### **ASX ANNOUNCEMENT**



#### 2024 AUSTRALIAN CRITICAL MINERALS CONFERENCE

29 May 2024

Arafura Rare Earths Limited (ASX: ARU) ("Arafura" or the "Company") is pleased to attach a copy of the presentation delivered by Managing Director and CEO, Darryl Cuzzubbo, at the 2024 Australian Critical Minerals Conference in Brisbane.

#### -ENDS-

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"Our goal is to be a trusted global leader and supplier of choice for sustainably mined and processed rare earth products, helping our customers deliver clean and efficient technologies. We are committed to delivering positive intergenerational economic, environmental and social benefits to our stakeholders."





### **Disclaimer**



This presentation is dated 29 May 2024 and has been prepared by Arafura Rare Earths Limited ("Arafura", "Arafura Rare Earths" or the "Company") and is of a summary form only and therefore contains general background information which may not be complete. It should be read in conjunction with, and full review made of Arafura Rare Earths' most recent financial report and other periodic disclosures and releases lodged with the Australian Securities Exchange (ASX) and available at www.asx.com.au.

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#### **Mineral Resources and Ore Reserves**

The information in this presentation that relates

to Mineral Resources is extracted from the Company's ASX announcement dated 7 June 2017 (Detailed Resource Assessment Completed) and was completed in accordance with the guidelines of the JORC Code (2012). The information in this presentation that relates to Ore Reserves is extracted from the Company's ASX announcement dated 16 March 2020 (Major Increase in Mine Life for the Nolans Project) and was completed in accordance with the guidelines of the JORC Code (2012). Arafura Rare Earths 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 all material assumptions and technical parameters underpinning the estimates in the original market announcements continue to apply and have not materially changed. Arafura Rare Earths 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.

### Production Targets and Forecast Financial Information

The information in this presentation that relates to production targets and financial information (in relation to capital cost of A\$1,590 million) is extracted from the Company's ASX

announcement dated 11 November 2022 (Nolans Project Update). The production target is based on 12% Proved Reserves, 62% Probable Reserves and 26% inferred resources as reported in the Company's ASX announcement dated 11 November 2022. 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. Arafura confirms that, other than as set out in this presentation, all material assumptions underpinning the production target and forecast financial information derived from the production target set out in the Company's ASX announcement dated 11 November 2022 (including any assumptions referred to in the Company's ASX announcement dated 11 November 2022 that were used from the DFS as set out in the Company's ASX announcement dated 7 February 2019 (Nolans Project Definitive Feasibility Study) or from the Updated Mining Study as set out in the Company's ASX announcement dated 16 March 2020 (Major Increase in Mine Life for the Nolans Project)), continue to apply and have not materially changed.

### Agenda





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Nolans Project indicative timeline

- (5)
- Market outlook: structural deficit about to bite
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- (7)
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- (13) ESG an integrated approach
- (14) Nolans: ready to go

### **Corporate summary**

### Why the Nolans Project?

√ fully-permitted¹ ✓ scalable  $\checkmark$  construction-ready<sup>3</sup>  $\checkmark$  tier 1 location

√ single-site ore-tooxide project

NdPr is essential for the energy transition

Supply security threat with ~90% of NdPr supplied by China

**Demand expected to nearly** double by 2032 2 - development pipeline challenging

+38 years Mine life

NdPr Oxide 4,440 tpa

**SEG/HRE Oxide** 474 tpa

**Phosphoric Acid** 144,393 tpa

(54% P<sub>2</sub>O<sub>5</sub> MGA)



All Northern Territory Government approvals granted / Awaiting approval of relevant management plans in support of Commonwealth Government approvals already received



**Explorer** 

Developer

**Project Execution** 









**Market Cap** 

A\$450m4

**Share price** A\$0.204

**Shares on issue** 2,310m

Cash

A\$58m<sup>5</sup>

Adamas Intelligence, "Rare Earth Magnet Market Outlook to 2040" (Q2 2023)

<sup>3</sup> Commencement of construction is subject to finalisation and financial close of debt financing facilities and receipt of equity funding sufficient to proceed to construction

