



**Breakaway  
Research**

December 2012

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### Company Information

ASX Code	TNG
Share Price	A\$0.125
Ord Shares	417.1m
Options	25.9m
<b>Market Cap</b>	<b>A\$52.1m</b>
Cash (Sept 12)	A\$7.8m
Total Debt	A\$0m
<b>Enterprise Value</b>	<b>A\$44.3m</b>

### Directors

Chairman	Jianrong Xu
Managing Director	Paul Burton
Non-Executive Director	Neil Biddle
Non-Executive Director	Rex Turkington
Non-Executive Director	Zhigang Wang
Non-Executive Director	Stuart Crow

### Substantial Shareholders

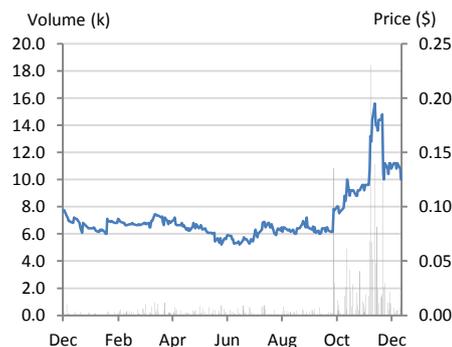
Ao-Zhong Int.Min Resources	15.3%
Aosu Inv. & Develop. Co	14.7%
WWB Investments P/L	6.5%
CBH Resources	3.5%
JP Morgan Nom's	2.2%

Source: Bloomberg

### Company Details

Address	Level 1, 282 Rokeby Rd Subiaco, WA, 6008
Phone	+618 9327 0900
Web	www.tnglimited.com.au

### 1 Year Price Chart



Source: Bloomberg

# TNG Limited (TNG)

*Early stage copper exploration augments  
significant vanadium and titanium project*

**Recommendation: Speculative BUY**

## Company Update

### Key Points

- **Flagship Mount Peake vanadium and titanium project hosts JORC Resource of 160Mt with exploration target of 500-700Mt**
- **PFS indicates robust economics with LOM revenue of ~A\$12B**
- **Economics enhanced with patented TIVAN processing**
- **Cornerstone Chinese investors provide support project to advance DFS and further exploration**
- **Mount Hardy copper project demonstrates early potential and significant upside**
- **Recently completed exploration program's likely to lead to positive news flow**

*Following on from our 'initiation of coverage' released in October 2012, TNG continues to make steady progress within its portfolio of exploration projects. Recently, TNG completed reconnaissance field work and drill programs targeting five 'high priority' electro-magnetic (EM) targets at Mount Hardy. Surface copper mineralisation is extensive over 4km of strike and early drill results indicate copper mineralisation found at surface at all prospects in the area extend at depth. Assays are still pending from six holes. An extensive exploration program is planned for 2013 as Mount Hardy has significant potential to host multiple copper VMS base metal deposits.*

### Investment Thesis

TNG's principle focus is the development of the 100% owned Mount Peake vanadium-titanium-iron project which currently hosts a JORC resource of 160Mt @ 0.27% V<sub>2</sub>O<sub>5</sub>, 5% TiO<sub>2</sub> and 22% Fe. Following a recent ~9,000m drill campaign (assays pending) potential exists for a significant resource upgrade within Q1 2013. A recent PFS already indicates an economically robust and lucrative project (capable of generating total LOM revenue ~\$12Bn) which is further enhanced by the revolutionary, TNG owned and patented, 'TIVAN' processing route.

The next project to receive the company's attention is the highly prospective, yet early stage Mount Hardy copper project which hosts extensive surface copper prospects. An airborne geophysical survey followed up by field work has led to the identification five high priority targets which have recently been drill tested. Assays are still pending from six holes however, early assays from one of the drill holes confirms mineralisation found at the surface extends at depth and is associated with EM conductors (identified by the HELITEM survey). Remaining assays are expected to be reported by the end of the December quarter.

