

An aerial photograph of a large-scale excavation site in a dry, arid landscape. Several yellow excavators are visible, along with a large yellow bulldozer and a yellow dump truck. A white car is parked near the bottom center. A person in a high-visibility vest is standing on the left side of the site. The ground is uneven and shows signs of heavy machinery work.

# Advanced, Globally Significant, Tier 1 Australian Critical Minerals Project

## Donald Rare Earths & Mineral Sands Project



# Disclaimer

## CAUTIONARY STATEMENT

This presentation has been prepared by Astron Corporation Limited (Astron or the "Company"). The information contained in this presentation is for information purposes only. The information contained in this presentation is not investment or financial product advice and is not intended to be used as the basis for making an investment decision. Please note that, in providing this presentation, Astron has not considered the objectives, financial position or needs of any particular recipient. Astron strongly suggests that investors consult a financial advisor prior to making any investment decision. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. To the maximum extent permitted by law, none of Astron, its related bodies corporate or its shareholders nor their respective directors, officers, employees, agents nor advisors, nor any other person, accepts any liability, including, without limitation, any liability arising out of fault or negligence for any loss arising from the use or application of information contained in this presentation.

This presentation may include "forward looking statements" within the meaning of securities laws of applicable jurisdictions. Forward looking statements can generally be identified by the use of the words "anticipate", "believe", "expect", "project", "forecast", "estimate", "likely", "intend", "should", "could", "may", "target", "plan", "guidance" and other similar expressions. Indications of, and guidance on, future earning or dividends and financial position and performance are also forward-looking statements. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Astron and its related bodies corporate, together with their respective directors, officers, employees, agents or advisers, that may cause actual results to differ materially from those expressed or implied in such statement. Actual results, performance or achievements may vary materially from any forward-looking statements and the assumptions on which those statements are based. Readers are cautioned not to place undue reliance on forward looking statements and Astron assumes no obligation to update such information. Specific regard should be given to the risk factors outlined in this presentation (amongst other things). This presentation is not, and does not constitute, an offer to sell or the solicitation, invitation or recommendation to purchase any securities and neither this presentation nor anything contained in it forms the basis of any contract or commitment.

This presentation is not, and does not constitute, an offer to sell or the solicitation, invitation or recommendation to purchase any securities and neither this presentation nor anything contained in it forms the basis of any contract or commitment. Certain financial data included in this presentation is not recognised under the Australian Accounting Standards and is classified as 'non-IFRS financial information' under ASIC Regulatory Guide 230 'Disclosing non-IFRS financial information' (RG 230). This non-IFRS financial information provides information to users in measuring financial performance and condition. The non-IFRS financial information does not have standardised meanings under the Australian Accounting Standards and therefore may not be comparable to similarly titled measures presented by other entities, nor should they be interpreted as an alternative to other financial measures determined in accordance with the Australian Accounting Standards. No reliance should therefore be placed on any financial information, including non-IFRS financial information and ratios, included in this presentation. All financial amounts contained in this presentation are expressed in Australian dollars and rounded to the nearest \$0.1 million unless otherwise stated. Any discrepancies between totals and sums of components in tables contained in this presentation may be due to rounding.

## COMPETENT PERSONS STATEMENT

The information in this report that relates to the MIN5532 Mineral Resource estimate is based on information and supporting documentation compiled by Mrs Christine Standing, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mrs Standing is a full-time employee of Optiro Pty Ltd (Snowden Optiro) and is independent of Astron Corporation, the owner of the Mineral Resources. Mrs Standing has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. The Company confirms that the form and context in which the Competent Persons' findings are presented have not materially modified from the relevant original market announcement.

The information in this document that relates to the estimation of the RL2002 and RL2003 Mineral Resources is based on information compiled by Mr Rod Webster, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists. Mr Webster is a full-time employee of AMC Consultants Pty Ltd and is independent of DMS, the owner of the Donald Project Mineral Resources. Mr Webster has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. The Company confirms that the form and context in which the Competent Persons' findings are presented have not materially modified from the relevant original market announcement.

The information in this document that relates to the estimation of the Ore Reserves is based on information compiled by Mr Pier Federici, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Federici is a full-time employee of AMC Consultants Pty Ltd and is independent of Astron. Mr Federici has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. The Company confirms that the form and context in which the Competent Persons' findings are presented have not prematurely modified from the relevant original market announcement.

The information in this document that relates to the metallurgical performance and outcomes of testwork is based on information compiled by Mr Ross McClelland, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr McClelland is the principal metallurgist and director of Metmac Services Pty Ltd. Mr McClelland has been involved with the metallurgical development of the Wimmera-style mineral sands resources for more than 30 years. He has provided metallurgical consultation services to DMS for more than 7 years. He qualifies as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been prematurely modified from the relevant original market announcement.

# Astron Corporation: Corporate Overview

Astron is focused on the development of the world-class Donald Rare Earths and Mineral Sands Project



## Key Project: Donald

*Advanced project with globally significant size and scale, major regulatory approvals in place and underpinned by robust economics.*

*It is planned to come into production at a time where a supply deficit is emerging for rare earths and mineral sands.*

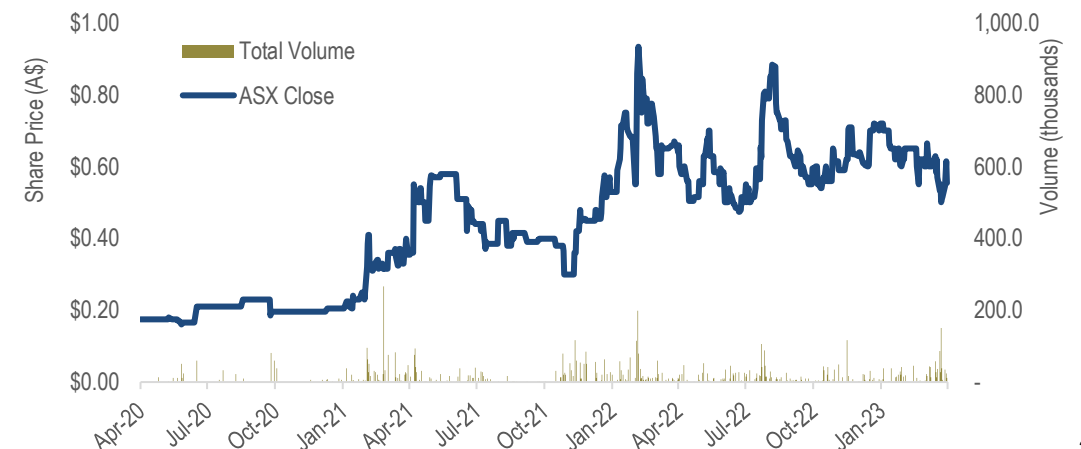
## Strategy

*Astron aims to establish itself as a **world scale critical minerals and mineral sands production company***



ASX Code	ASX:ATR
Securities on Issue	133.6 M
Share Price <sup>1</sup>	A\$0.485
Market Cap <sup>1</sup>	A\$64.8 M
Phase 1 Post-Tax NPV	A\$852.0 M
Net Assets <sup>2</sup>	A\$86.2 M
Top 20 Shareholding	~90%
Project Location	Wimmera Region, Victoria, Australia

## ATR Share Price vs Volume



1. Share price and market capitalisation as at 12 May 2023

2. Based on December 2022 Half-Year financial statements, includes land assets of \$5.2M & water entitlements of \$10.6M

# Globally Significant, Scalable Critical Minerals Project

Ambitions of becoming a multi-generational supplier of critical minerals and generating shareholder wealth in the process

Globally significant, scalable and strategic  
Tier 1 project in a leading jurisdiction

