# TNG LIMITED

## ASX ANNOUNCEMENT

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REGISTERED OFFICE TNG Limited Level 1, 282 Rokeby Road Subiaco, Western Australia 6008

T +61 8 9327 0900 F +61 8 9327 0901

W www.tngltd.com.au E corporate@tngltd.com.au

ABN 12 000 817 023

#### DIRECTORS

Jianrong Xu Paul Burton Michael Evans Stuart Crow Rex Turkington Wang Zhigang

COMPANY SECRETARY Simon Robertson

## PROJECTS

Mount Peake: Fe-V-Ti Black Range Iron Manbarrum: Zn-Pb-Ag East Rover: Cu-Au McArthur: Cu-Zn-Pb-Ag Mount Hardy Cu-Au-Zn-Pb Sandover Cu-Au Walabanba Fe-V-Ti-Cu-Au

## CONTACT DETAILS

Paul Burton | +61 8 9327 0900 Nicholas Read | +61 419 929 046 Simon Robertson | +61 8 9327 0900

# THICK GRAPHITE ZONE CONFIRMED AT MOUNT PEAKE VANADIUM PROJECT

Diamond rig now drilling two large base metal targets at McArthur River

# Key Points

- Wide graphitic zone outlined at BGC1 anomaly with 45.3m continuous down-hole intersection in recent diamond drilling.
- Samples now submitted for analysis and metallurgical testwork to establish total graphite potential at Mount Peake.
- Results expected within four weeks, which will determine the next steps in evaluating the graphite potential at Mount Peake, including the possibility of including it in the current Definitive Feasibility Study.
- The rig has now moved to TNG's McArthur River Project and has commenced drilling on the northern of two holes targeting strong coincident geochemical and geophysical anomalies.

TNG Limited (ASX: TNG) is pleased to advise that the drilling of the graphite target zones at its 100%-owned **Mount Peake Vanadium-Titanium Iron Project** has now been completed, with a diamond hole at target BGC1 intersecting a **thick zone of graphitic schist**.

The core will now be analysed and undergo beneficiation testwork to determine the economic potential of the zone.

The two graphite drilling targets at Mount Peake (Figure 1) were detailed in the Company's ASX Announcement of 20 August 2014. The northern BGC1 target is a very strong late-time Electromagnetic (EM) conductor (from both TNG's 2012 HELITEM survey and a previous GEOTEM survey).

Drilling in this area by TNG in 2010 encountered a thick graphitic interval in Reverse Circulation (RC) drilling (see ASX Release – 21 October 2010), and preliminary metallurgical testwork was encouraging, prompting the Company to consider follow-up drilling to provide a more comprehensive assessment of the graphite potential at Mount Peake.

The G34 anomaly is a strong mid-to-late-time EM conductor with no drill intersection to date. Both graphite targets are located within 20km of the Mount Peake vanadium-titanium-iron resource, which is currently progressing through the metallurgical phase of the Definitive Feasibility Study.

Both targets required diamond drill core sampling to provide good quality sample material for beneficiation testwork to determine the economic potential of the graphite outlined.

