

# RARE EARTH DRILL RESULTS EXPAND MINERALISATION POTENTIAL



**TUC**  
RESOURCES

**ASX Code: TUC**

**ASX Announcement**  
**07 September 2011**

## Highlights:

- Significant Total Rare Earth Oxide (TREO) drill intersections Include:
  - **TDD19: 3.2m @ 3.13% TREO** from 296m  
⇒ **including 1.2m @ 4.45% TREO** from 296m;  
⇒ **within 10.4m @ 1.12% TREO** from 292.8m;
  - **TDD20: 2.4m @ 2.97% from 296.9m,**  
⇒ **within 8.3m @ 1.01% TREO** from 292m;
  - **TDD21: 0.8m @ 1.24%** from 397.6m.
- Drilling has now outlined two separate zones of higher grade mineralisation on section.
- Given the repetitive nature of the mineralisation, it is thought that many more exploration opportunities exist over the +4km length of the prospect area.
- Drilling continues and Infill drilling is planned on-section to target high grade, thick intercepts (+8m).
- Mineralisation remains open to the north and south. Further step out and infill drilling is planned.



Figure 1 - Diamond Drilling at the Quantum Prospect, September 2011

Figure 2 (next page) shows the repetitious nature of mineralisation. All of these zones will now be targeted in ongoing exploration thus offering increased discovery potential. Planned drilling illustrated on Figure 2 shows how recent higher grade intercepts will be further targeted.

This section is approximately 200m north of high grade intercepts in the initial discovery drilling (See TUC ASX Announcement dated 11 August 2011 and TUC Quarterly Activity Report dated 29 July 2009, for recent summaries of all previous results and progress at Quantum).

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Approximately twelve per cent of the TREO distribution at Quantum is the critical rare earth Neodymium. The rare earth distribution at Quantum is very similar to Molycorp's Mountain Pass Mine in the USA.