Compelling financial metrics,  
multi phased expansion approach

Phase 1 major approvals in hand,  
technically de-risked

Favourable market dynamics across  
product mix

Focus on execution and creating value for  
shareholders

- **100% ownership of world's third largest rare earth resource ex-China, and the largest zircon resource globally**
- Attractive product mix with significant heavy rare earth assemblage. Revenue skewed towards high value rare earths (~58%) and zircon (~31%)
- Strong strategic appeal given compelling financial metrics, product mix, resource size / project scalability / mine life and jurisdiction
- **DFS analysis estimates a Phase 1 post tax NPV of A\$852m / IRR of 25.8%, 3.75 year payback period, 40+ years mine life**
- Forecasted **first quartile revenue to cash cost ratio** producer, average R:CC ratio of **2.13:1**
- Phase 1 utilises 17% of the resource - scope to significantly enhance production with phased expansion
- Phase 2 PFS underway – duplication of Phase 1 plus a mineral separation plant, targeted development 2029 from cashflow
- **Advanced regulatory approvals - granted Mining Licence, Victoria EES, CHMP & EPBC, owned water rights & land holdings**
- Extensive metallurgical separation test work via pilot plant on 1kt of material indicates high recoveries of valuable heavy minerals
- Simple conventional mining and processing methods, test-pits have been excavated & successfully rehabilitated
- **First shipment planned for Q3 2025 when significant supply / demand gap is emerging in both major revenue streams**
- Rare earth demand is forecast to grow at 6.0% CAGR until 2035 - limited sources of new supply especially in Tier 1 / ex China jurisdictions
- Zircon entered into supply led deficit in 2021, mid-term deficit is supply driven due to depletion of existing operations and jurisdictional risks
- **Management team has added considerable depth including former operatives from Iluka, Mineral Deposits, Tronox & BHP**
- Clearly defined project execution timetable with material catalysts including engaging with strategics on project partnering & offtake
- Focus on unlocking value for all shareholder with active approach to enhancing liquidity over time

# Critical Minerals for a Sustainable World

Decarbonisation and energy transition are heavily dependent on sustainable supply of critical minerals

## Rare Earths



Wind turbines

## Zirconium



Ceramics, kitchen and sanitaryware

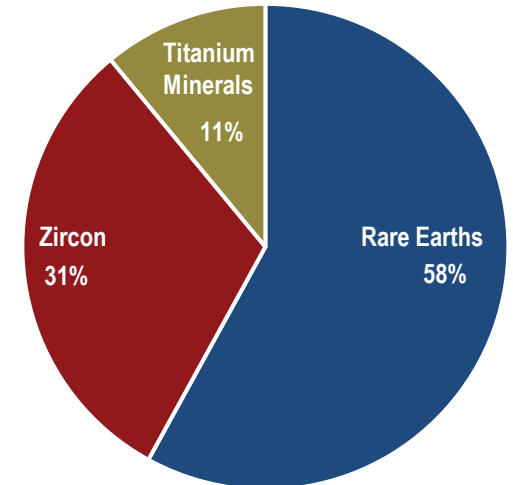
## Titanium Minerals



Paint and pigment production

## Project Revenue Composition<sup>1</sup>

Donald Project contains an attractive product mix, skewed towards high value rare earth and zircon minerals



Electric vehicles and batteries



Casting and foundry applications



Aerospace and industrials

<sup>1</sup> For further information, see ASX Announcement, Donald Project Phase 1 DFS Release, 26 April 2023



# Experienced Project Team To Deliver the Donald Project

Highly experienced Board & Management team with vast experience in corporate development

<b>George Lloyd</b> <i>Chairman</i>	Formerly overall responsibility for corporate development and exploration at RGC Limited, overseeing the merger of RGC and Westralian Sands Limited to form Iluka and negotiation of the Mining Area C Royalty with BHP (now Deterra) and currently Chairman of global engineering services group Ausenco, bauxite development company VBX Limited, and Chairman of the Senior Advisory Board of AWR Lloyd, a specialist strategy and M&A advisory firm focused on the Indo-Pacific region.
<b>Tiger Brown</b> <i>Managing Director</i>	Joined Astron in 2018, holding various business development planning and executive roles in China and Australia prior to joining the board in 2019. Appointed Managing Director in February 2021 and has overseen the detailed planning for the commercialisation of the Donald project.
<b>Kang Rong</b> <i>Executive Director</i>	A key contributor to the establishment of Astron's historic downstream processing and global marketing and sales activities, overseeing the sale of Astron's downstream assets to Imerys S.A. for \$200m. Kang holds a deep knowledge of the mineral sands product market and its key participants.
<b>Gerard King, AM</b> <i>Non-Executive Director</i>	Former Partner of Lavan & Walsh, which became Phillips Fox Perth. Experienced in commercial contracting, mining law and corporate and ASX compliance. A former member of the Australian Mining & Petroleum Lawyers Association, as well as serving as a Non-Executive Director for several companies.
<b>Dr Mark Elliott</b> <i>Non-Executive Director</i>	Appointed to the Board January 2021. A Geologist with extensive experience in the resource sector. Over 30 years experience in corporate roles, such as Chairman or Managing Director on a number of ASX-listed and private companies including, Zirtanium Ltd which secured the Donald and Jackson deposits after they were relinquished by Rio Tinto. <b>Associated with identifying and securing resource projects, capital raisings, marketing and completing commercial agreements, feasibility studies, mine development and project execution.</b>
<b>Greg Bell</b> <i>Chief Financial Officer</i>	Over 21 years of advisory and corporate experience, initially at Deloitte, followed by 8 years with Mineral Deposits Limited (MDL) as Accounting Manager and then Chief Financial Officer. Subsequently, consulting and executive roles with international mineral sands and resource companies, including in the critical minerals sector with TiZir and Tiger Resources.
<b>Sean Chelius</b> <i>Donald Project Director</i>	Over 30 years experience in mining project planning and implementation, including full responsibility for taking projects from concept through to commissioning and production. Experience includes project management and engineering roles with BHP, Anglo American, Newcrest, Ausenco, including the delivery of Unki greenfield development in Zimbabwe, expansion of anglo-platinum refinery and the first autonomous haulage in coal with BMA.
<b>Jessica Reid</b> <i>GM Sustainability</i>	Experienced environmental and social professional, working across Australia and PNG on natural resource and major infrastructure projects for over 18 years as Principal at Tetra Tech (formerly Coffey). Previous experience includes the delivery of Donald Project E.E.S. and Gippsland Renewable Energy Zone in VIC, environmental approvals for the Wafi-Golpu Project, Ok Tedi Mine Life Extension in PNG.
<b>David Addinsall</b> <i>Senior Mining Engineer</i>	Decades of experience in mineral sands mining including Technical Services Manager at Iluka's Jacinth Ambrosia and WRP.
<b>Ross McClelland</b> <i>Process Engineer</i>	Over 30 years of working with fine mineral recoveries, dating back to Wimmera Industrial Minerals in 1990s, and subsequently at QIT, highly skilled Metallurgist, having worked across a broad spectrum of mineral projects
<b>Peter Coppin</b> <i>Senior Geologist</i>	Experienced Geologist, previously mine geologist for Iluka Resource's Ouyen Project, and hard rock experience at Ballarat Goldfields, Kirkland Lake and Newmarket Gold.

