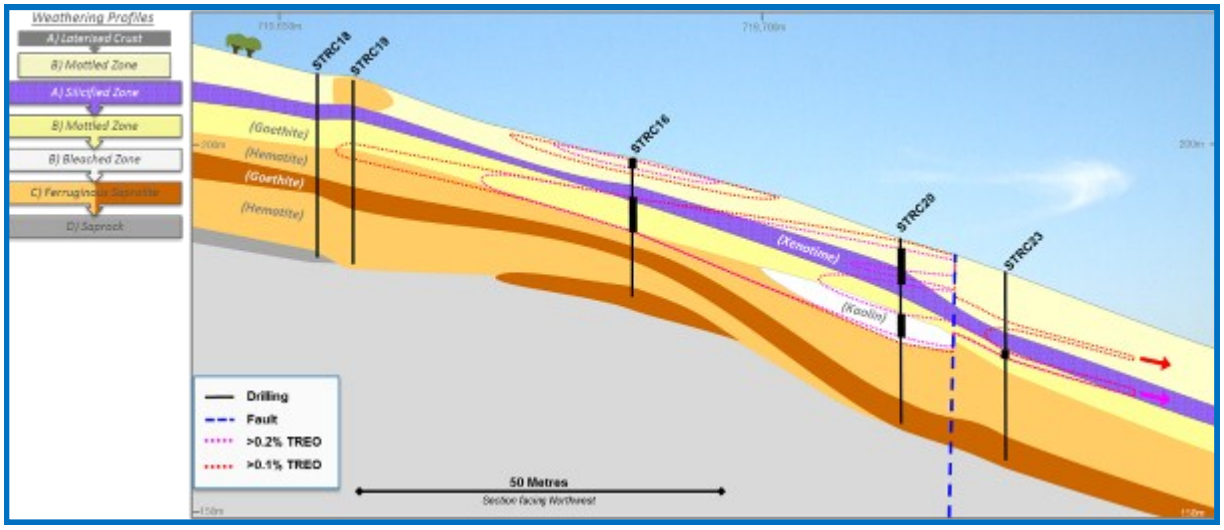

Figure 5 - Weathering profiles and mineralised zones (red-dotted line) at Stromberg.

A metallurgical diamond drilling program is planned for mid 2012 to provide enough sample for bulk testing and more accurately assess geo-metallurgical characteristics.

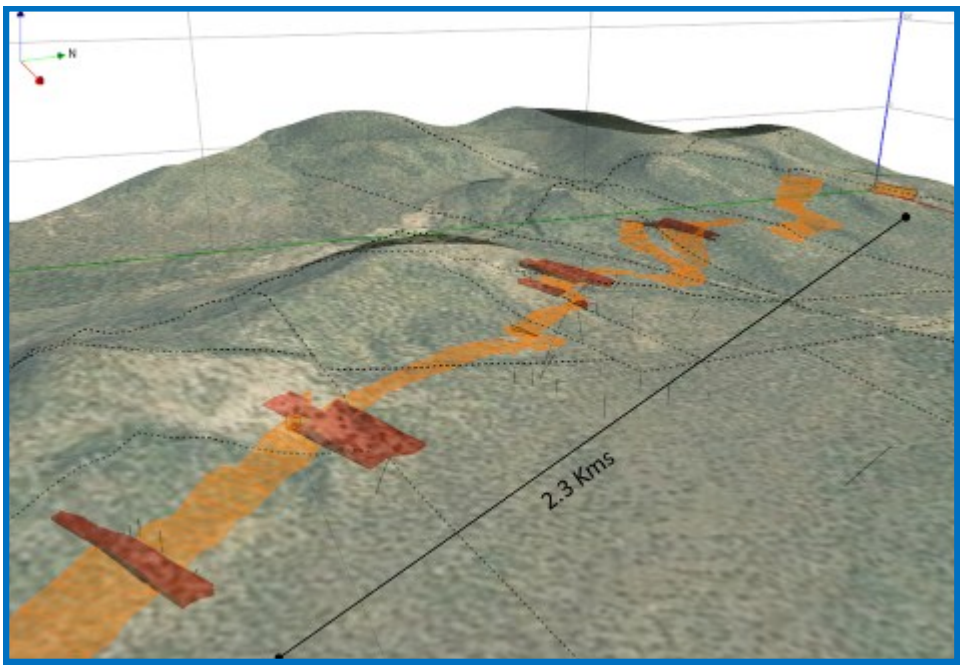

Figure 6 - Interim 3D modelling of Stromberg HREE Prospect. Identified mineralisation (red), geology projected continuation between drilling (orange), fault traces (black dotted lines), with GoogleEarth image draped over topographic surface (view NW).