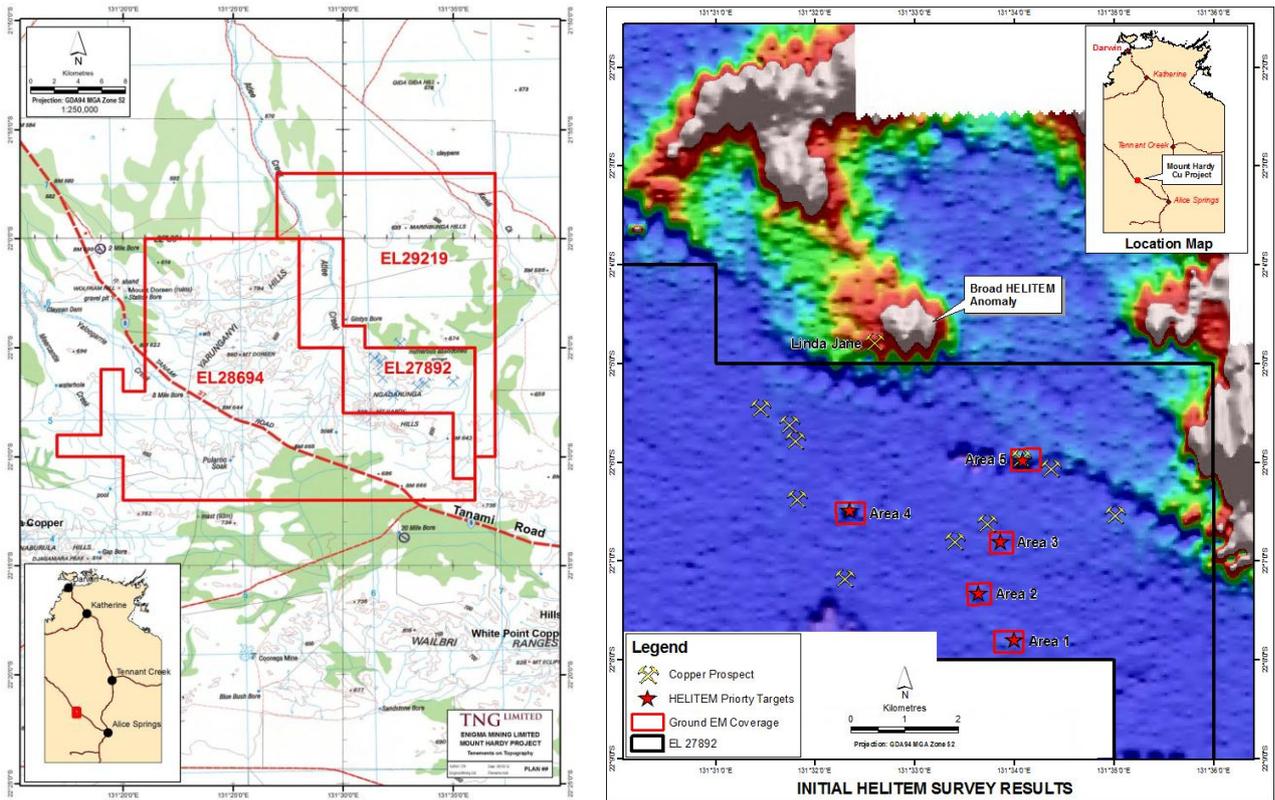


## Company Update

### Mount Hardy – The next major project

The Mount Hardy copper project (EL 27892) is located within the historical “Mount Hardy copper field” where numerous copper prospects were identified in the 1960’s. TNG has a 100% interest in the project area.

#### Mount Hardy Tenement Map and Geophysical Survey Results



*Five high priority targets*

*High grade outcropping mineralisation*

*Highly prospective*

No modern exploration has been carried out on the tenements however limited shallow drilling undertaken by the Northern Territory Geological Survey in 1967 confirmed extensions of high-grade mineralisation below these gossans.

TNG recently carried out a HELITEM survey over the Mount Hardy prospect which covers an area of ~900km<sup>2</sup> of the Lander Group Formation. Extensive high grade surface mineralisation (rock chips) have been identified from outcropping and sub-surface gossans with results of up to **35% copper, 6.85% zinc, 16.15% lead and 7.93g/t gold**.

TNG considers that the highly anomalous grades of gold (and silver, arsenic and bismuth) together with base metals, is indicative of an enriched hydrothermal source fluid which provides further encouragement for accumulation of mineralisation given the size of the area and the scale of the electro-magnetic (EM) targets.



## Expanding the project area

Realising the potential of the Mount Hardy region, TNG recently agreed to acquire EL 28694, located immediately adjacent to EL 27892, for consideration of A\$95,000 (subject to DD and regulatory approvals). The acquisition increases the land holding by ~413km<sup>2</sup> around the Mount Doreen granite, which TNG believes may be the source of the metalliferous fluids forming the Mount Hardy copper prospects.

*Increasing land holding by ~413km<sup>2</sup>*

## Stage 1 Drilling program completed

Approximately 2,000m of drilling has been allocated to the initial reconnaissance drill program aimed at testing the high priority targets.