Technical Consultants



# The Donald Project

The Most Advanced Rare Earths Development Project in Eastern Australia

Donald WCP Pilot Plant, 2018

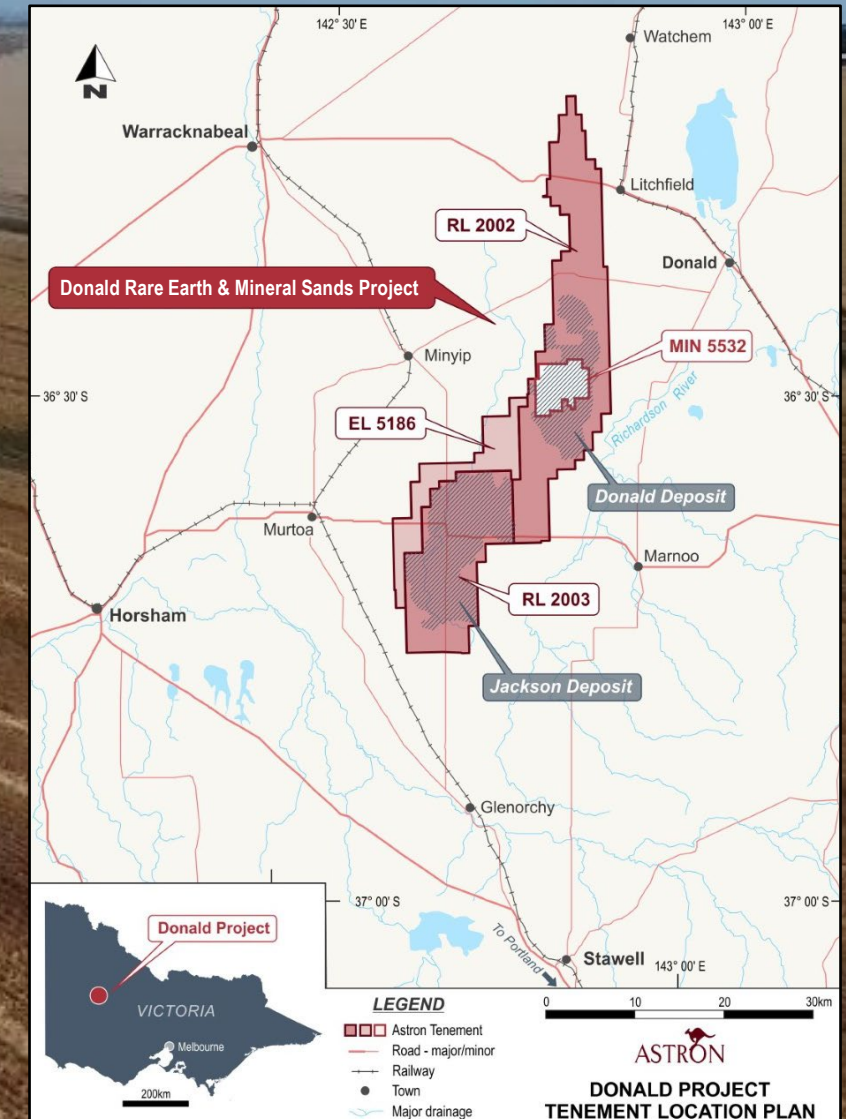


# The Donald Project

100% owned world class asset in supportive jurisdiction with key regulatory approvals in place



- Located ~300 kms north-west of Melbourne, near the regional towns of Minyip and Donald, on mainly freehold, arable land predominantly used for cropping and grazing
- A total licenced area of 506 km<sup>2</sup>, Phase 1 planned on granted mining licence MIN5532 (27km<sup>2</sup> indicated in the grey shaded area in the image on the right)
- Close to existing infrastructure, power & export facilities and enjoys strong community support, cultural heritage approvals (CHMP) in place – no Native Title
- The only Project of its type with a positively assessed Victorian government EES
- The Company's balance sheet is backed by hard assets including company owned farmland and water rights (all carried at cost)
- Comprises a granted Mining Licence (MIN5532), two retention licences (RL2002 and 2003) and an exploration licence (EL5186)

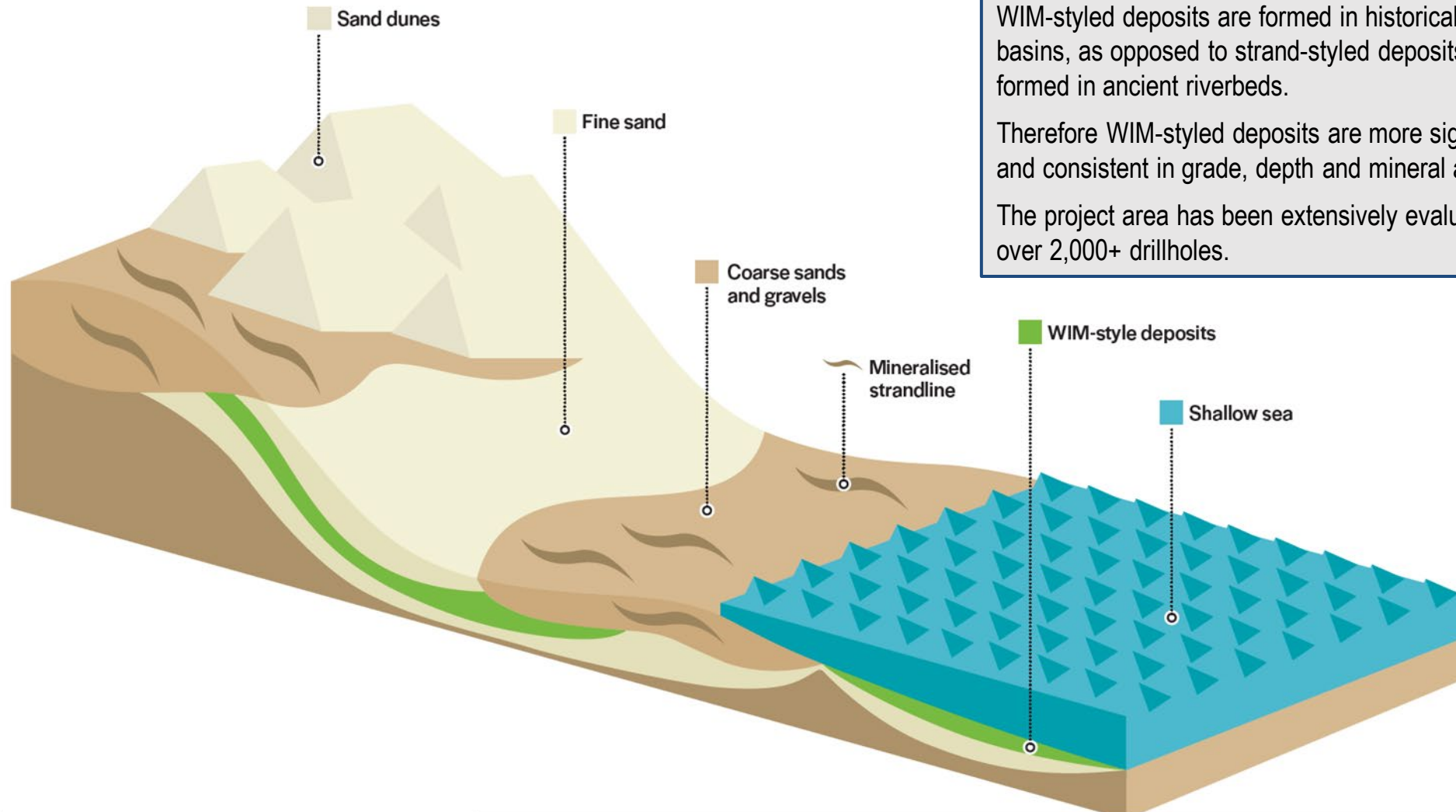


Site of Donald Project rehabilitated test-pit from 2022



# WIM-Styled Deposits - Significant Size and Scale

WIM-style deposits are typically flat, shallow & extensive containing greater tonnages and more consistent VHM characteristics