# **Nolans Project location**



Stuart Highway 10km east



Water supply 25km southwest



and other services 135km south

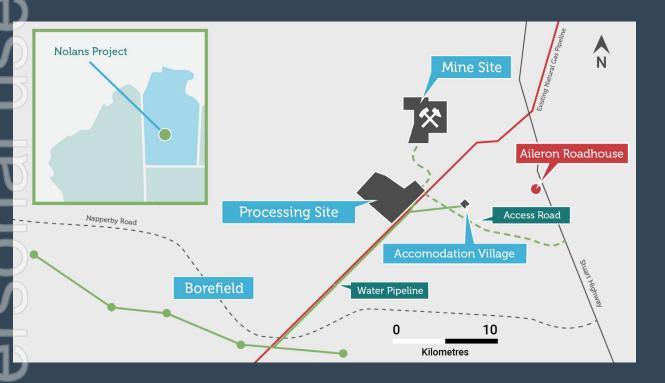


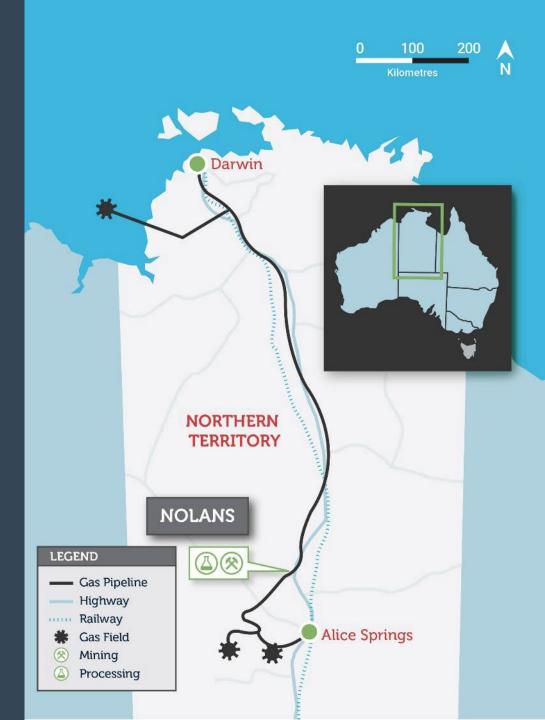
Amadeus natural gas pipeline adjacent to site