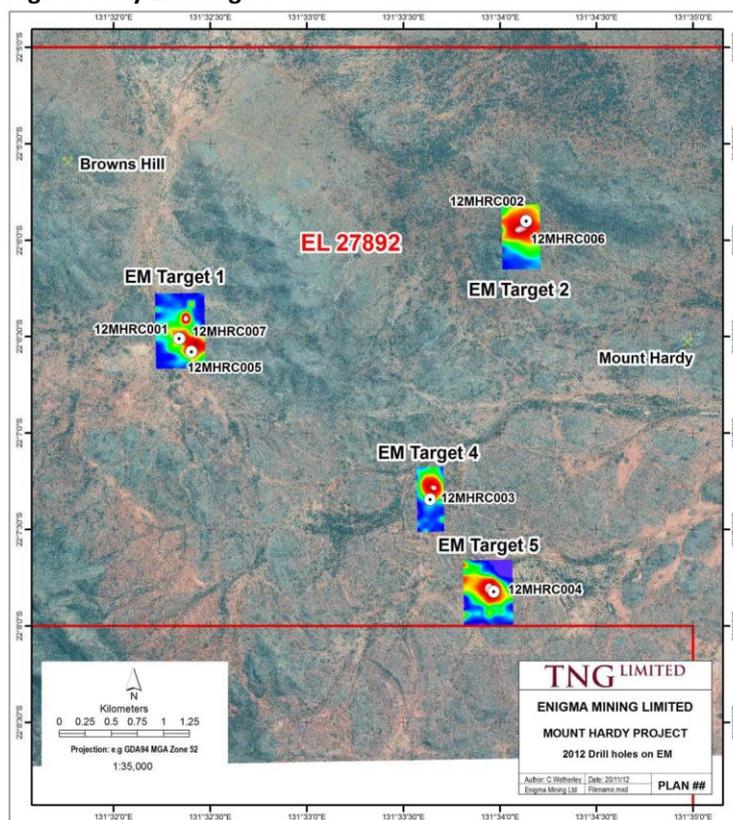
*EM1 first to be drilled*

The first Mount Hardy target to be drill tested was 'EM Target 1' (EM#1) which is located the base of a hill where outcropping mineralisation indicated grades of up to 12.65% copper (from rock chip sampling).

The EM#1 anomaly has been interpreted to extend over an area of ~500m by 100m with the first drill hole designed to intersect this anomaly at a depth of ~100m.

## High Priority EM Targets

*Seven holes drilled in early stage reconnaissance drill program*



Source: TNG

*Mineralisation extends from surface to a depth of ~120m*

The results of the first RC drill hole (12MHRC001) are highly encouraging as they indicate the mineralisation extends from surface to a depth of ~120m. A large massive and disseminated sulphide zone was intersected (as predicted) from 120m which hosted potential ore grade mineralisation. Highlights include:

- 2m @ 1.75% Cu, 0.33% Pb, 0.67% Zn from 125m;
- 1m @ 1.08% Cu, 0.12% Pb, 0.22% Zn from 120m;
- 3m @ 1.16% Cu, 0.59% Pb, 1.67% Zn from 191m; including 1m @ 2.35% Cu, 1.16% Pb, 3.08% Zn from 192m



*First hole 'clipped' the edge of the EM conductor*

TNG's interpretation of the intersections suggests that the RC hole intersected the edge of the main EM conductor plate. A down-hole EM (DHEM) survey will now be undertaken to confirm the position of the main body of mineralisation. An additional drill hole (12MHRC007) was also drilled into EM#1 however assays are still pending.

### Exploration Potential

The initial reconnaissance drill program has now been completed. A total of seven holes, for ~2,000m, were drilled however, assays are still pending for six of them. Results are expected imminently.

*Significant exploration program planned for 2013*

**The prospectivity of the Mount Hardy region should not be underestimated. Surface sampling has already shown that copper mineralisation extends over a strike length of at least 4km and the discovery of copper mineralisation at depth (at EM#1 and the Mount Hardy "Mine" prospect) further enhances the exploration appeal of the region.**

*Assays still pending from remaining six holes*

Once the remaining assays are received (due imminently), down hole EM surveys will be conducted on all of the drill holes completed to date which will aid in the locating of the buried sulphide mineralisation and help guide follow up diamond hole drill programs.

### The Mount Hardy "Mine" Prospect

The Mount Hardy "Mine" prospect is located ~2.5km east of EM#1. And was previously "worked" in the 1940's however no other mining activity has occurred. In 1968, seven drill holes were completed by the Bureau of Mineral Resources over a strike length of just 150m. TNG recently sourced this historic core and sent it for assaying. Highlights from 249 samples received to date include:

- **10.7m @ 4.1% Cu from 6.9m** (including 1m @ 27% Cu),
- **7.0m @ 1.64% Cu from 37.5m** (including 3m @ 5.7% Cu) and
- **2.6m @ 1.69% Cu from 23.5m**

### Breakaway's View

*Still early stage of exploration*

Mount Hardy has significant potential to host numerous high grade copper and or VMS base metal deposits, however further exploration, geophysics and drilling is still required to determine the geological controls of the mineralisation in the region.

*First hole confirms the 'prospectivity' of the region*

The early results indicate mineralisation outcropping at surface extends at depth but more importantly, it is associated with the EM conductors. The first hole to be assayed (12MHRC001) has been interpreted to have 'clipped' the EM conductor which provides encouragement for the second hole 12MHRC007 (assays pending), which was drilled into the same target.

*Drilling around historic mine sites provides addition opportunity*

Further opportunity still exists with the extensive mineralisation associated with the historic Mount Hardy and Browns Mine areas which are yet to be adequately drill tested. Assays from historic drill core are highly encouraging, confirming surface copper extends at depth.

*Increased exposure to prospective ground*

The recent acquisition of the neighbouring tenement provides further exposure to prospective ground around the Mount Doreen granite, which TNG believes may be the source of the metalliferous fluids forming the Mount Hardy copper prospects.



### **Analyst Verification**

We, Grant Craighhead and Andrew McLeod, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

### **Disclosure**

Breakaway Investment Group (AFSL 290093) may receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of TNG Limited and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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