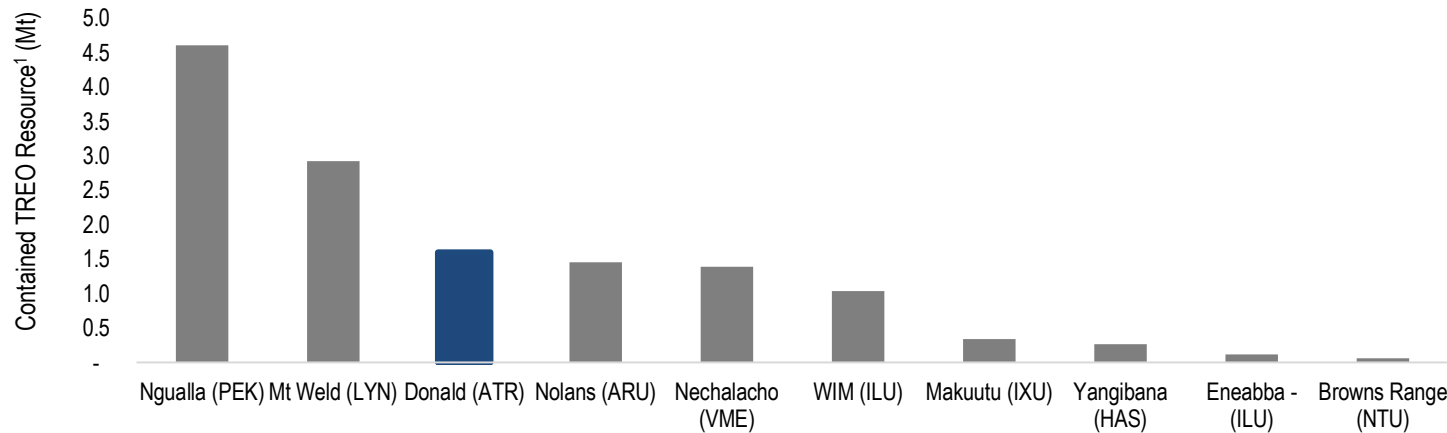
WIM-styled deposits are formed in historical land sea basins, as opposed to strand-styled deposits which are formed in ancient riverbeds.

Therefore WIM-styled deposits are more significant in size and consistent in grade, depth and mineral assemblage.

The project area has been extensively evaluated with over 2,000+ drillholes.

# Bringing to Life a Globally Significant Rare Earths and Zircon Project

## Rare Earths - Relative In-situ Rare Earth Resource – 3<sup>rd</sup> Largest Resource Ex-China



1. Selected ex-China producing and prospective rare earths projects with available resource data, based on publicly available information. Bar size denotes overall size of Total Rare Earth Oxide (TREO) equivalent resource. This assumes a conversion factor of 0.67 from Monazite and Xenotime to TREO.

>2.4 Mt of in-situ monazite (~1.6 Mt of TREO equivalents) **third largest rare earth project** outside of China

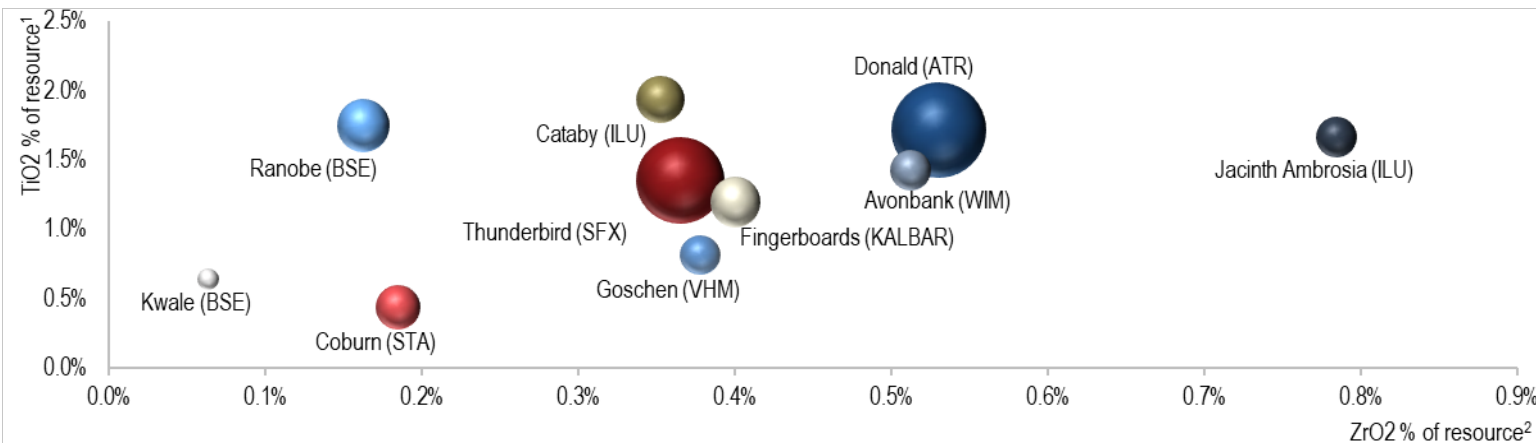
Attractive heavy rare earth assemblage with xenotime : monazite ratio of > 0.3 : 1

22.1 Mt of in-situ zircon resource – **the largest zircon project globally**

Over 85% of the Ore Reserves for Phase 1 in Proven category

Revenue to cash cost ratio of 2:1 (gross margin ~50%) driven attractive mineral assemblage of valuable rare earths and zircon

## Mineral Sands - Relative In-situ Resource & Grade of Ti & Zr – Largest Resource Globally



1. Selected prospective developing mineral sands projects with available mineral resource data, based on publicly available information. Metallurgical assemblages are converted from optical assemblages. ZrO<sub>2</sub>% is calculated as a percentage of overall ore. Bubble size denotes overall size of zircon-equivalent resource.

2. Astron Corporation's Mineral Resource Information derived from ASX announcement, 1 December 2022, Donald Rare Earth and Mineral Sands Project – Mining Licence Mineral Resource Update.



# Opportunity to Capture Further with Phased Production Growth

Scale of Mineral Resource allows phased development for efficient capital deployment and future value accretion

A photograph of industrial equipment, specifically a large vertical structure with multiple horizontal, ribbed sections, possibly a conveyor or part of a processing plant, under a clear blue sky.

## Phase 1 - FY2024

**MIN5532**

Throughput: 7.5 Mtpa

Mine Life: 41.50 years

NPV<sub>8</sub> Post Tax: A\$852m

A close-up photograph of a person wearing a blue protective suit and gloves, holding a small, dark, irregularly shaped object, possibly a mineral sample.

## Phase 2 - FY2029+

**RL2002**

Throughput: 15 Mtpa

On-site MSP

To be funded through

Phase 1 cashflow

A photograph of large industrial machinery, featuring prominent orange-colored vertical structures and complex piping, situated within a large industrial facility.