Exploration Activities Report continued...

NEW GROUND - STROMBERG HREE DISTRICT POTENTIAL

Daly Project

3163km²
EL25222, EL25223, EL25224, EL25229, EL28970, ELA27151, ELA29240, ELA29241, ELA29458, ELA29242, ELA29026.

TUC has recently strengthened its land position around the Stromberg HREE Prospect to 2330km^2 by pegging new ground based on the Stromberg exploration model (Figure 7).

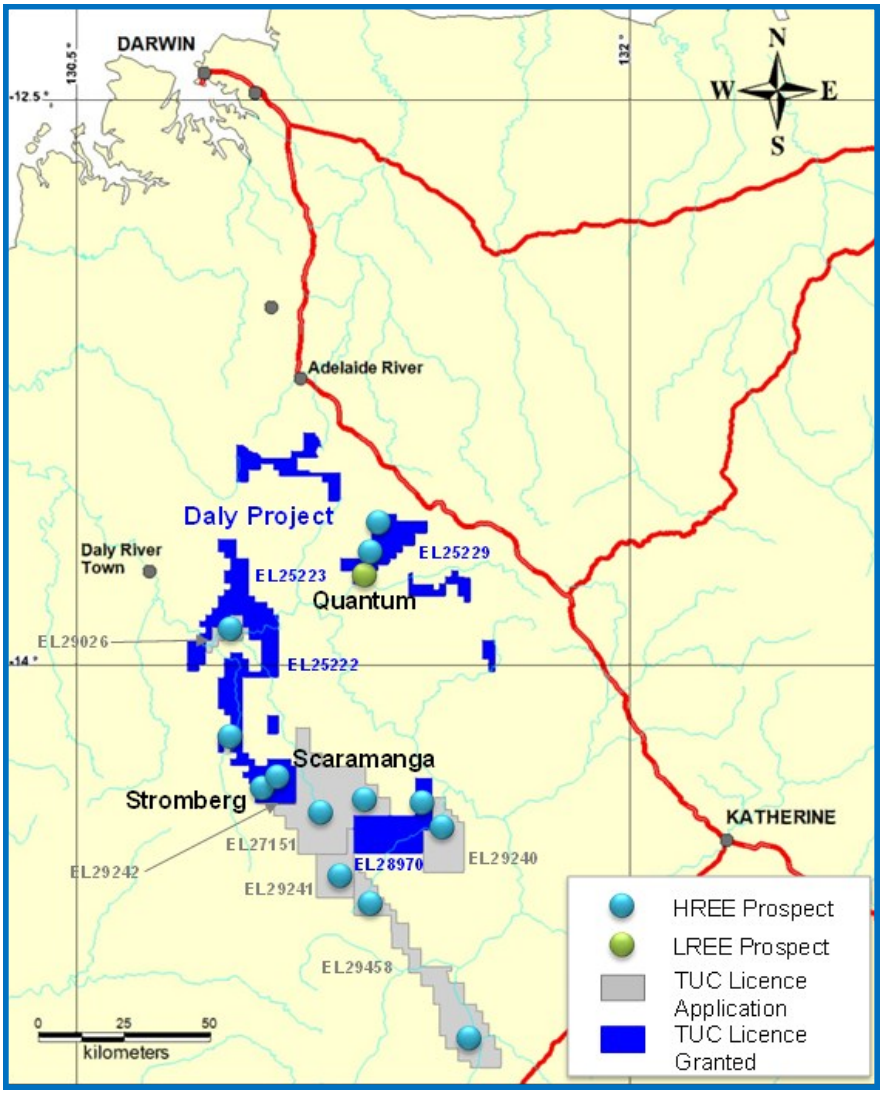

Figure 7– Stromberg district exploration potential and tenements

TUC is excited to have been granted EL28970, approximately 40km east of the Stromberg Prospect. The EL28970 licence has a sizeable, approximately 7.5km in length, airborne radiometric anomaly sub-parallel to a number of other of anomalies of varying size and tenor including the Stromberg HREE Prospect. The sub-parallel nature of the radiometric anomalism and the possible faulting in the area is interpreted by TUC to represent repetitions of mineralising controls at Stromberg, see Figure 8. Exploration drilling work planned for the Stromberg district in 2012 includes:

- RC drilling for resource calculations at Stromberg;
- Metallurgical diamond drilling at Stromberg;
- First pass exploration RC drilling at Scaramanga;
- First pass RAB/AC drilling on the newly granted EL28970.