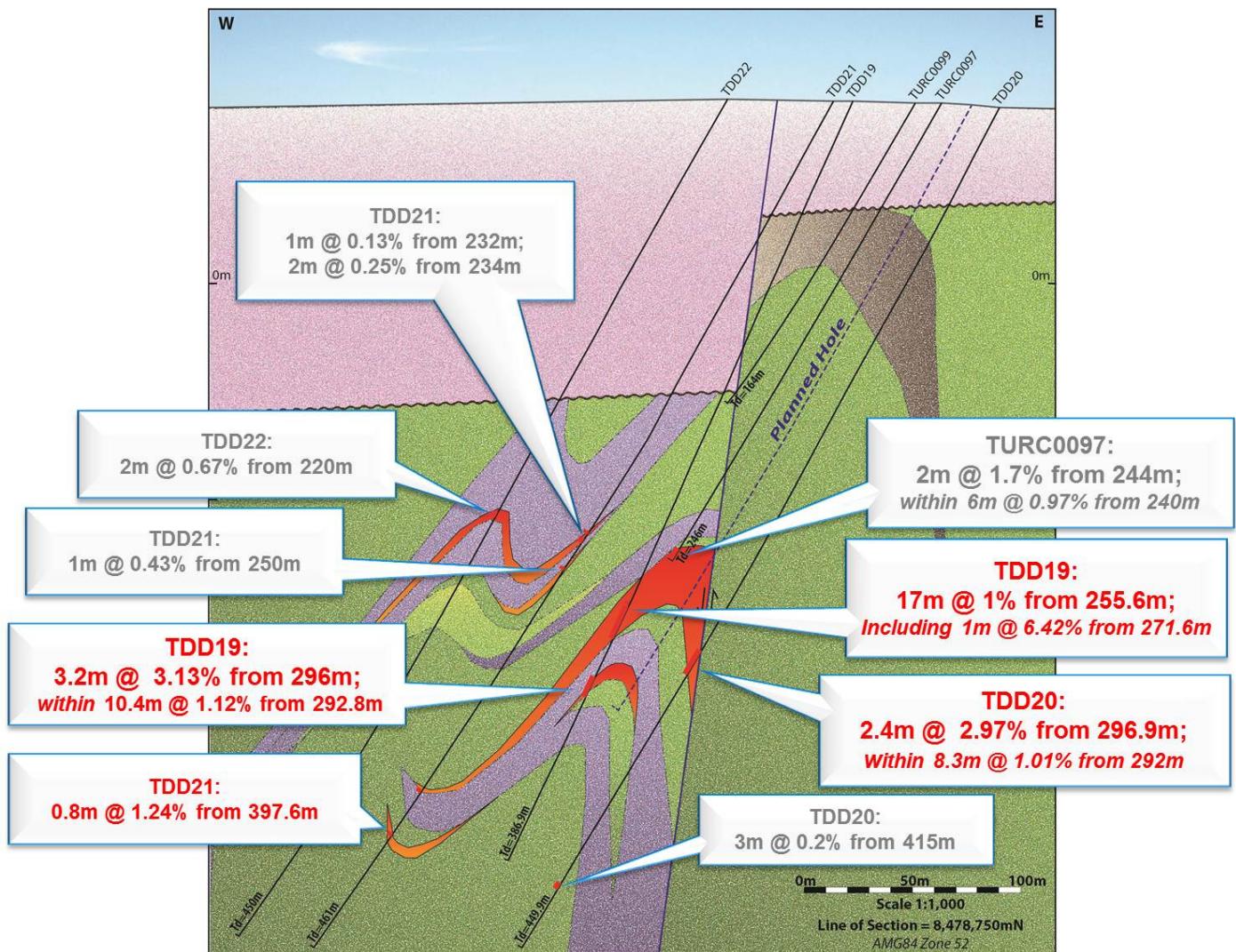


Figure 2 - Schematic Geological cross-section of the northern-most drill section yet drilled at the Quantum Prospect (8,478,750mN), with all results returned to date.

Recent significant intersections are illustrated on Figures 2 and 3 (next page) and relevant hole details are listed in Table 1.

Hole_Id	mE	mN	RL(m)	Grid	Depth (m)	Dip°	Az°	Results	Comments
TDD19	744,905	8,478,752	85	AMG 84 Z52	386.9	-65	270	Assays Returned	
TDD20	744,973	8,478,750	82	AMG 84 Z52	449.9	-62	270	Assays Returned	RC Pre-Collar TURC105
TDD21	744,896	8,478,753	85	AMG 84 Z52	461	-60	270	Partial Assays Returned	RC Pre-Collar TURC98
TDD22	744,847	8,478,750	86	AMG 84 Z52	From 252	-60	270	Partial Assays Returned	RC Pre-Collar TURC100
TDD24	744,959	8,478,751	84	AMG84 Z52	Inprogress	-62	270	In Progress	In Progress
TURC009	744,934	8,478,753	84	AMG 84 Z52	164	-60	270	Assays Returned	Pre-collar
TURC0097	744,946	8,478,752	84	AMG 84 Z52	246	-60	269	Assays Returned	Hole Collapsed

Table 1 - Hole Details for holes on the 8,478,750mN section

Figure 3 shows a long-section of the Quantum drilling results and plans. Recent extensional results are highlighted in red text. A number of pre-collars are ideally placed for infill and extensional drilling and results to date suggest a strong continuity of mineralisation with a good grade profile. Two pre-collars have been drilled to 1km to the south of the existing drilling focus to provide for a more rapid assessment of size potential.

