



SUNRISE FOR THE SLEEPING GIANT

TZMI CONGRESS | NOVEMBER 2022
ASX: NMT | AIM: NMT | OTC: RDRUY | DEU: 9R9



Authorised for release on behalf of Neometals by Christopher Reed, Managing Director.

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An investment in securities in Neometals is subject to investment and other known and unknown risks, some of which are beyond the control of Neometals. The Company does not guarantee any particular rate of return or the performance of Neometals. Investors should have regard to the risk factors outlined in this document.

Compliance Statement:

The information in this document that relates to Exploration Results and the Mineral Resource Estimate for the Barrambie VTM Project has been extracted from ASX Releases set out below, which are available at www.neometals.com.au

17/04/2018	Updated Barrambie Mineral Resource Update
11/07/2018	Barrambie Test Work Produces +90% Purity Titanium Slag at High Recoveries
22/12/2020	Barrambie Flowsheet Breakthrough
3/11/2022	Barrambie - Successful Commercial Smelting Trials For Barrambie
17/11/2022	Robust Outcomes From Barrambie Titanium Project PFS

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that **in the case of estimates of Mineral Resources or Ore Reserves** all material assumptions and technical parameters underpinning the estimates in the market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

Barrambie: Sunrise for the Sleeping Giant



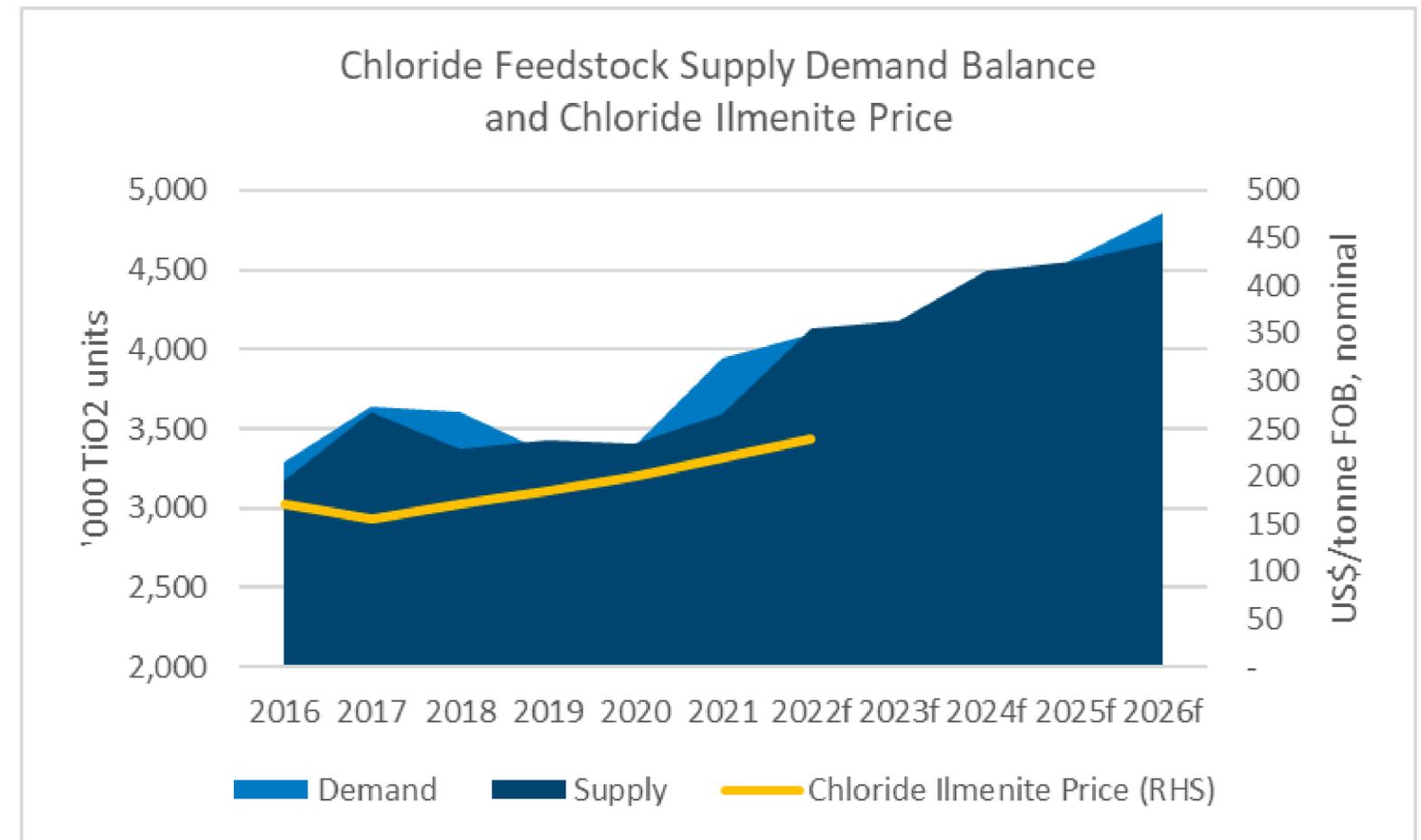
- One of the highest-grade hard rock titanium assets globally
- 100% owned in Tier 1 jurisdiction
- Granted mining lease and mining approval to extract approximately 1.2Mtpa of mineralisation
- Environmental approval secured in 2012 to mine and construct a 3.2 Mtpa processing plant. Implementation timeframe extension application underway.
- Attracted strong partner to optimise value realisation
- Successful commercial scale trial to demonstrate value in use to end users