Exploration Activities Report continued...

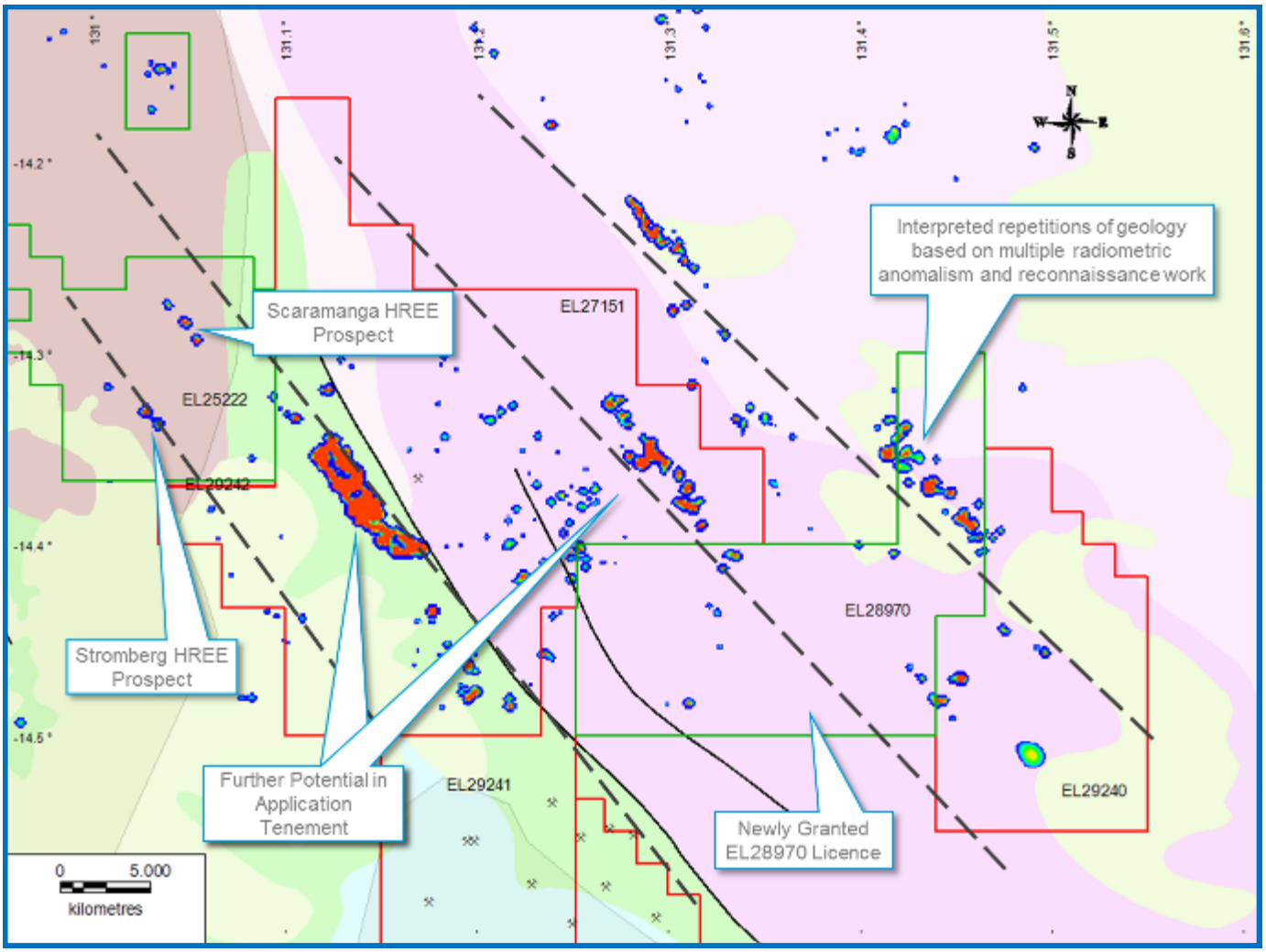

Figure 8 - Stromberg District exploration potential outlined by radiometric signatures and simple geology map. Note newly granted EL28970 and grey dashed line representing interpreted trend of repetitions of geology based on radiometric anomalism, possible faulting and reconnaissance. Note Granted Licences = Green, Application Licences = Red.