Tailings and waste management at site



Deep water port and associated infrastructure at Darwin





# **Construction ready**

### Once financed, we are ready to go

Environmental permits and approvals in place1



>\$40m on site works derisking project schedule



Granted mineral lease / license



**Experienced Board and** leadership team supported by KBR and Hatch



Access to existing infrastructure

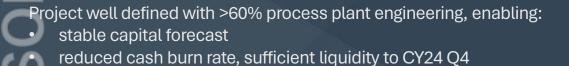


Construction to commence when funding complete targeting CY24 2H



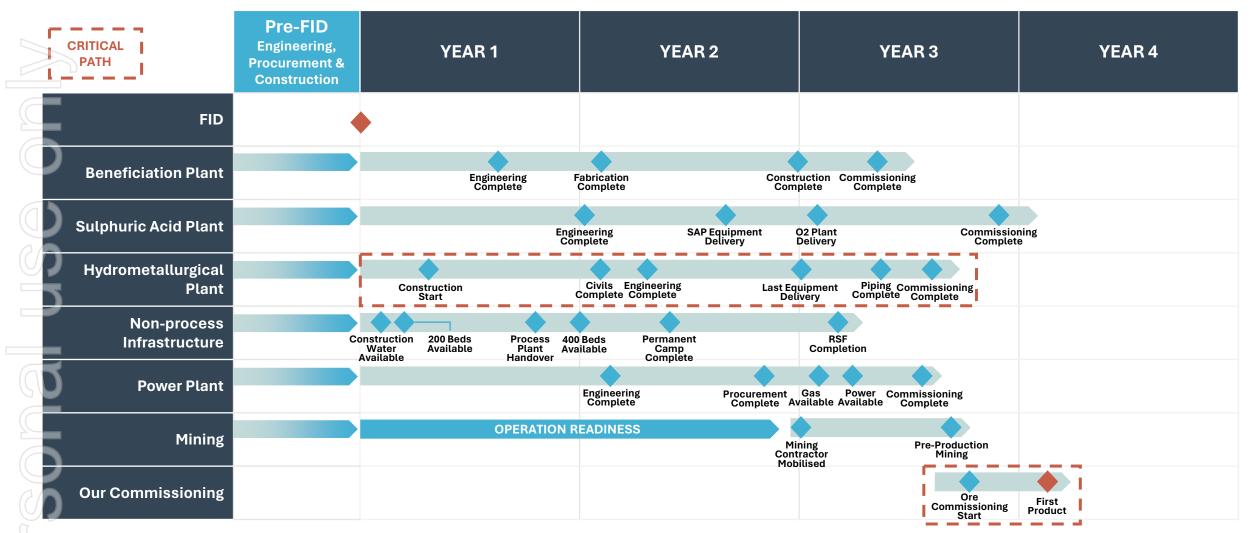






## **Nolans Project indicative timeline**



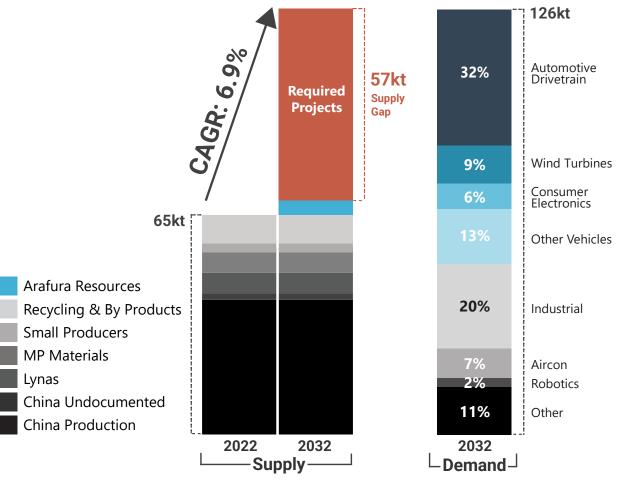


# Market outlook: structural deficit about to bite

Forecast supply gap represents ~88% of global supply today

- The equivalent of > 12 Nolans projects required to close gap
- Average ~18 years required to develop mines from discovery to first commercial production<sup>1</sup>
- Development pipeline is challenging





Source: Arafura internal Supply Demand forecast referencing Wood Mackenzie – Rare Earths Market Study, July 2022; Wood Mackenzie Rare Earth Markets 2022 Outlook to 2050 (September 2022); General Administration of Customs of China via Baiinfo January 2022, Roskill 2021. Supply is primary supply, including monazite and excludes secondary source of NdPr supply from waste magnet production.

Average global mine lead times, S&P Global Market Intelligence report 21 March 2024: 'Average lead time almost 18 years for mines started in 2020 – 23'

## Market drivers: NdPr pricing upside



### Remember the semi-conductor chip crisis?1

- Acute competition to secure chips
- Created **significant risk** to automotive global supply chain



Value of NdPr in one EV with a sale price of ~US\$53,000 is ~**US\$50**<sup>2</sup>

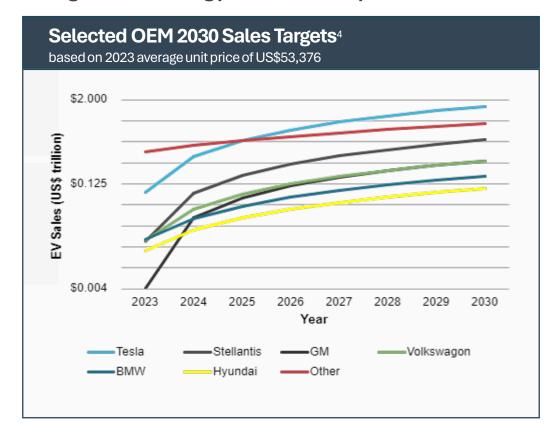
Lack of supply puts the entire EV global supply chain at risk





- NdPr comprises less than 0.1% cost in an EV
- Very low substitution risk
- Critical in motor efficiency
- Strongest permanent magnet available today up to 10x stronger than ferrite magnets<sup>3</sup>

### Big names with big promises are dependent on NdPr



<sup>🗓</sup> Commodities 2022: Vehicle makers face challenging year amid persistent chip shortage | S&P Global Commodity Insights (spglobal.com)

Source: Macquarie Rare Earths Update 'A delicate balance for NdPr', November 2023. ~\$50 is an estimated average value as at 27 May 2024. Percentage of NdPr will vary in electric vehicles.

