# TNG LIMITED

Appendix 2: Assumptions and pricing details for Mount Peake Two-Stage Development Option

# 5Mt per annum operation at Current prices for FeV, Fe, Ti0<sup>2</sup>

•	Processing rate (life-of-mine):	5Mt/annum
•	Average head grade:	0.39% V <sub>2</sub> O <sub>5</sub> , 27.09% Fe, 7.02% TiO <sub>2</sub>
•	Average Concentrate grade	1.2% V <sub>2</sub> O <sub>5</sub> , 56% Fe, 18 % TiO <sub>2</sub>
•	Total concentrate production/annum:	1,500,000Mt
•	Mining, Operating, transport and processing cost	\$95.5/t concentrate
•	<sup>2</sup> Net annual Revenue	\$40,410,000
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<sup>3</sup>CAPEX \$230m AUD

# 5Mt per annum operation at Forecast prices for FeV,

•	Processing rate (life-of-mine):	5Mt/annum
•	Average head grade:	0.39% $V_2O_5$ , 27.09% Fe, 7.02% Ti $O_2$
•	Average Concentrate grade	1.2% $V_2O_5$ , 56% Fe, 18 % TiO <sub>2</sub>
•	Total concentrate production/annum:	1,500,000Mt
•	Mining, Operating, transport and processing cost	\$66.1/t concentrate
•	<sup>2</sup> Net annual Revenue	\$84,510,000
•	<sup>3</sup> CAPEX \$230m AUD	

### Key assumptions at commencement of operations include:

- Operating costs and pit slope angles related to mining estimated to a Pre-Feasibility Study level (±25%)
- FeV price of \$28,000/ tonne current;
- Forecast price FeV price of \$56,000/tonne estimated for 2015
- TiO<sub>2</sub> price of US\$400/ tonne
- Fe price of US\$105/ tonne current magnetite price, calculated at a 20% discount to CFR fines.
- A\$/US\$ exchange rate of 1 US\$ = 1A\$

<sup>1</sup> 22% of the Resource underpinning the Production Target is Inferred Resource. **Cautionary Statement**. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

<sup>2</sup> Net annual Cash Flow is defined as the average discounted cash flow per annum after all CAPEX (pre-strip CAPEX, initial CAPEX, and expansion CAPEX) has been deducted, but ignores cost or source of capital, hedging, tax, depreciation, rehabilitation and salvage.

<sup>3</sup> CAPEX is extracted from PFS study.

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### 10Mt per annum operation at Current prices for FeV, Fe, Ti02<sup>1</sup>

•	Processing rate (life-of-mine):	10Mt/annum
•	Average head grade:	0.39% V <sub>2</sub> O <sub>5</sub> , 27.09% Fe, 7.02% TiO <sub>2</sub>
•	Average Concentrate grade	1.2% $V_2O_5$ , 56% Fe, 18 % TiO <sub>2</sub>
•	Total concentrate production/annum:	3,000,000Mt
•	Mining, Operating, transport and processing cost	\$73.5/t concentrate
•	<sup>2</sup> Net annual Revenue	\$113,880,000

<sup>3</sup>CAPEX \$349m AUD

# 10Mt per annum operation at Forecast prices for FeV,

•	Processing rate (life-of-mine):	10Mt/annum
•	Average head grade:	0.39% V <sub>2</sub> O <sub>5</sub> , 27.09% Fe, 7.02% TiO <sub>2</sub>
•	Average Concentrate grade	1.2% $V_2O_5$ , 56% Fe, 18 % TiO <sub>2</sub>
•	Total concentrate production/annum:	3,000,000Mt
•	Mining, Operating, transport and processing cost	\$44.1/t concentrate
•	<sup>2</sup> Net annual Revenue	\$202,080,000

<sup>3</sup>CAPEX \$349m AUD

### Key assumptions at commencement of operations include:

- Operating costs and pit slope angles related to mining estimated to a Pre-Feasibility Study level (±25%)
- FeV price of \$28,000/ tonne current;
- Forecast FeV price of \$56,000/tonne estimated price for 2015
- TiO<sub>2</sub> price of US\$400/ tonne
- Fe price of US\$105/ tonne current magnetite price
- A\$/US\$ exchange rate of 1 US\$ = 1A\$

<sup>1</sup> 22% of the Resource underpinning the Production Target is Inferred Resource. **Cautionary Statement**. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

<sup>2</sup> Net annual Cash Flow is defined as the average discounted cash flow per annum after all CAPEX (pre-strip CAPEX, initial CAPEX, and expansion CAPEX) has been deducted, but ignores cost or source of capital, hedging, tax, depreciation, rehabilitation and salvage.

<sup>3</sup> CAPEX is factored increase from PFS calculation.

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### Pricing:

Product pricing was supplied by Independent Commodities Analysts based on all available forecasts and current and forecast price trends.

Forecast increases in demand and pricing for FeV have been fully included

Forecast increases in demand and pricing for V205 and Ti02 have not been fully included; but base case product markets were used for all commodities.

### **Exchange Rate:**

An exchange rate of 1 US for 1 AUD was used.

Capital Cost (CAPEX): The details of the estimated capital expenditure were extracted from the 2012 PFS.

Process Plant – Process plant direct costs are for 5Mtpa and 10Mtpa operations, using figures extracted from the 2012 PFS.

Processing cost - are all costs associated with processing for concentrate and pig iron less estimated mill processing credits

Infrastructure and other fixed assets – have been extracted from the 2012 PFS

Operating Costs (OPEX): The details of the estimated operating I expenditure were extracted from the 2012 PFS.

Mining Costs - Mining costs extracted from the 2012 PFS.

The Indicated and Inferred Mineral Resource for Mount Peake underpinning the Production Targets discussed above was prepared by a competent person in accordance with the 2004 JORC code as part of the 2012 Prefeasibility Study (see ASX Releases – 12 October 2011 and 9 July 2012, and the above Competent Person Statements).

The Pre-Feasibility Study mining economic analysis determined the optimum mining scenario as open pit mining of a total of 91Mt of ore and processing at initially 2.5Mtpa ramping up to 5Mtpa to give a mine life of 20 years (see ASX Release – 9<sup>th</sup> July 2012).

78% of this resource is in the Indicated Resource category, which has a higher confidence than the Inferred Resource material, and is sufficient to be able to be used as a basis for establishing a Probable Reserve. 22% of the Resource is in the Inferred Resource category<sup>1</sup>.

The currently underway Definitive Feasibility Study has now converted the majority of the above Inferred Resource material to Measured and Indicated Resource (see ASX Release 26<sup>th</sup> March 2013) categories (under JORC 2012). The economic analysis of the mining and processing options for this material is yet to be completed as it need await metallurgical testwork which is currently underway and is expected to be reported later this year.

<sup>1</sup> **Cautionary Statement.** There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.