Photo 2 - Field reconnaissance helicopter access.

Field Work Planned For The Next Quarter

Rare Earths

Daly Project

- Diamond Drilling at the Stromberg HREE Prospect to obtain core for metallurgical samples, as well as geological and geotechnical work.
- LiDAR (Light Distance and Ranging) topographic survey is planned for late-April/May. A test flight for hyperspectral remote sensing is also being discussed with contractors.
- Geochemistry at Scaramanga HREE prospect.
- Reconnaissance geochemical sampling on the newly pegged Hodgson Downs HREE prospective lease EL29464.

Figure 9 shows the locations of planned field based activities for the April - June 2012 Quarter.

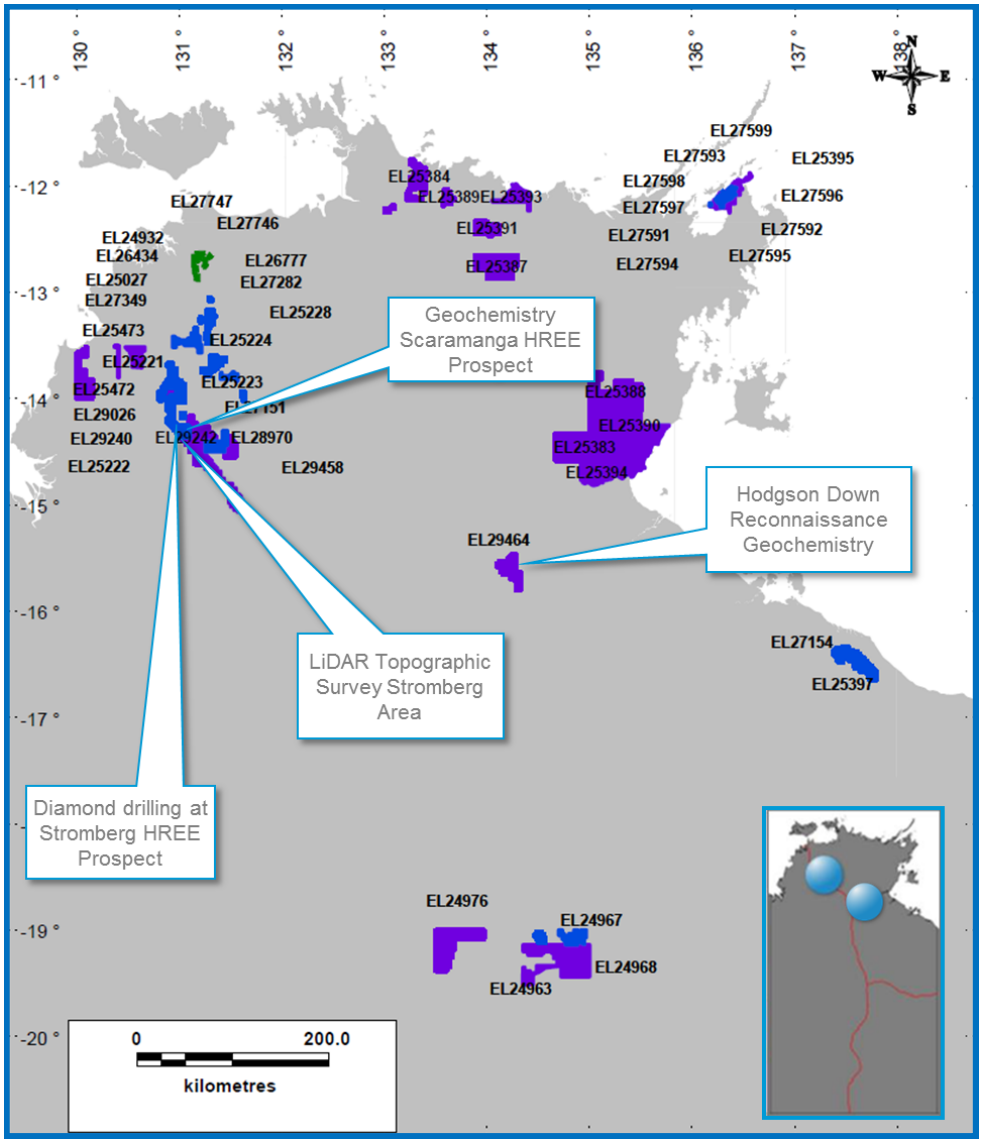

Figure 9 - TUC Tenement Map and Location of Planned Work for the Next Quarter. Note Granted Licence = Blue, Application Licence = Purple, and Frazer Project (purchase shortly to be completed) = Green.