Source: Shin-Etsu Rare Earth Magnets <a href="https://www.shinetsu-rare-earth-magnet.jp/e/design/rem.html">https://www.shinetsu-rare-earth-magnet.jp/e/design/rem.html</a>

Assumes linear interpolation between each manufacturers' 2023 actual sales and 2030 stated sales target; manufacturers' sales targets are subject to change

# Supply chain risk

### Remember the chips?<sup>1</sup>

Supply security creates significant risk

### Japan has ex-China strategy

Japan has secured significant proportion of ex-China NdPr for stable feedstock <sup>2</sup>

### **ROW dependant on China**

Today the **US, Korea** and **European** EV and wind turbine manufacturers depend on China supply

### Who is next with ex-China supply?

**Arafura** provides unique opportunity for OEMs to achieve long-term NdPr supply security

# Is a truly independent ex-China supply chain possible?

Yes. **Nolans** is one of the most advanced ore to oxide development projects globally. <sup>4</sup>



~90%

Global NdPr is processed in China<sup>3</sup>

**~10%**Rest of World

Majority directed to Japan

Illustrative purposes only

- 1 Commodities 2022: Vehicle makers face challenging year amid persistent chip shortage | S&P Global Commodity Insights (spglobal.com)
- Refer Lynas ASX announcement 7 March 2023 "JARE extends support for Lynas growth plan" and Sojitz News Release 7 March 2023 "Securing Supply of Heavy Rare Earths to Japan with Additional Investment to Lynas". Arafura estimates ~75% of LYC supply is allocated to Japanese market
- <sup>3</sup> Adamas Intelligence, "Rare Earth Magnet Market Outlook to 2040" (Q2 2023)

- 10
- <sup>4</sup> Average global mine lead times, S&P Global Market Intelligence report 21 March 2024: "Average lead time almost 18 years for mines started in 2020 23". Internal analysis of development stage of projects assessed based on Company filings.

## Virtue of Nolans: large, scalable, low-cost resource



### Nolans: a differentiated proposition



Large, high-grade resource



Located in a Tier 1 mining jurisdiction



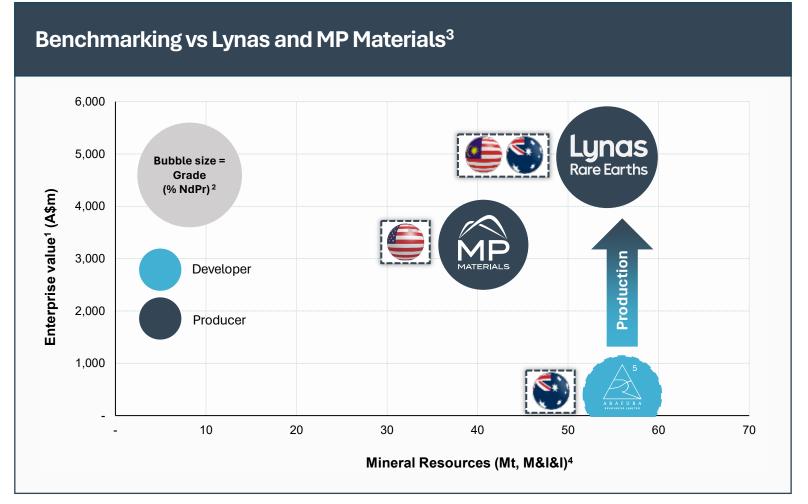
Low unit cost – phosphoric acid credits



Single site ore to oxide



# Expansion scoping study underway



<sup>1</sup> Enterprise value as at 22 March 2024. Enterprise value calculated as market capitalisation plus debt minus cash. Debt and cash are as at 31 December 2023. There is no guarantee that Arafura's enterprise value following production will be similar to that of Lynas or MP

<sup>&</sup>lt;sup>2</sup> Based on % TREO multiplied by % NdPr enrichment

<sup>&</sup>lt;sup>3</sup> Please refer to Appendix 1 for further information; data sources are listed in Appendix 1

<sup>4</sup> Total mineral resources include varying compositions of measured, indicated and inferred; refer to Appendix 1 for a full breakdown of these resource estimates

<sup>5</sup> Lynas and MP Materials are already in production and so are not identical in nature to Arafura; there is no guarantee that Arafura will reach its desired production levels at Nolans in full or at all; production at Nolans is subject to funding and the successful completion of construction

## **Binding offtake target**



# Focus on strategic value and equity investment

Targeting NdPr users not aligned with 'Made in China 2025 Strategy'

Offtake discussions now focused on parties bringing strategic value including equity investment