Need & Opportunity

China is half of the global titanium pigment production and is shifting to the more sustainable chloride process

World supply of quality chloride feedstocks is in decline, with prices steadily increasing for the last 5 years

- Chloride pigment production requires high-grade feedstocks such as ilmenite, rutile and titanium slags
- Primary mineral sands (rutile, ilmenite) deposits are being depleted
- Neometals is working with Chinese partners to realise value from production¹



Source: TZMI Feedstock Price Forecast, Issue 3, 2022

1. For full details of commercial partnerships via MOU refer to:
 Neometals ASX release dated 16th April 2021 titled "Barrambie - MOU for Cornerstone Concentrate Offtake" and
 Neometals ASX release dated 4th October 2021 titled "MOU for JV to develop Barrambie"



The Strategy: Secure Strong Partners

Currently Neometals has:

- **Conditional MOU with IMUMR* for 50:50 operating JV**
 - IMUMR is a Chinese leading titanium-vanadium research institute with a national mandate to develop upstream supply chains for strategic industries
- **Neometals executed MOU with leading titanium slag producer, Jiuxing Titanium Materials (Liaoning) Co. Ltd.****
 - MOU includes negotiation terms for binding formal offtake supply agreement on take-or pay basis for 5 years from first production
 - 800,000 dtpa of mixed gravity concentrate or 500,000 dtpa of ilmenite and 275,000 dtpa of iron-vanadium concentrate

*IMUMR = Institute of Multipurpose Utilisation of Mineral Resources, Chinese Academy of Geological Sciences

**For full details of commercial partnerships via MOU refer to:

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Successful Commercial - Scale Smelting Trials with Jiuxing

Commercial-scale smelting of Barrambie mineral concentrate (35%TiO₂) blended with other commercially available ilmenites produced a premium quality chloride-grade titanium slag

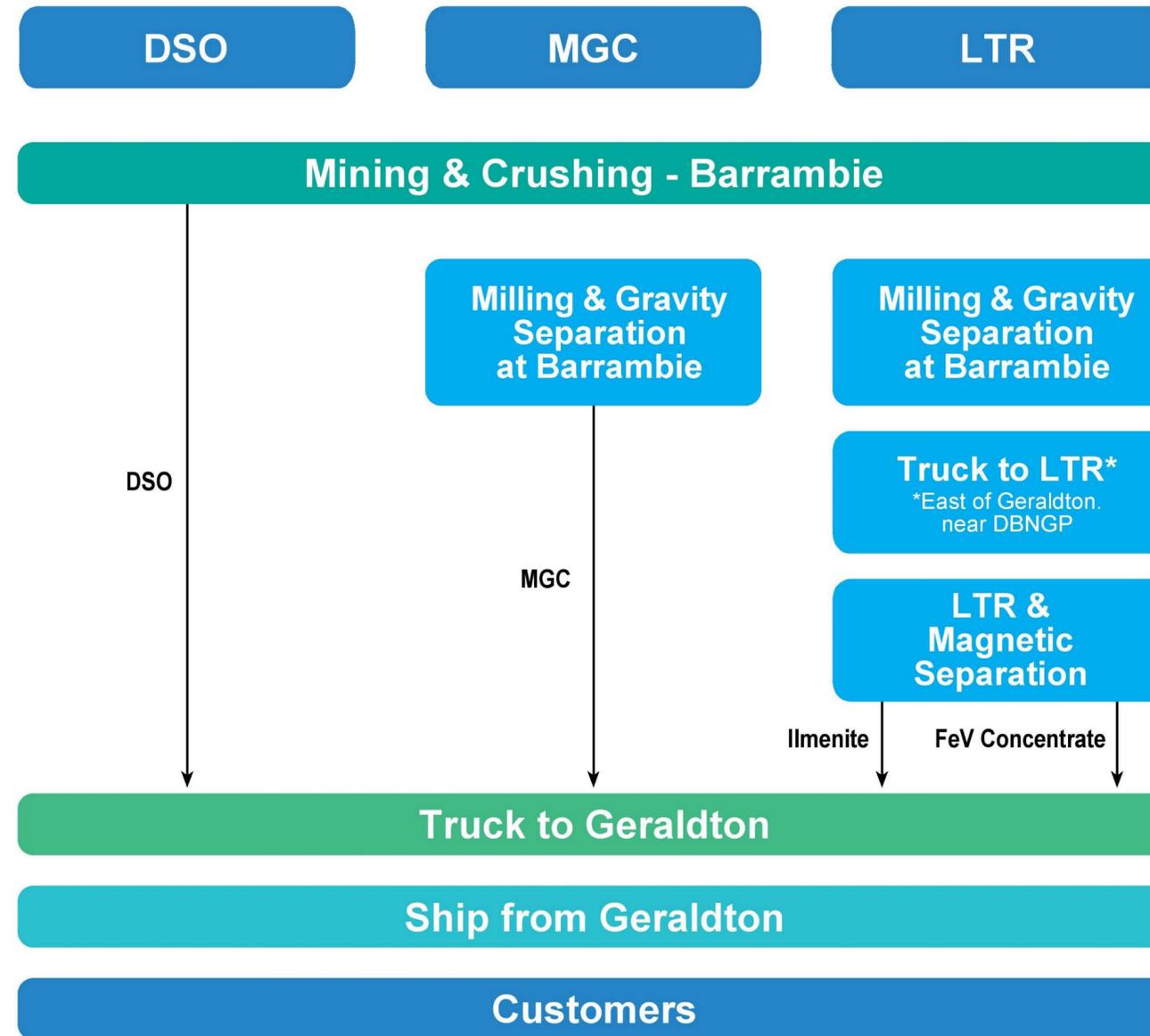
	TiO ₂ Slag from Scheme 1		TiO ₂ Slag from Scheme 2	
	Jiuxing Assay	Australian Check Assay	Jiuxing Assay	Australian Check Assay
TiO₂	<u>90.86%</u>	<u>92.35%</u>	<u>91.68%</u>	<u>91.2%</u>
CaO	0.25%	0.43%	0.31%	0.30%
MgO	0.45%	0.45%	0.54%	0.54%
ΣFe	3.86%	1.93%	4.08%	4.37%
SiO₂	-	2.62%	-	1.63%
V₂O₅	-	0.85%	-	0.65%