## Phase 3 - FY2032+

**RL2003**

Throughput: 15 Mtpa+,  
Downstream Opportunities

# The Donald Project - Phase 1

## Dual revenue stream underwritten by conventional mining operations and proven process flowsheet

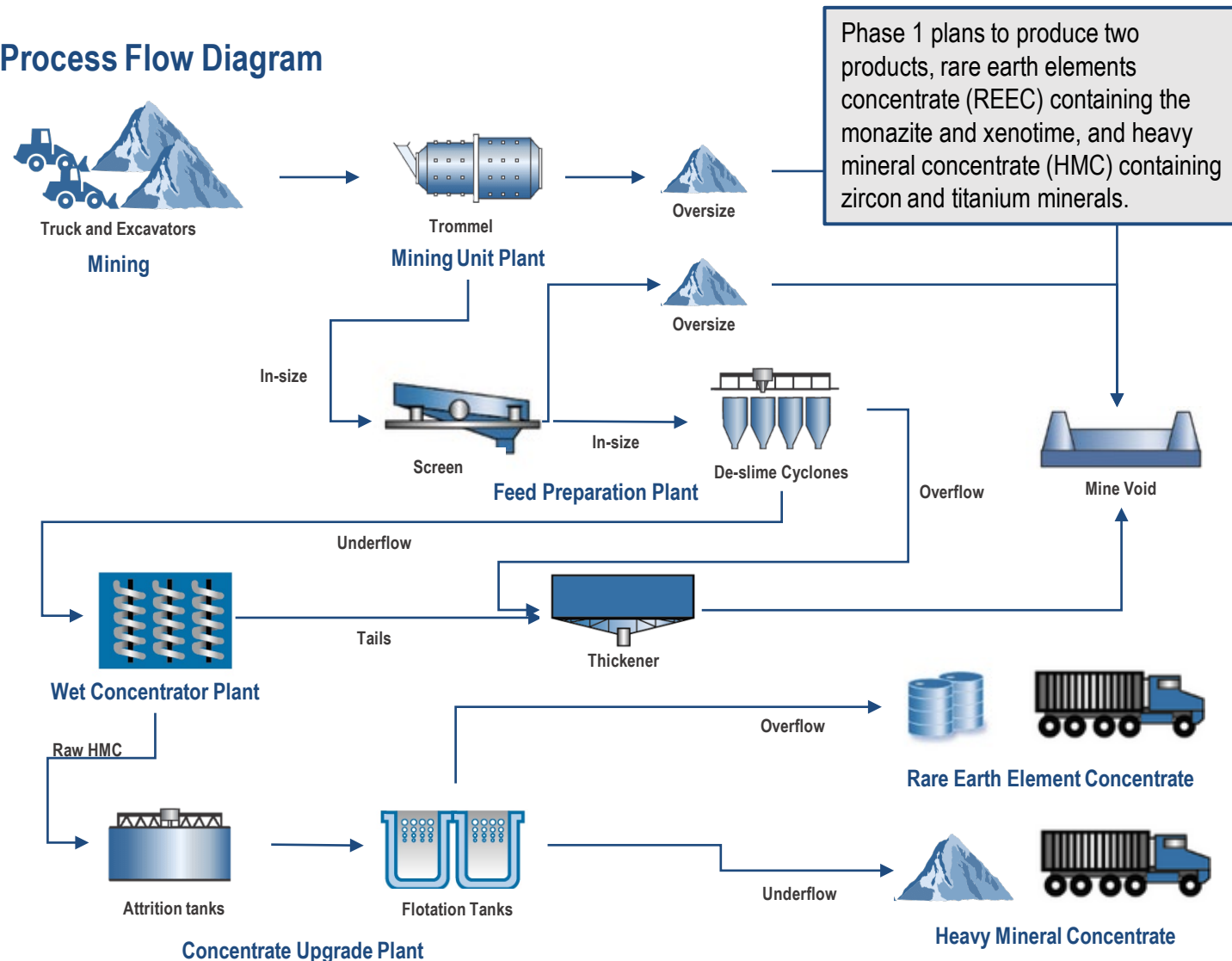
### Conventional, Established and Proven Flowsheet

- Mining via conventional truck and excavator method, with topsoil, subsoil and overburden stockpiled separately
- Mining Unit Plant consists of off-the shelf equipment of a trommel
- WCP flowsheet developed using proven separation techniques of separation spirals (MG-12 spirals, which are in commercial use at 15 plants globally)
- CUP flowsheet which floats the rare earth minerals from the titanium and zirconium minerals well-understood – over 30 years of history in flotation separation
- Demonstrated at pilot scale from test-pit excavation of 1,000t of ore which was subsequently processed into 24t of HMC in 2019 with the following recoveries:

Assemblage	MUP	WCP	CUP	Total
ZrO <sub>2</sub>	99.6%	94.3%	99.0%	93.0%
CeO <sub>2</sub>	99.5%	94.5%	96.5%	90.7%

- Tailings to be returned using modified co-disposal, and land subsequently rehabilitated to farmland or native vegetation within 3 to 5 years
- Over the first five full years of production, an average of 9ktpa of rare earth element concentrate and 250ktpa of heavy mineral concentrate will be produced

### Process Flow Diagram





# Extensive Evaluation & De-risking

Project significantly de-risked through successful pilot plant test work and systematic navigation of regulatory environment

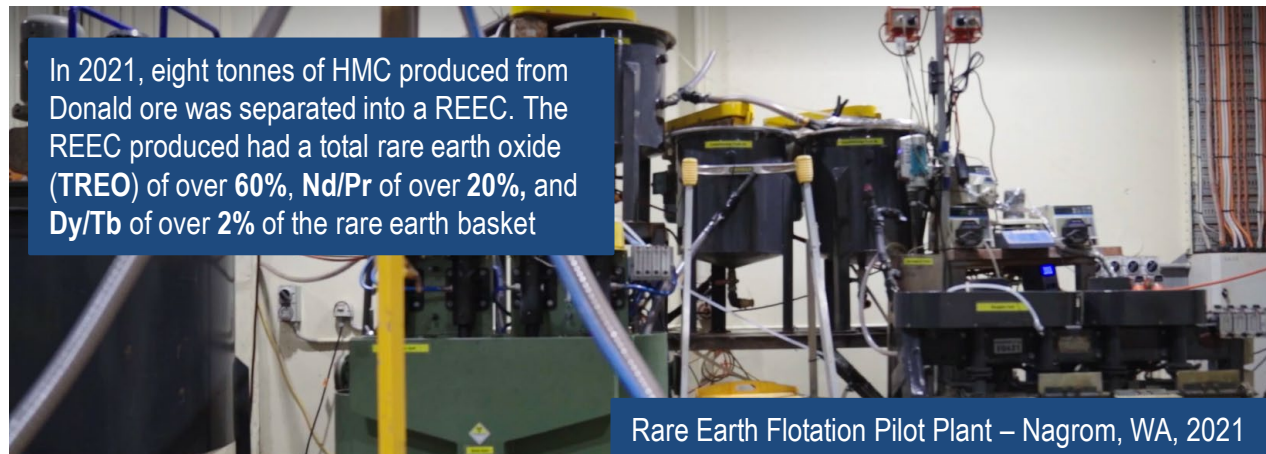
## Advanced Regulatory Approval Status

Key Approval Requirement	Completed	Date	Expiry
Environmental Effects Statement	✓	2008	N/A
EPBC (federal)	✓	Mar-09	2034
Cultural Heritage Management Plan	✓	Jan-14	Life of mine
Mining Licence - MIN5532	✓	Aug-10	Aug-30
Water Rights <sup>1</sup>	✓	Jan-12	Jan-41
Radiation Licence <sup>2</sup>	✓	Dec-20	Dec-23
Work Plan	Pending	Target EOY 2023	Life of mine
ATR Land Holdings (Project Area) <sup>3</sup>			
On-MIN5532	Off-MIN5532	Total	
831.3 Ha	620.5 Ha	1,451.8 Ha	

### Notes

1. Water Rights include a 6.975 GL water entitlement purchased with option to renewal from GWM Water in 2012 for **A\$17m**, sufficient for Phase 1 & Phase 2.
2. Radiation Licence was first issued in 2014 and have since been renewed periodically.
3. Astron Corporation through its subsidiary Donald Mineral Sands Pty Ltd has accumulated land-holdings over the project's history.