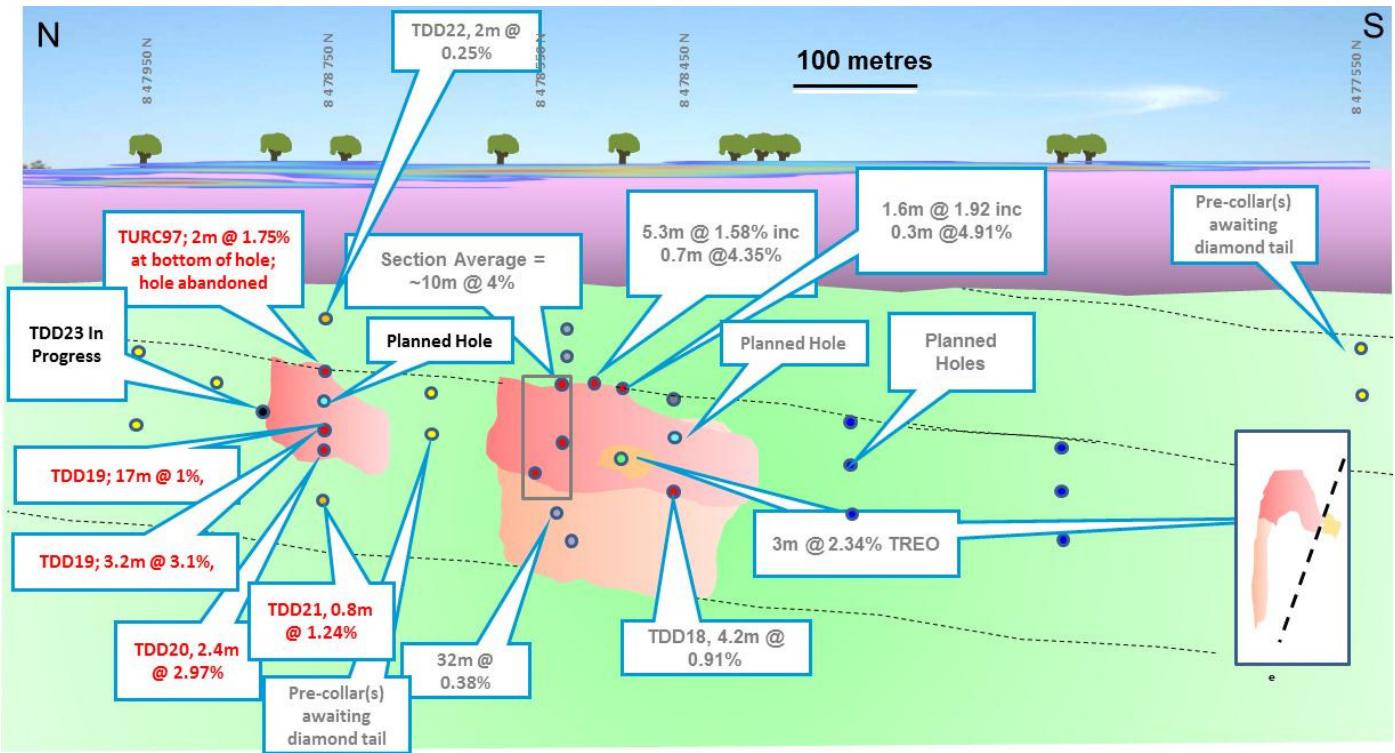


Figure 3 - Quantum Long-Section; recent results and follow up planned drilling in red and black respectively; September 6 2011.

Figure 4 shows the Quantum prospect's location, TUC tenements, and the regional geological setting, with respect to TUC's other rare earth prospects at Stromberg and Drax (see recent TUC ASX Announcement dated 25 August, for information regarding these recent critical and heavy rare earth discoveries).

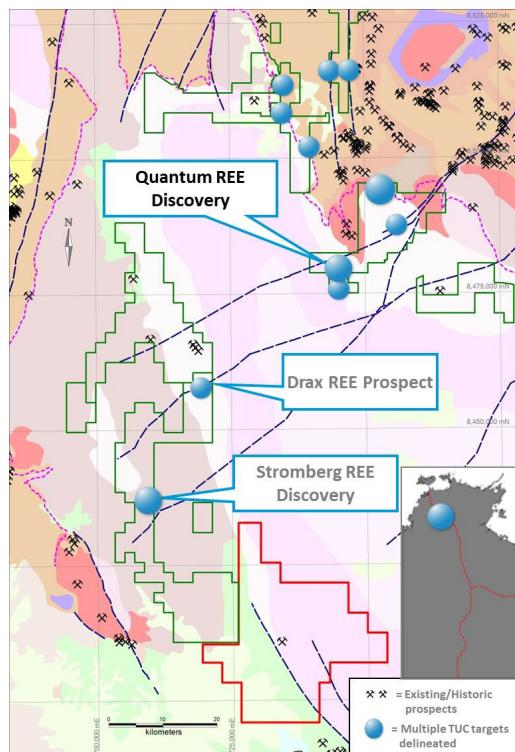


Figure 4 - Location of TUC's REE and HREE prospects and tenements (green outlines) in the mineral prospective Pine Creek region, with geology background.

\*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  $\text{REE}_2\text{O}_3$ , with the exception of Ce, Pr and Tb; which are calculated as  $\text{CeO}_2$ ,  $\text{Pr}_6\text{O}_{11}$ , and  $\text{Tb}_2\text{O}_7$  respectively, in accordance with geochemical conventions.

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TUC Resources Ltd holds approximately 16,000km<sup>2</sup> of prospective land package across 39 (27 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.