Offtake Discussion Group	Location	NdPr Oxide (Tpa)¹	% of Binding Offtake Target⁴					
Secured Offtake (Binding Agreement)								
Hyundai & Kia	Korea	1,500	43%					
Siemens Gamesa RE	Germany	520	15%					
Offtake Under Discussion <sup>2</sup>								
Contract negotiations	Asia & Europe	2,000	56%					
Advanced offtake discussions <sup>3</sup>	Asia & Europe	2,515	71%					
TOTAL		6,535	185%					

Product may be supplied as NdPr Oxide or Metal equivalent

The Company, at this stage, has no certainty as to the timing and likelihood of successfully concluding binding agreements being entered into

<sup>&</sup>lt;sup>3</sup> ASX announcement will be released once the binding offtake agreement has been executed

<sup>&</sup>lt;sup>4</sup> Targeting 80% of planned production as binding offtake. Planned Production refers to the average annual production from Nolans, being 4,440tpa (Refer ASX Announcement dated 11 May 2021)

# Project funding: indicative debt structure & status



	<u>Facility</u>	Amount (US\$m)	Conditional Approval (US\$m)	Status							
	Project Finance Facilities										
	EFA	125	125	Conditionally Approved <sup>3</sup>							
	NAIF	100	100	Conditionally Approved (A\$150m) <sup>3</sup>							
)	EDC	300	300	Conditionally Approved <sup>4</sup>							
	KEXIM	75	-	Lol received 4 Dec 2023 <sup>5</sup>							
	ECA Covered Tranche	175 <sup>1</sup>	<b>75</b> <sup>6</sup>	EFA conditional approval <sup>3</sup> RFP responses							
	Total	775									
)	Cost Overrun Facility <sup>2</sup>	80	33 <sup>6</sup>	Conditional approvals: NAIF (A\$50m) <sup>3</sup>							
	Subordinated SLF	200	200	EFA conditional approval <sup>3</sup>							
	Total Debt Facilities	1,055	833	excluding contingent instrument facility							



#### **Cost Overrun Facility (COF)**

US\$80m funded by senior debt<sup>2</sup>

#### **Standby Liquidity Facility (SLF)**

EFA US\$200m, 15-year, subordinated debt facility

#### **Purpose:**

Fund project and ramp-up costs, excluding senior debt financing costs, prior to project completion

<sup>&</sup>lt;sup>1</sup> Targeting commercial bank lending under ECA covered tranches supported by untied loan guarantees from Euler Hermes and KEXIM. Refer to ASX announcements dated 29 March 2023 and 20 June 2023.

<sup>&</sup>lt;sup>2</sup>Total Cost Overrun funding of US\$160m, 50% funded by senior debt with remaining 50% to be funded by equity.

<sup>&</sup>lt;sup>3</sup> Refer to ASX announcement dated 14 March 2024.

<sup>&</sup>lt;sup>4</sup> Refer to ASX announcement dated 27 May 2024

<sup>&</sup>lt;sup>5</sup> Refer to ASX announcement dated 4 December 2023.

<sup>&</sup>lt;sup>6</sup> EFA allocations across ECA Covered Tranche and COF to be agreed.

## **Equity engagement**



### Potential build-up of equity capital

#### **Cornerstone Group Public Market Customer Cornerstone & Other Strategic** Substantial holders **Industry Cornerstone** Other customer cornerstones Government seeded funds 3 **Institutional Investors** with supply chain diversification mandate Institutional investors **Customer/strategic commitment Existing Shareholders** Resources PE, corporates, with an energy will drive participation of large institutional and family transition mandate financial groups offices Balance to be raised through offer to new and existing shareholders