## Significant lab & Pilot test work de-risks operating feasibility





# Feasibility Study and Financials

*Donald Project Test-pit Rehabilitated, 2022*



# Phase 1 Financials

Robust financial metrics deliver long-life, sustainable cash flows to drive shareholder value

Financial metrics	Unit	Phase 1
Post-tax NPV <sub>8</sub> (FID)	[A\$m]	852
Post-tax IRR	[%]	25.8%
Payback period	[years]	3.75
Execution capital cost	[A\$m]	364
Revenue to Cost Ratio	[R:CC]	2.13
Cumulative free cash flow	[A\$m]	3,869
Average revenue per annum	[A\$m]	314.4
Average EBITDA per annum	[A\$m]	147.8
Average post-tax free cash flow per annum	[A\$m]	103.1
Mine Life	[Years]	41.5
Average REEC production	[ktpa]	7.2
Average HMC production	[ktpa]	228.7
Stripping ratio	[Tails/Ore]	1.6:1
LT Average FX (\$A/\$US)	[AUD:USD]	0.70

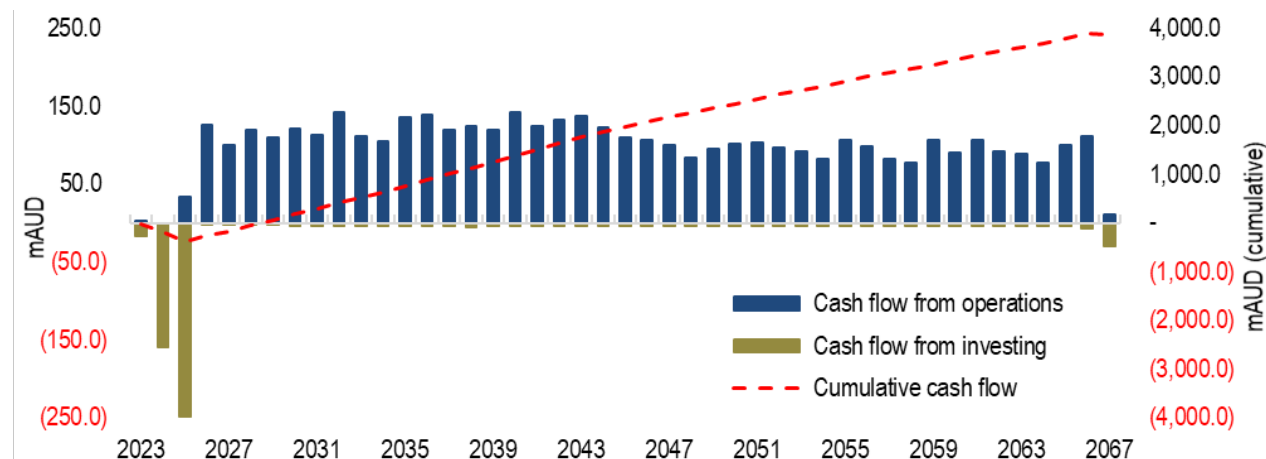
Note: Unless otherwise stated, all dollar values are expressed in real Q1 2023 Australian Dollars

For further information, see ASX Announcement, Donald Project Phase 1 DFS Release, 26 April 2023

## Highlights

- Compelling economics with a post-tax NPV of \$852 million and post-tax IRR of 25.8%
- Phase 1 is forecast to generate \$4 billion of free cash flows (including construction capital), \$13 billion of revenue and \$6 billion of EBITDA over a 40-year plus mine life
- Average revenue is expected to be \$314 million per annum, \$148 million per annum of EBITDA and \$103 million of free cash flows per annum
- Product pricing is based on independent pricing by Adamas Intelligence (REEC) and TZMI (HMC)
- Operating expenditure has been derived from a first principles build up and benchmarked against other similar projects or from specialist consultants and service providers

## Life of Mine annual cash-flows



# Capital Expenditure

Project capital expenditure estimated to AACE Class 2 accuracy based on external independent design and engineering

Cost Department	A\$m
Mining Unit Plant	20.5
Wet Concentrator Plant	70.0
Concentrate Upgrade Plant	38.1
On-site non-process infrastructure (on-site road, electricity and water upgrades)	33.6
Overhead 66kv powerline supply	27.6
Water supply upgrade	11.9
Off-site road upgrades	13.9
Other off-site infrastructure	10.0
Project engineering and technical services	47.9
Construction Indirects	26.9
Other	25.0
Contingency (@12%)	39.2
<b>Total</b>	<b>364.7</b>

- Total execution capital has been estimated to an **AACE Class 2** level of accuracy based on the contributions of external, independent consultants and cover the design and engineering of all capital plant, equipment and infrastructure required to complete the construction of the Project in preparation for operations
- The capital estimates are based on independent technical estimates provided by Mineral Technologies, AMC Consultants, ATC Williams, W3 Plus, Powercor, Driscoll Engineering, BM Projects and other external consultants
- The capital estimate is based on the assumption that the construction for the MUP, WCP and CUP will be completed by an Engineering, Procurement and Construction (EPC) contractor engaged by the Company. Estimates for other on- and off-site infrastructure such as the earthworks, overhead powerline, road and water upgrades, etc., have been compiled from various independent consultants on the basis that the work will be completed by dedicated specialist contractors.
- The capital estimates have been benchmarked against both recent and future projects using similar proven designs both in Australia and Internationally and have been assessed as competitive.
- The contingency for the Project has been estimated on a line-by-line basis for each area and reflects an independent expert's viewpoint of the risk to the capital estimate of each individual area, including potential for changes in current design and/or engineering of key infrastructure. The contingency of \$39.2 million represents 12.0% of the total capital estimate.

*Note: Unless otherwise stated, all dollar values are expressed in real Q1 2023 Australian Dollars*

*For further information, see ASX Announcement, Donald Project Phase 1 DFS Release, 26 April 2023*



# Phase 1 Operating Expenditure

Competitive operating expenditure benchmarked against similar projects in Australia

Operating area	Average Expenditure A\$m	Cost per tonne of Ore Mined \$/t	Average Expenditure %
Mining costs	65.9	8.78	39.5
Processing costs	23.9	3.19	14.4
Transport costs – mine site to port	13.3	1.77	8.0
Transport costs – port to end user	28.7	3.83	17.2
Royalties	7.5	1.00	4.5
Labour	17.9	2.38	10.7
Non-process operating and maintenance costs	6.1	0.82	3.7
Other operating costs	3.3	0.44	2.0
<b>Total</b>	<b>166.6</b>	<b>22.21</b>	

*Note: Unless otherwise stated, all dollar values are expressed in real Q1 2023 Australian Dollars*

*For further information, see ASX Announcement, Donald Project Phase 1 DFS Release, 26 April 2023*

- The annual operating expenditure estimate completed for the DFS has been derived from a first principles build-up of operating costs and are to a confidence level of **AACE Class 2 estimate**.
- Operating expenditure has been benchmarked against similar projects in Australia. Offsite operating expenditure (such as transport) has been derived from specialist consultants and service providers.
- Mining costs are based on individual equipment hours of designated mobile mining fleet according to mine physicals and productivity and estimated unit operating costs for each item of equipment (generally per engine hour). Fixed costs are estimated on a periodic basis pro-rated to the duration of each period in the mine schedule. The model also includes an average contractor margin of 15%. These costs were benchmarked against AMC database and are within reasonable limits.
- Processing costs have been estimated by Mineral Technologies (MT) based on process flow sheets and DFS level engineering design. Pricing for material processing inputs such as reagents, electricity, diesel and water has been estimated using the latest available pricing. These estimates have been reviewed internally by MT and benchmarked against similar projects in Australia
- Transport costs have been estimated for both pit to port and port to customer due to the pricing basis selected for the financial model. Road and rail transport of HMC and REEC is based on current freight pricing for these methods of transport. Sea freight for transport of HMC has been estimated using current bulk shipping cost estimates. Sea freight for transport of REEC is based on current container shipping rates for Class 7 materials
- Operating expense estimates are based on commencement of the project in Q3 2025 and operations at nameplate capacity in Q4 2025.

# Sensitivity Analysis

## Sensitivity analysis demonstrates a robust, resilient project

### Key sensitivities

- Sensitivity analysis shows that even with large movements in the key variables, the Project returns a very attractive Post-tax NPV. The analysis illustrates the Donald Project is robust and can weather major commodity cycles
- REEC pricing assumptions are derived from Adamas Intelligence forecasts and are calculated as a percentage of the basket value. Astron's REEC product contains significant heavy rare earth elements resulting in a pricing advantage over its peers.