Source: Jiuxing and Neometals*

*For full details refer to Neometals ASX release dated 3rd November 2022 titled “Successful commercial-scale smelting trials for Barrambie”

- Results provide real world industry validation that saleable titanium and iron / vanadium co-products can be produced using a simple and conventional processing pathway
- Enable Neometals and Jiuxing to pursue binding offtake negotiations

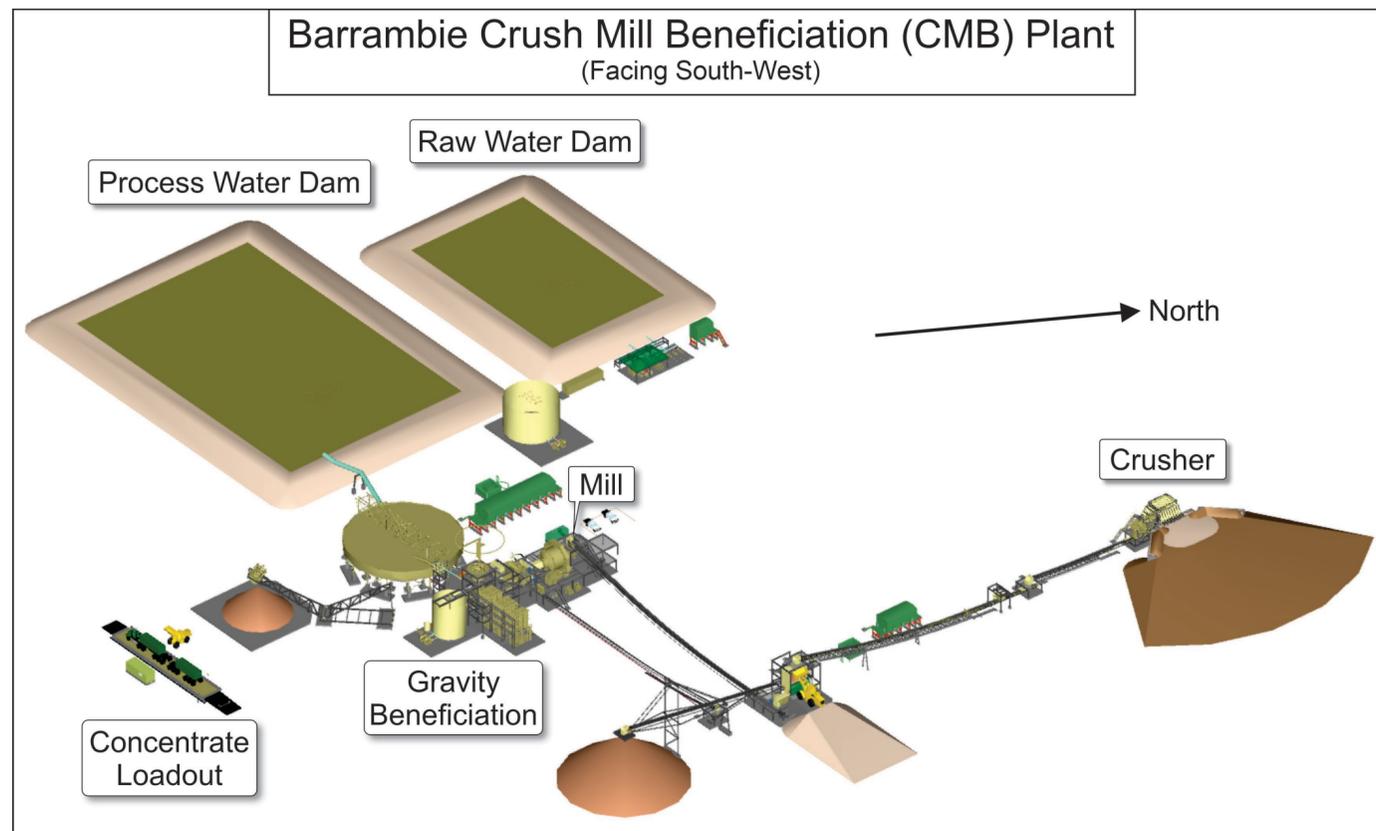
The Solution: Pathways to Commercialise



*Dampier to Bunbury Natural Gas Pipeline

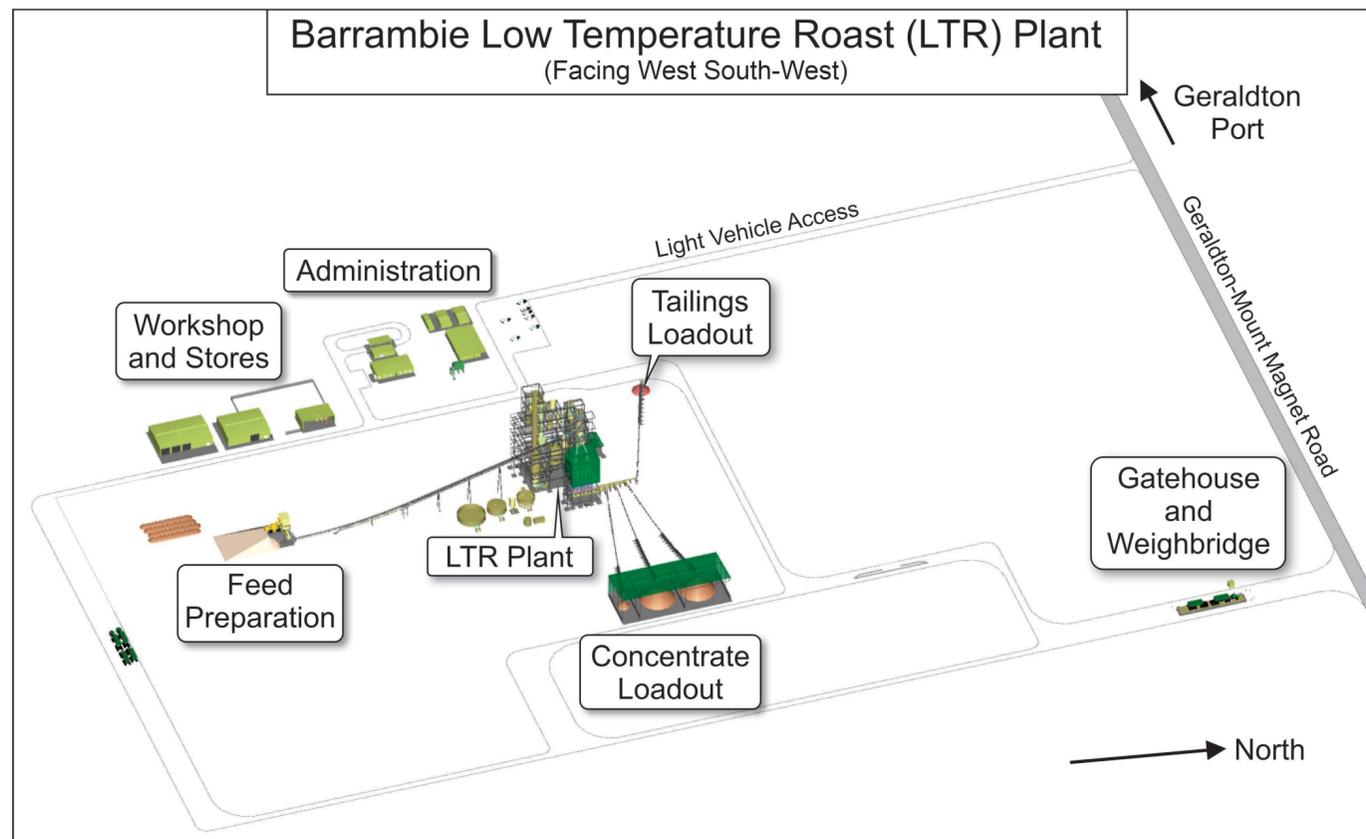
For full details refer to Neometals ASX release dated 17th November 2022 titled "Robust Outcomes From Barrambie Titanium Project PFS"