Finance

The 31 March 2012 cash position of the Company was $2.865M vs. a December 2011 cash position of $3.51M. Discovery cost at Stromberg should remain favourable due to shallow drilling and softer nature of the rocks at this prospect.

The Company also has funds from its contributing joint venture partners. The Company is well placed to make significant inroads into exploration across its portfolio and partnerships.

Capital Structure:
Share Price (TUC): **$0.185**; Issued Shares: **124.4M**; Market Cap: **$23.0M (as at 27 April 2012**).

Corporate

CORNERSTONE INVESTOR STRATEGY

TUC Delegation Canada, USA and Australia

Discussions are advancing with a number of rare earth value chain parties with respect to cornerstone equity investment in TUC. Interest has been bolstered by attendance of a number of national and international conferences including PDAC 2012 in Toronto.

TUC considers early alignment with a major industry player as a valuable advantage, due to the downstream processing and marketing requirements associated with these metals.

LAND ACCESS

Stromberg District

Discussions are advancing with Traditional Aboriginal Land Owners through the Northern Land Council towards more formal land access and land use agreements on TUC's granted and application tenements in the Stromberg district. TUC is seeking to unify land access agreement across this important HREE tenement package. This may help allow access to the highly propsective ELA27151 tenement. It is hoped that if discussions are positive, this will significantly increase the chances of TUC's finding additional HREE material. Further on-country consultations are planned for June and July 2012.

FRAZERS PROJECT

Purchase of granted tenements from Equator Resources

330 km²

In the last Quarter of 2011, TUC Resources Ltd entered a binding agreement to purchase 330km^2 of exploration tenements in the Pine Creek Region of the Northern Territory from Equator Resources Ltd, see Figure 9. The completion of this nominal sum transaction is expected to be finalised very shortly. This ground will add to TUC's rare earth and uranium tenements in the region.

For further information on anything in this report, please contact:

MR IAN BAMBOROUGH

Managing Director
TUC Resources Ltd
+61 (0)8 8947 0944 or ibamborough@tucresources.com.au

*Total Rare Earth Oxides (TREO's) have been calculated by addition of common oxide values for Ce, Dy, Er, Eu, Gd, Ho, La, Lu, Nd, Pr, Sm, Tb, Tm, Yb, Y. REO values have been calculated from REE ppm grades after analysis by lithium-metaborate fusion and ICPMS , where possible, or by HF/multi acid digest and ICPMS. The total REO is calculated as the sum of all REE as REE_2O_3, with the exception of Ce, Pr and Tb; which are calculated as CeO_2, Pr_6O_{11}, and Tb_4O_7 respectively, in accordance with geochemical conventions.

**Heavy Rare Earth Elements HREE*'s = Dy, Er, Ho, Lu, Tb, Tm, Yb, Y;
**Medium Rare Earth Elements MREE's = Gd, Eu, Sm;
**Light Rare Earths LREE's Ce, La, Pr, Nd.

INVESTOR INFORMATION

Registered Office:
15 Lovegrove Close
MOUNT CLAREMONT
WA 6010
Tel: 08 9384 3284
Fax: 08 9284 3801
E: info@tucresources.com.au
W: www.tucresources.com.au

Darwin (Main) Office:
Unit 2/59 Winnellie Road
Winnellie NT 0820
Tel: 08 8947 0944
Fax: 08 8947 5217

Company Management:
Peter Harold - Non-Executive Chairman
Ian Bamborough - Managing Director
Anthony Barton - Non Executive Director
Michael Britton - Non Executive Director
Leon Charuckyj - Non Executive Director
Graeme Boden - Company Secretary

TUC Resources Ltd holds approximately 18,000km^2 of prospective land package across 44 (33 under application) tenements making it one of the biggest ground holders in the Northern Territory of Australia. The business holds eight consolidated project areas across several key geological and metallogenic terrains, affording it the opportunity to diversify exploration into many commodities.

The information in this report relates to exploration results compiled by Ian Bamborough, who is a Member of The Australian Institute of Geoscientists. Ian Bamborough is a fulltime employee of TUC Resources Ltd. Ian Bamborough 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'. Ian Bamborough consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.