US\$/t	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035+
<b>Pricing Scenario</b>												
Low	10,138	11,587	12,196	11,564	10,546	10,850	11,877	13,215	14,213	14,875	15,536	16,197
Base	11,593	14,094	14,575	14,432	14,185	14,610	15,306	16,137	16,797	17,288	17,780	18,271
High	13,196	15,218	16,193	17,053	17,825	18,371	18,735	19,060	19,381	19,702	20,024	20,346

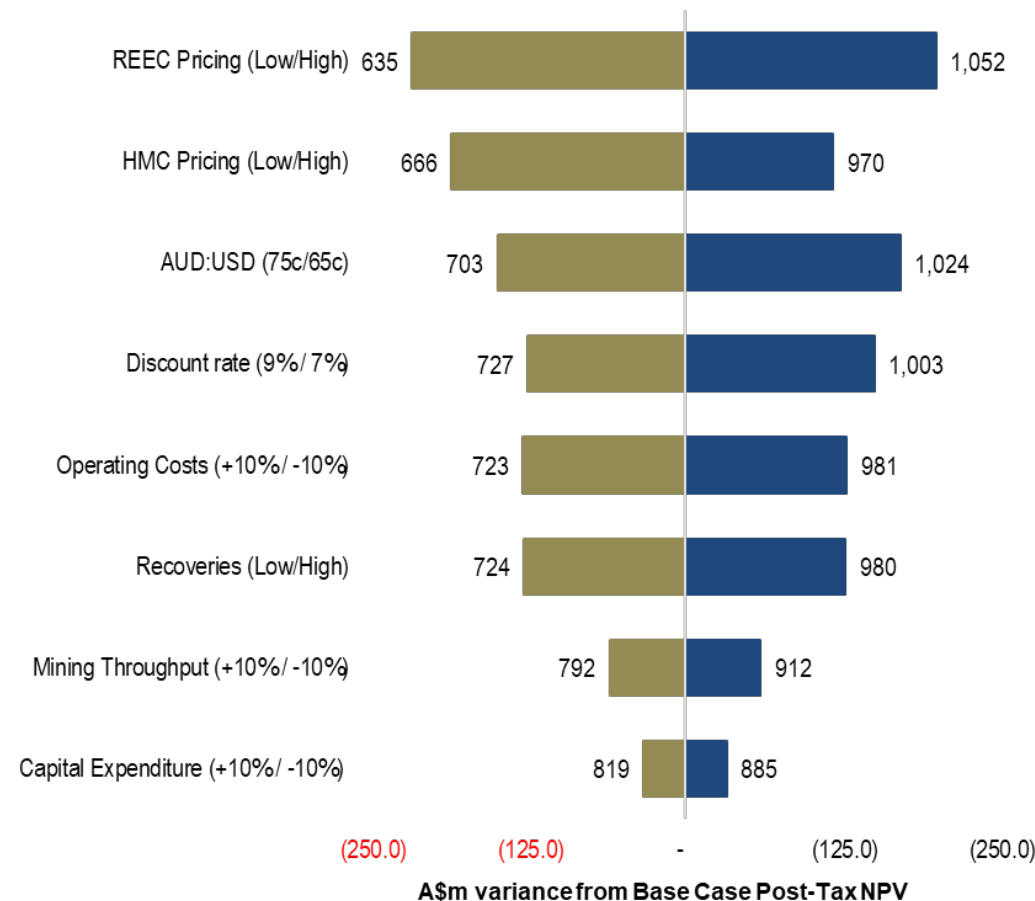
Source: Adamas Intelligence, data as at Q1 2023

- HMC pricing assumptions outlined below are derived from TZMI forecasts. HMC pricing is back calculated from final mineral sand product pricing, using margin, recoveries, quality discount, and allocated processing cost.

US\$/t	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
<b>Pricing Scenario</b>												
Low	386	342	331	347	315	294	298	294	286	277	372	369
Base	456	430	435	433	441	425	430	425	413	399	398	394
High	540	525	525	533	554	544	550	543	527	510	398	394

Source: TZMI market study, data as at Q2 2022

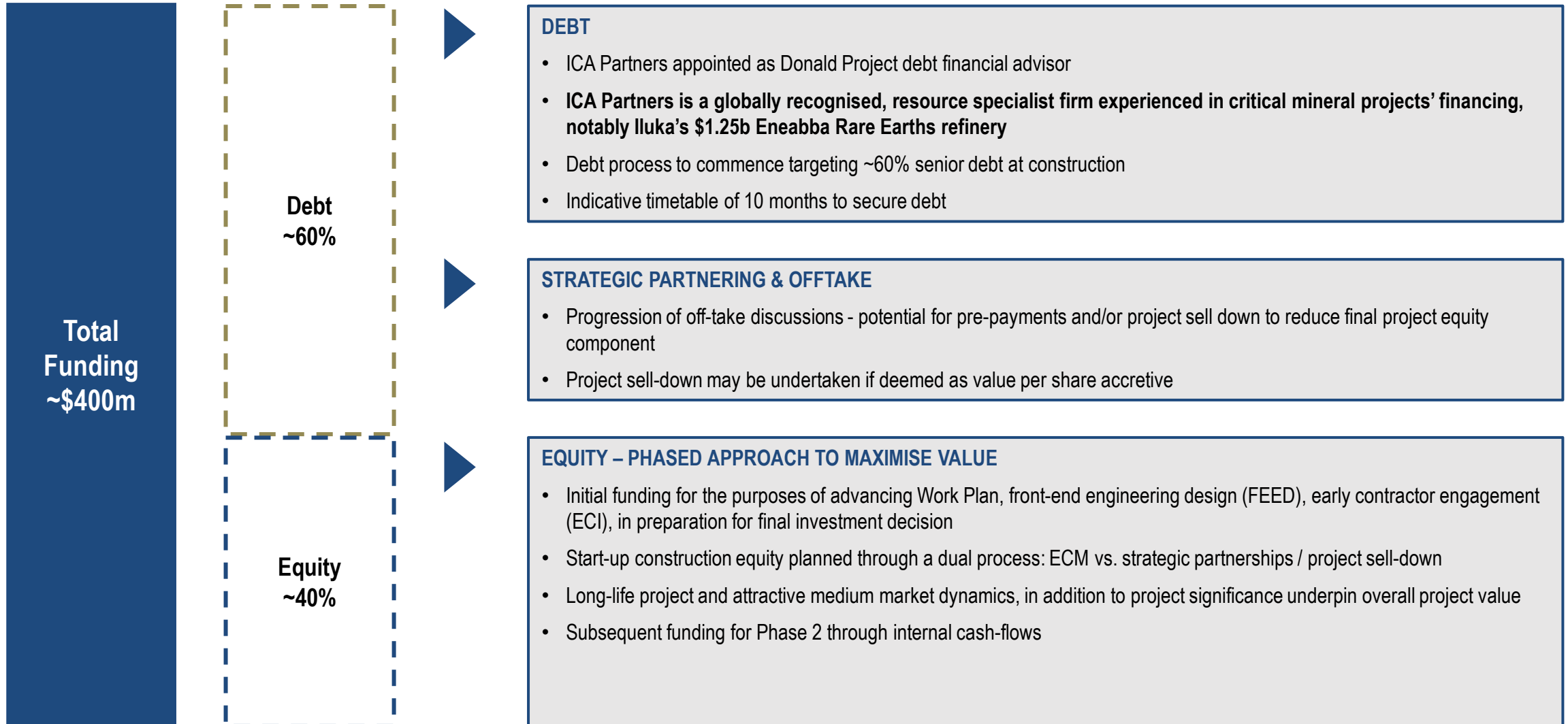
- NPV is also sensitive to movements in operating costs and mineral recoveries – however, the operating cost estimate has been derived on a first principle basis by independent experts and benchmarked against other similar projects. Mineral recoveries assumptions are based on extensive metallurgical test work completed on a pilot plant scale using bulk samples representative of the actual mine path





# Funding Strategy

Project capital expenditure estimate to be funded by efficient deployment of debt and equity capital



A person wearing a blue and orange jumpsuit and blue gloves is shown from the chest down, holding a large, clear, textured object. The background is a bright, hazy outdoor setting.