Barrambie Proposed Processing Facilities – CMB Plant



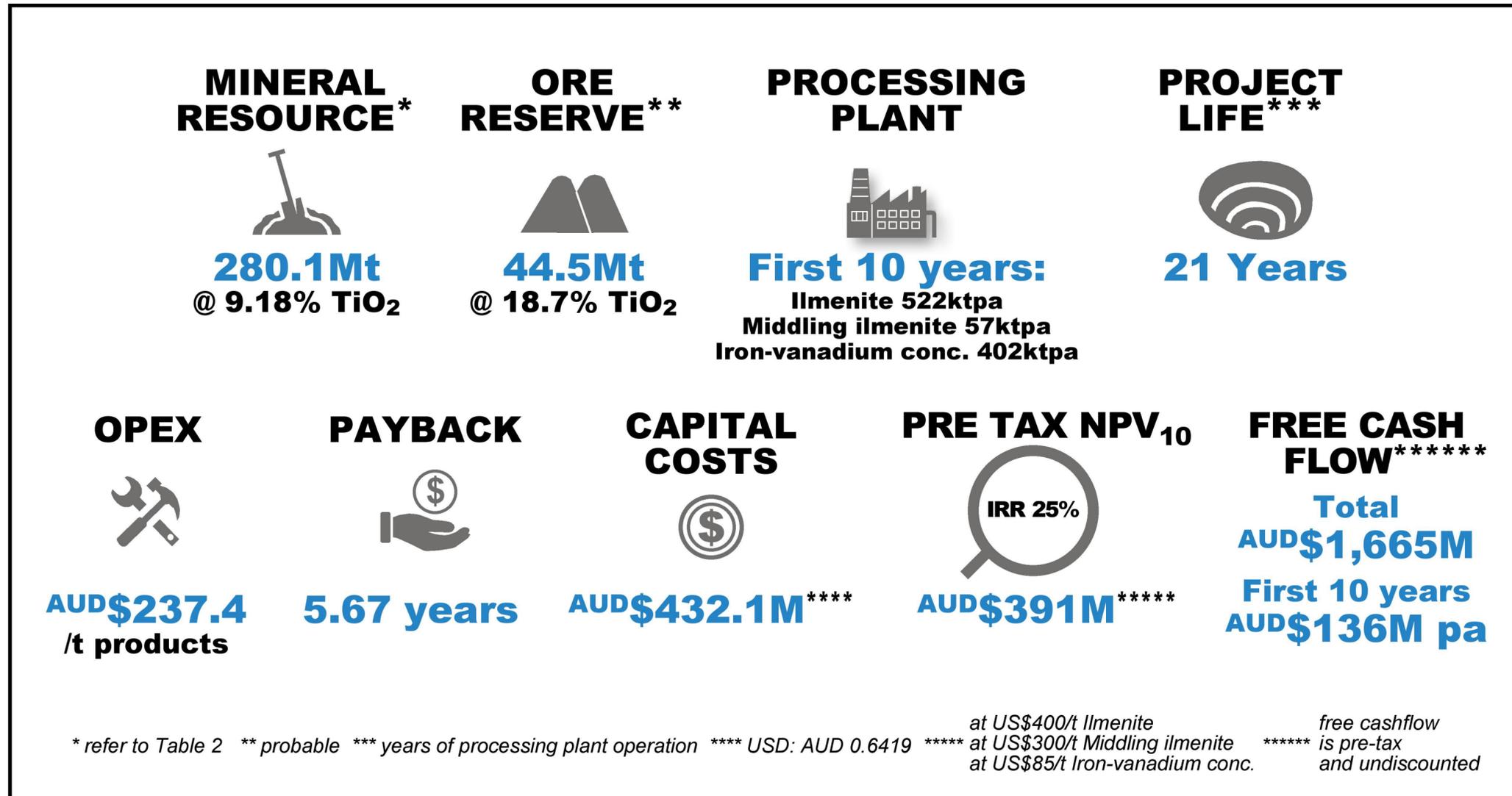
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Strategy – Produce Chloride Grade Ilmenite via LTR Plant



For full details refer to Neometals ASX release dated 17th November 2022 titled “Robust Outcomes From Barrambie Titanium Project PFS”

Robust PFS Results



- The PFS confirms 'value-in-use' for Barrambie's product basket and supports dialogue with potential offtake partner Jiuxing

For full details refer to Neometals ASX release dated 17th November 2022 titled "Robust Outcomes From Barrambie Titanium Project PFS"



Next Steps

- Continue metallurgical variability testwork
- Complete binding offtake negotiations with potential offtake partner Jiuxing
- Execution of Barrambie BOO/T Contract* and/or commence a AACE¹ Class 3 Definitive Feasibility Study

*Subject to successful Jiuxing trial, positive PFS and Board approval

¹ Association for the Advancement of Cost Engineering (AACE)