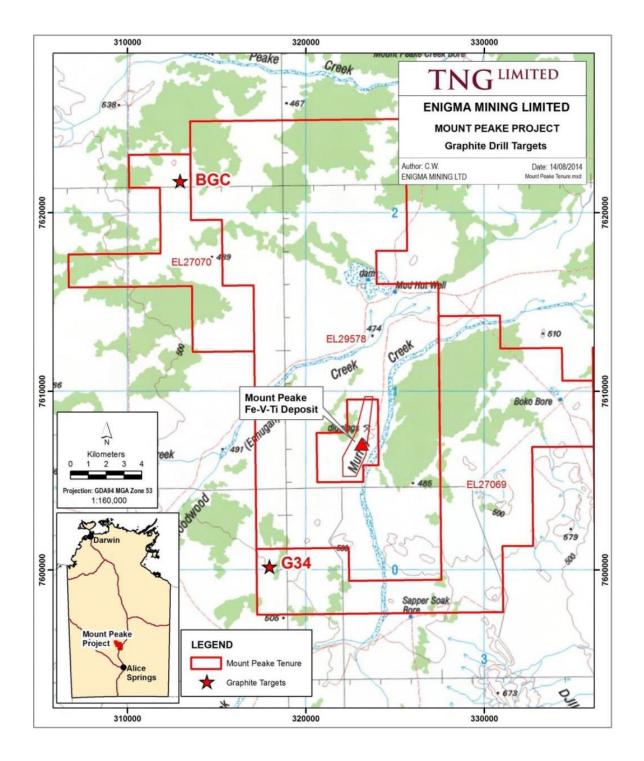


Figure 1: Location of the graphite prospects, BGC and G34, within the Mount Peake Project area.

Table 1 – Hole collar summary details	Table 1	- Hole colla	r summar	v details
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HOLE_ID	EASTING	NORTHING	RL	DEPTH	DIP	AZIMUTH
14MPDDHBGC1W1	312678	7622371	493	298.40	-60	270
14MPDDHG34W1	317602	7599918	500	210.50	-55	270

Diamond drill-hole 14MPDDHBGC1W1 wedged off the old BGC1 RC hole and provided core from 186.8m to 298.4m down-hole. The **interval from 240.0m to 285.3m (45.3m) was continuously graphitic** with the visual grade increasing from the extremities towards the centre (at approximately 266m down-hole).

The host rock is a quartz-biotite-andalusite schist from the Paleoproterozoic Lander Rock Beds in the Aileron Province.

The graphite is continuous (Figure 2) and appears associated with an intense and pervasive silicapyrite-graphite alteration zone. Graphite grade varies but visual estimates average significantly better than 5% over the full 45.3m interval, and may be as high as 10% over this thickness. In the central portion (approximately 260-271m), there could be over 10m of >5% material and some more fractured intervals would be likely to exceed 10% graphite.



Figure 2: Core tray #18 from 14MPDDHBGC1W1 from 262.95 to 267.65m, showing typical dark grey graphitic core.

Previous metallurgical work on Reverse Circulation drill chips showed that 5% graphite upgraded by simple flotation to >70% total graphitic carbon. Drill core has demonstrated that upgrading above 70% will be possible.

The G34 target was tested by diamond drill-hole 14MPDDHG34W1 and graphite was seen from 180.4m to 189.0m. The host sequence is also Lander Rock Beds schist, with visually estimated high-grade graphite veins (>50%) encountered from 181.8m to 183.0m (Figure 3) and also 187.25m to 187.7m. The remainder would have approximately 3-5% graphite content.



Figure 3: Core tray #20 from 14MPDDHG34W1 from 179.4 to 183.3m, showing the pale sericite alteration and the graphite vein (from 181.8 to 183.0m).

Core samples (nine taken from the G34 target and 43 from BGC1) have now been submitted to ALS (Perth) for analysis of graphitic carbon, with results to be reported in due course.

Graphite beneficiation testwork is being planned on composite samples from each target, with various analyses, graphite sizing and flotation testwork to determine the size, quality and value of the flake.

TNG's Managing Director, Paul Burton, said the drilling had confirmed the presence of a significant zone of graphite at Mount Peake, verifying the information obtained from previous RC drilling and highlighting the significant graphite potential of the area.

"Given its depth, and coincidence with the large 1km by 0.5km Electromagnetic (EM) signature, the economic potential of this discovery will depend largely on the results of the upcoming metallurgical testwork, which will show us whether we can extract the graphite," Mr Burton said.

"While evaluating the graphite potential is not our primary focus at Mount Peake, there is the possibility that this could add a fourth valuable metal to our existing product suite, which already comprises vanadium, titanium and iron.

"Graphite is a valuable mineral which is currently experiencing surging demand due to its use in electronics and batteries," he continued. "This is an opportunity which complements what we are already planning at Mount Peake and which could be a valuable add-on to an existing project development.

"Given the potential size of the graphite zone, this is an opportunity which we feel we must pursue for the benefit of our shareholders," Mr Burton added.