## Refreshed leadership team and Board





Mark Southey
Non-Executive Chairman



Darryl Cuzzubbo
Managing Director & Chief
Executive Officer



Chris Tonkin Non-Executive Director



Cathy Moises
Non-Executive Director



Michael
Spreadborough<sup>1</sup>
Non-Executive Director



Roger Higgins<sup>1</sup>
Non-Executive Director



Peter Sherrington
Chief Financial Officer



Stuart Macnaughton Chief Operating Officer



Fiona Blakely Chief People Officer



Robert Gerard Project Director



Tanya Perry
Head of Sustainability &
Environment

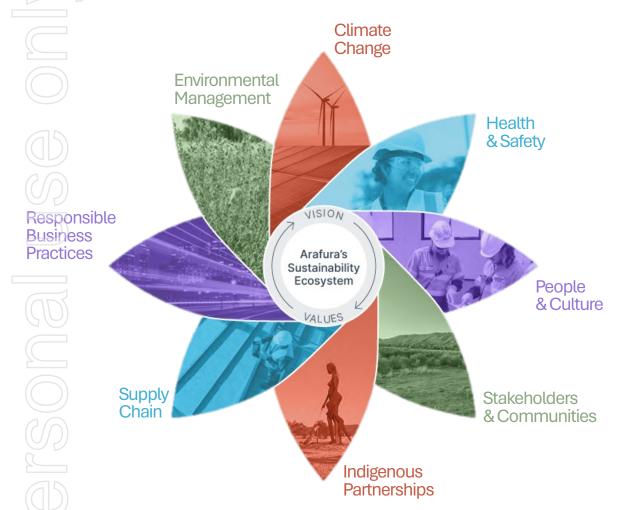


Shaan Beccarelli
Head of Corporate Affairs
& Investor Relations

# ESG – an integrated approach focusing upon what matters most



As a greenfield developer we have a unique opportunity to create and deliver value for all stakeholders





We recognise the interdependencies of ESG in our business



We are building capability to deliver bestpractice ESG



We are aligning our governance to international standards



We are poised to make a positive difference in the communities where we operate and live

# The Nolans Project is ready to go





Definitive Feasibility Study



Native Title Agreement



Mineral Leases granted



Federal government approvals



Northern Territory government approvals



Early works completed



68% of targeted senior debt funding secured – EDC, NAIF, EFA <sup>1</sup>



Remaining debt well progressed



58% of 80% offtake target secured <sup>2</sup>



Remaining offtake well progressed



**Equity initiated** 





<sup>&</sup>lt;sup>1</sup> Refer ASX announcement 27 May 2024

<sup>&</sup>lt;sup>2</sup> Refer ASX announcement 29 March 2023

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(All corporate and general enquiries)

E: nolansproject@arultd.com (Nolans Project enquiries only)





# Appendix 1: pure-play rare earth peer benchmarking



	Company	Project	Location	Stage	Product	EV (A\$m)¹	Mineral Resources (Mt)	TREO grade (%)	NdPr enrichment (%)	NdPr grade(%) <sup>2</sup>	Contained NdPr (Mt)	NdPr Production	Source(s)
A	rafura	Nolans	Australia	Construction	Oxide	537	Measured: 4.9 Indicated: 30.0 Inferred: 21.0 Total: 56.0	Measured: 3.2% Indicated: 2.7% Inferred: 2.3% Total: 2.6%	Measured: 26.1% Indicated: 26.4% Inferred: 26.5% Total: 26.4%	Measured: 0.84% Indicated: 0.71% Inferred: 0.61% Total: 0.69%	0.38	4.44	ASX announcement: "Nolans Project update" on 11 November 2022
	ynas	Mount Weld	Australia	Producing	Oxide	4,959	Measured: 17.1 Indicated: 11.4 Inferred: 25.9 Total: 54.3	Measured: 7.6% Indicated: 5.1% Inferred: 3.6% Total: 5.2%	<b>Total</b> : 22.8% <sup>4</sup>	<b>Total</b> : 1.19%	0.64	12.00	ASX announcement: "Annual Report FY2023" on 12 October 2023 ASX announcement: "Resources and Reserves Increase" on 6 August 2018
	1P	Mountain Pass	USA	Producing	Oxide	3,269	Measured <sup>3</sup> : 0.1 Indicated <sup>3</sup> : 31.5 Inferred <sup>3</sup> : 9.1 Total: 40.6	Measured <sup>3</sup> : 9.5% Indicated <sup>3</sup> : 6.2% Inferred <sup>3</sup> : 5.1% Total: 5.9%	<b>Total</b> : 15.7%	<b>Total</b> : 0.93%	0.38	6.00	SEC filing: "FORM 10-K" from 28 February 2022

<sup>1</sup> Enterprise value as at 22 March 2024. Enterprise value calculated as market capitalisation plus debt minus cash. Debt and cash are as at 31 December 2023

<sup>&</sup>lt;sup>2</sup> Based on %TREO multiplied by % NdPr enrichment

<sup>3</sup> Resources reported exclusive of Reserves. Measured Resource assumed to be equal to Proven Reserves. Indicated Resource assumed to include Probable Reserves

<sup>&</sup>lt;sup>4</sup> Calculated as contained NdPr reserves (386kt) divided by contained TREO reserves (1,690kt)