Ilmenite and Iron-Vanadium Concentrate Grades

	Barrambie Ilmenite	Barrambie Middling Ilmenite	Barrambie Iron-Vanadium Concentrate
Composition	Typical	Typical	Typical
TiO₂ (%)	52.0	48.0	13.0
V₂O₅ (%)	0.40	0.60	1.58
Fe₂O₃ (%)	47.0	50.0	84.2
Al₂O₃ (%)	1.0	1.3	1.8
SiO₂ (%)	2.0	2.5	2.6
CaO (%)	0.05	0.06	0.07
MgO (%)	0.17	0.15	0.12
MnO (%)	0.42	0.4	0.12
K₂O (%)	0.01	0.01	0.01
Nb₂O₅ (%)	<0.01	<0.01	<0.01
P₂O₅ (%)	<0.01	<0.01	0.02
SO₃ (%)	0.01	<0.01	<0.01
Th (ppm)	<10	<10	<10
U (ppm)	<10	<10	<10

For full details refer to Neometals ASX release dated 17th November 2022 titled "Robust Outcomes From Barrambie Titanium Project PFS"



Thank you.

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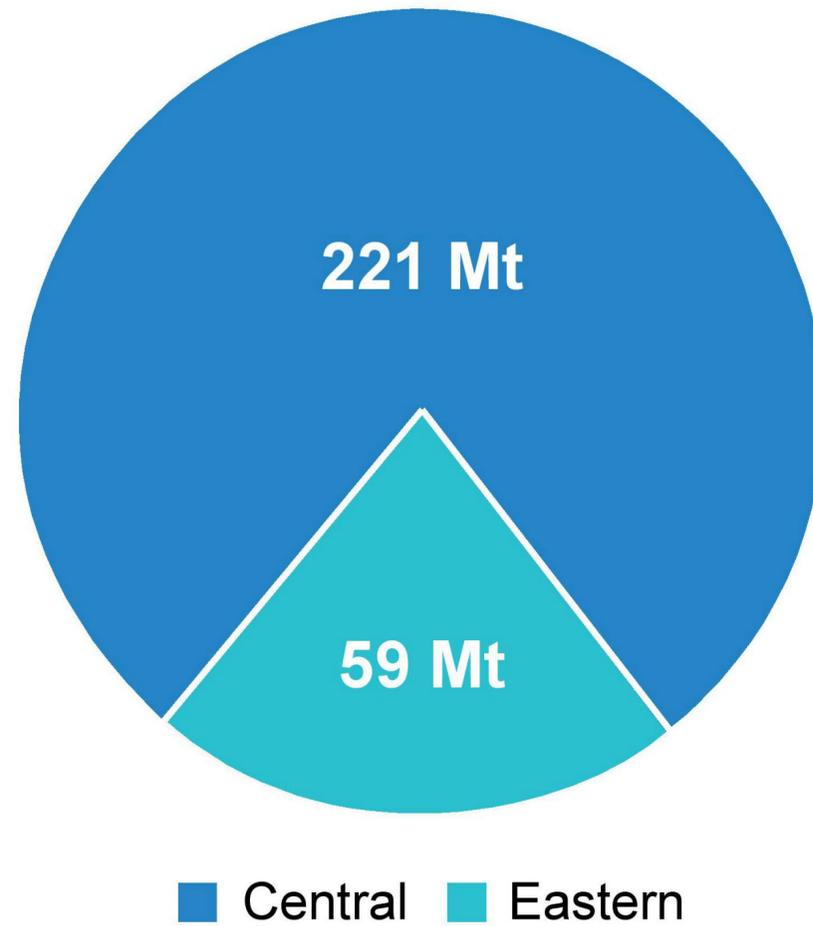
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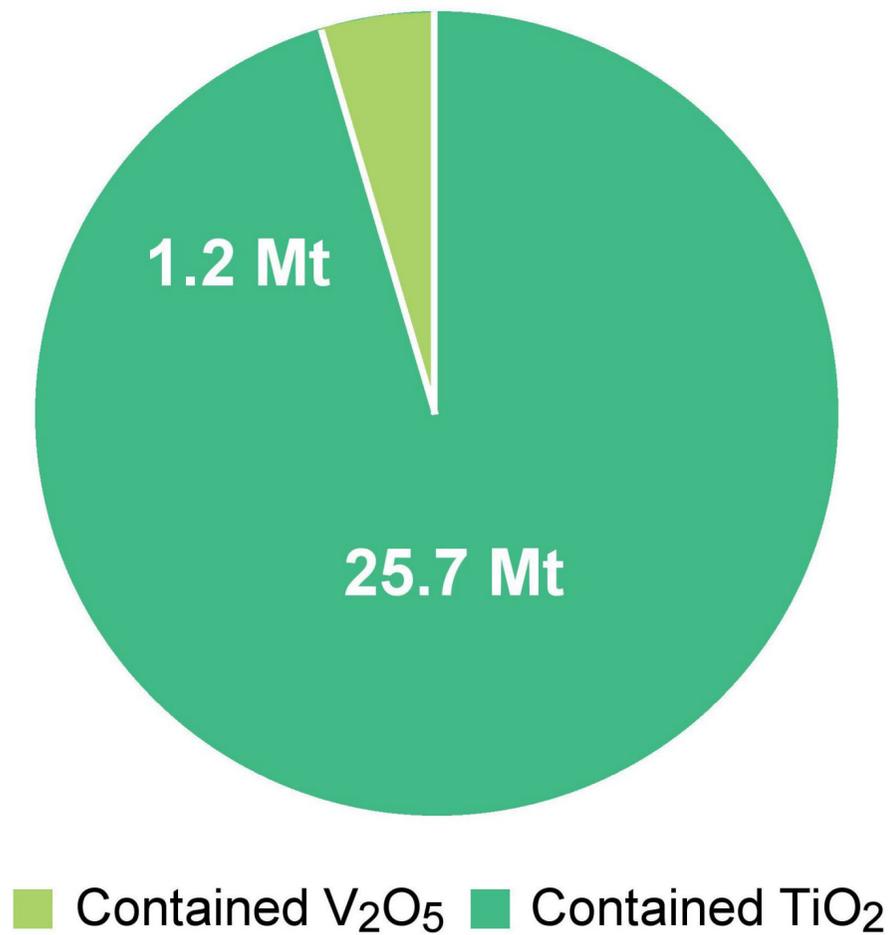
APPENDIX