Analytical results are expected within four weeks and metallurgical testing results over the coming months. If these results are positive, further drilling may be required to fully assess the graphite potential at Mount Peake and to establish whether it should be included in the current Mount Peake Definitive Feasibility Study.

# Paul E Burton Managing Director

17 September 2014

Enquiries:

Paul E Burton,

Managing Director + 61 (0) 8 9327 0900

Nicholas Read

Read Corporate + 61 (0) 8 9388 1474

#### **Competent Person Statement**

The information in this report that relates to Exploration Results and Exploration Targets is based on, and fairly represents, information and supporting documentation compiled by Exploration Manager Mr Kim Grey B.Sc. and M. Econ. Geol. Mr Grey is a member of the Australian Institute of Geoscientists, and a full time employee of TNG Limited. Mr Grey has sufficient experience 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Grey consents to the inclusion in the report of the matters based on his information in the form and context in which it appear.

#### Forward-Looking Statements

This announcement has been prepared by TNG Ltd. This announcement is in summary form and does not purport to be all inclusive or complete. Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained.

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## About TNG

TNG Ltd is an emerging resources company with a focus on exploration and development of projects in the Northern Territory of Australia. The Company is currently developing its 100%-owned world class Mount Peake Vanadium-Titanium-Iron project which is currently in the Definitive Feasibility Stage.

The Company has an extensive suite of other mineral projects in the Northern Territory including copper, iron ore, zinc and base metals, as well as strategic joint ventures with companies including Rio Tinto and Norilsk.

For more information please see the company's website at www.tngltd.com.au

# APPENDIX ONE

# Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.	pXRF samples were from systematic 1m or 5m intervals. pXRF analyses included several Blank and Standard samples per batch
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	Diamond drilling, NQ core
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Average of >90% recovery in all graphitic intervals.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged.	All core intervals have a detailed geological log including RQD measurement. Not at resource definition stage.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second- half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.	Samples cut and ½ core samples now submitted for analysis Full sample to be crushed and pulverised (>85% <75 micron). No subsampling. Sample preparation is "industry standard" and appropriate for the sample medium.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Awaiting lab results and report
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data.	Samples were by field staff and contract geologist under the supervision of the Exploration Manager. Field data was entered into standard spreadsheet templates and uploaded/validated in a project database.
Locations of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control.	Sample Locations were picked up using a standard GPS device using multiple point averaging, with accuracy of better than 2 metres for Northing and Easting, and around 3

		metres for RL. All coordinates data for the project are in MGA_GDA94 Zone 53.
Data spacing and distribution	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	Sampling was of an exploratory and reconnaissance nature and spacings were insufficient to establish continuity or define Resources. No compositing has been applied to the exploration results.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	As each target has only one drill intersection the orientation is not well defined. The modelled EM data suggests the drill intersections are close to perpendicular to the mineralisation strike
Sample security	The measures taken to ensure sample security.	All samples were under company supervision at all times prior to delivery to ALS laboratories in Alice Springs
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No sampling audits have been completed to date for the regional programs undertaken for graphite at Mount Peake.

# Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Mount Peake Project comprises several tenements. Drilling was limited to EL 27069 and EL 27070, held by Enigma Mining Ltd, a wholly owned subsidiary of TNG Limited. The tenements are in good standing with no know impediments
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	TNG have held this ground for more than 5 years. A GEOTEM survey and one drill hole was completed 10 years ago.
Geology	Deposit type, geological setting and style of mineralisation.	This exploration program aimed to provide good samples to allow commercial definition of the graphite seen at each target.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	See Table 1
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	No data aggregation has been applied to the results reported here.
Relationship between	These relationships are particularly important in the reporting	As each target has only one drill intersection

mineralisation widths and intercept lengths	of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	the orientation is not well defined. The modelled EM data suggests the drill intersections are close to perpendicular to the mineralisation strike
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figure 1 in the body of the report
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	No laboratory results are presented. PXRF results are not anomalous (for base metals) nor indicative of graphite grade or quality
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Information relating to the drill targets appeared in the ASX release on 20th August 2014.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Samples require analytical results to be received. Benificiation testwork is contemplated