The Solution: Sunrise for the Sleeping Giant

**Barrambie By Ore Body Size*
(Mt)**

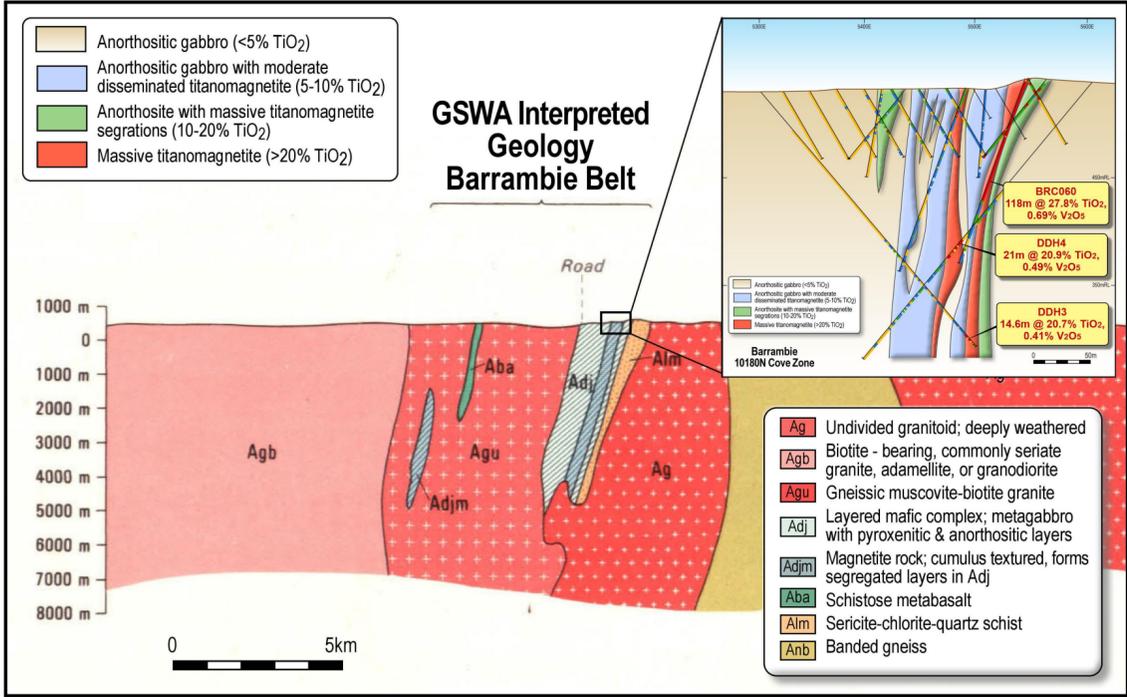
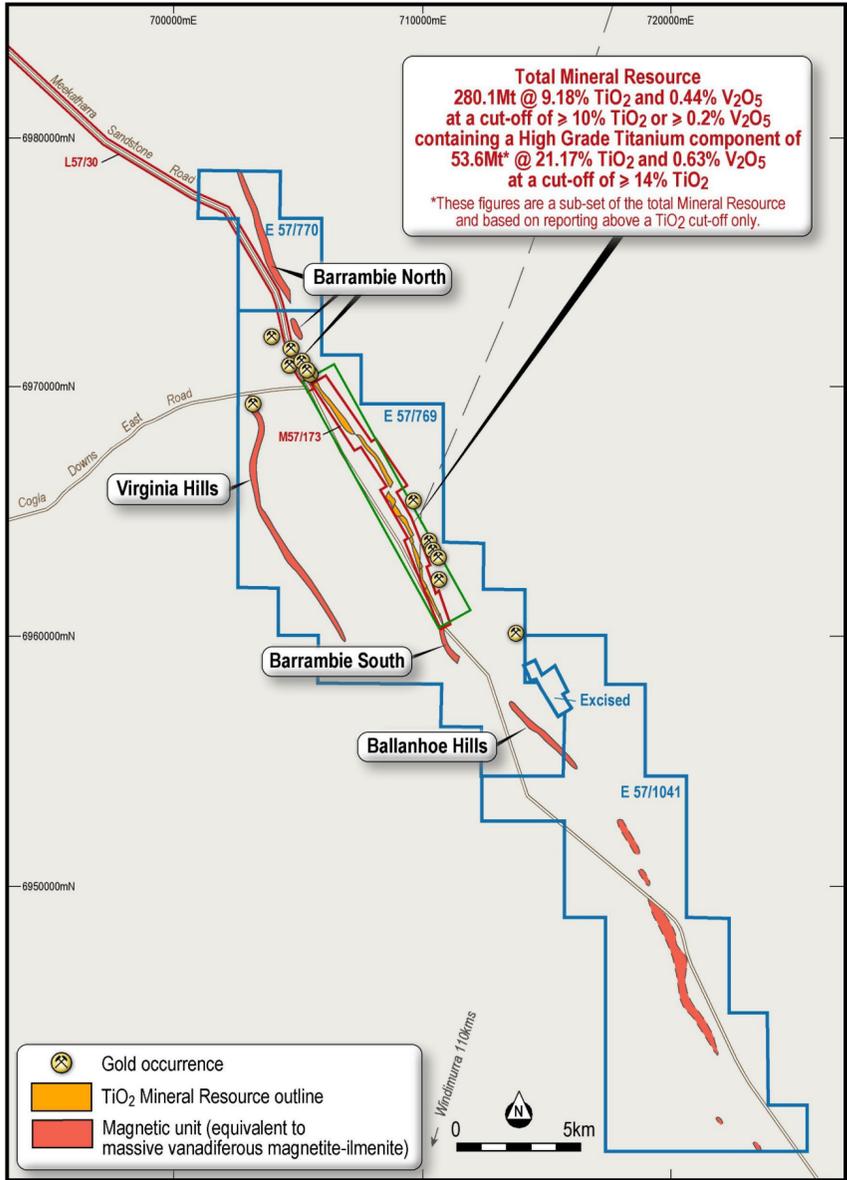


**Barrambie Contained Metal
(Mt)**



*For full details refer to Neometals ASX release dated 17th April 2018 titled "Updated Barrambie Mineral Resource Estimate"

Mineral Resource Estimate



*For full details refer to Neometals ASX release dated 17th April 2018 titled "Updated Barrambie Mineral Resource Estimate"



Mineral Resource and Ore Reserve Estimate

Global Mineral Resource as at 17 April 2018¹

	Tonnes (M)	TiO ₂ (%)	V ₂ O ₅ (%)
Indicated	187.1	9.61	0.46
Inferred	93.0	8.31	0.40
Total	280.1	9.18	0.44

High Grade V₂O₅ Mineral Resource (at 0.5% V₂O₅ cut-off)²

	Tonnes (M)	TiO ₂ (%)	V ₂ O ₅ (%)
Indicated	49.0	16.93	0.82
Inferred	15.9	16.81	0.81
Total	64.9	16.90	0.82

High TiO₂ Mineral Resource (14% TiO₂ cut-off)²

	Tonnes (M)	TiO ₂ (%)	V ₂ O ₅ (%)
Indicated	39.3	21.18	0.65
Inferred	14.3	21.15	0.58
Total	53.6	21.17	0.63

- (1) Based on Cut-off grades of $\geq 10\%$ TiO₂ or $\geq 0.2\%$ V₂O₅
 (2) The high-grade titanium and vanadium figures are a sub-set of the total Mineral Resource. These figures are not additive and are reporting the same block model volume but using different cut-off grades

Barrambie Titanium Ore Reserve Estimate - November 2022^{**}

Ore Reserve Category	Ore Tonnes (Mt)	TiO ₂ (%)	V ₂ O ₅ (%)	Fe ₂ O ₃ (%)
Probable	44.5	18.7	0.61	44.1

Cut-off is based on net value (revenue minus selling, processing, administration and incremental ore mining costs) >\$0/t on a diluted block-by-block basis from the parameters used in the pit optimisation. Ore Reserves reported are within the Mineral Resource estimates. This relates roughly to a 10% TiO₂ cut-off.

*For full details refer to Neometals ASX release dated 17th April 2018 titled "Updated Barrambie Mineral Resource Estimate"

**For full details refer to Neometals ASX release dated 17th November 2022 titled "Robust Outcomes From Barrambie Titanium Project PFS"