# Product Attributes and Market Dynamics



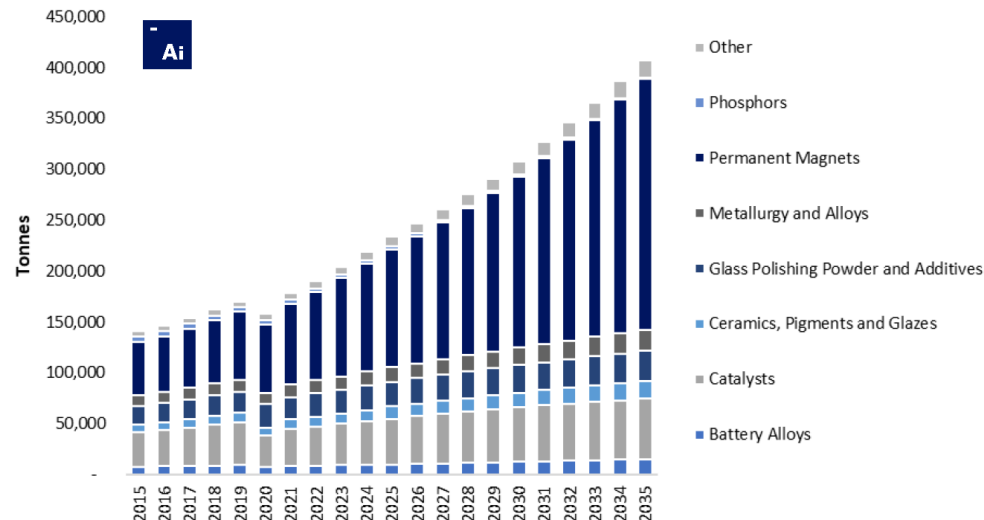
# Rare Earth Element Concentrate Market Tailwinds

Globally significant western rare earth supply coming online at a time of increasing product demand

## Market Demand

- Adamas Intelligence forecasts TREO demand to increase three-fold at a CAGR of 6.0% from 2022 to 2035. This is driven by the expanding permanent magnet sector, with increasing demand for electric vehicles, wind turbines and general automotive applications
- Due to their use in permanent magnet applications, neodymium, praseodymium, dysprosium and terbium comprise the majority of the current global REE market value and have higher forecast growth rates
- Substitution risk remains low as iron ferrites and other substitute materials often come with a significant weight or efficiency penalties

## Rare earth market demand forecast to 2035

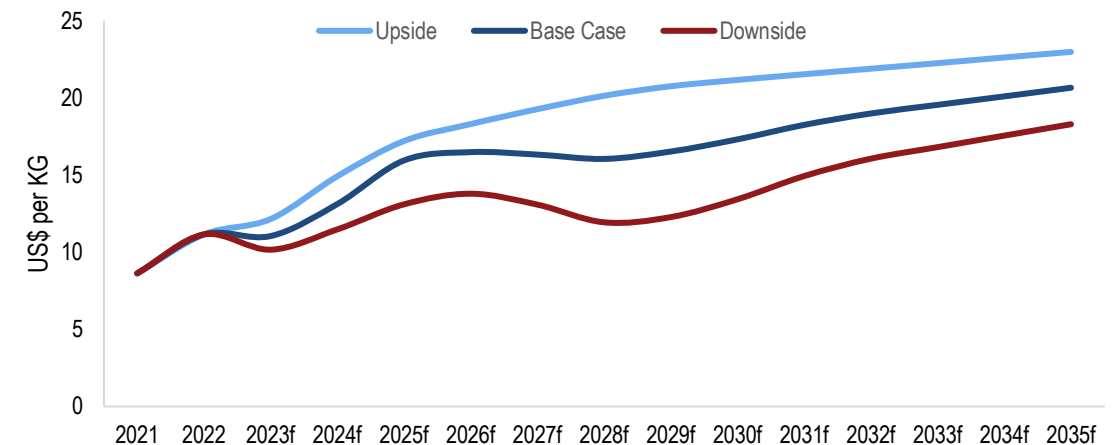


Source: Adamas Intelligence, data as at Q1 2023

## Market Supply

- Supply from developing projects is not expected to come online in time to meet demand in the short to medium term
- Outside of China, there are estimated to be 46 mining projects aiming to reach production before 2033. Of these projects, 3 have reached production whilst 14 (including the Donald Project) have completed DFS
- Short to medium term supply shortages are forecast for dysprosium (2024 onwards), terbium (2023 onwards), neodymium and praseodymium (both 2026 onwards)
- The Donald Project with its advanced project status is able to take advantage of the emerging supply deficit in rare earth minerals and be a strategic western source of rare earth minerals, representing the creation of an independent value chain

## Donald REEC pricing forecast to 2035



Source: Adamas Intelligence, data as at Q1 2023

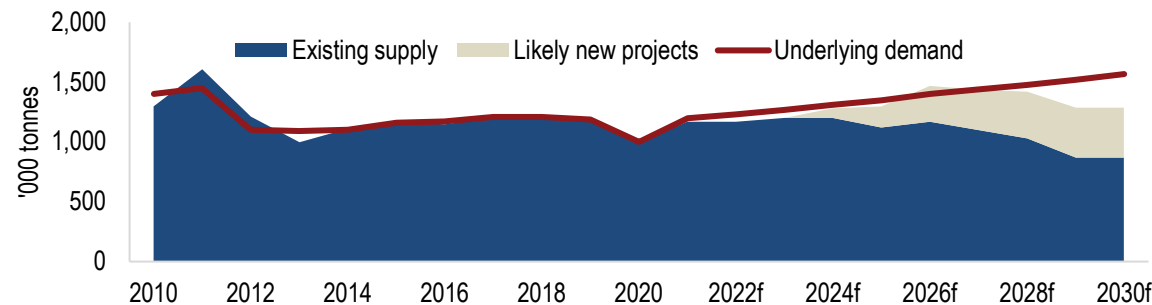
# Heavy Mineral Concentrate Market Tailwinds

New long-life supply in mining friendly jurisdictions required to meet forecast demand

## Zircon

- TZMI is forecasting an increase in global demand from 1.21mt in 2021 to 1.55mt in 2030, a compound annual growth rate of **2.8% p.a.**
- Supply expected to decline in the short-to-medium term at **4.6% p.a.** to 2030, due to the depletion of current sources and a lack of major new projects coming online

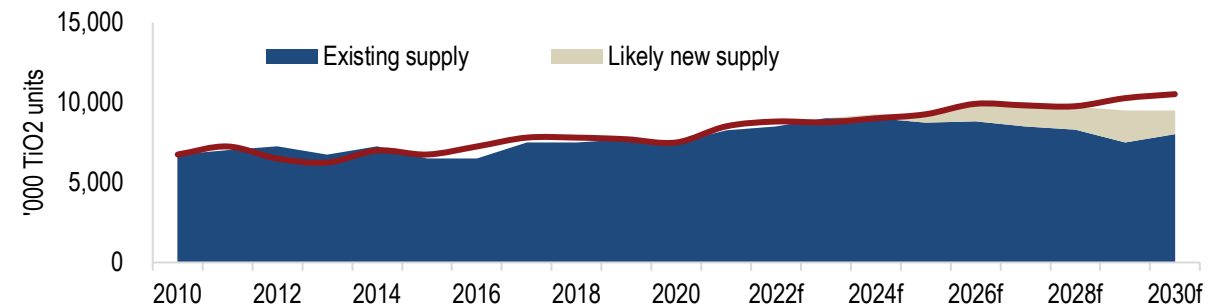
Global zircon supply / demand balance: 2010–2030



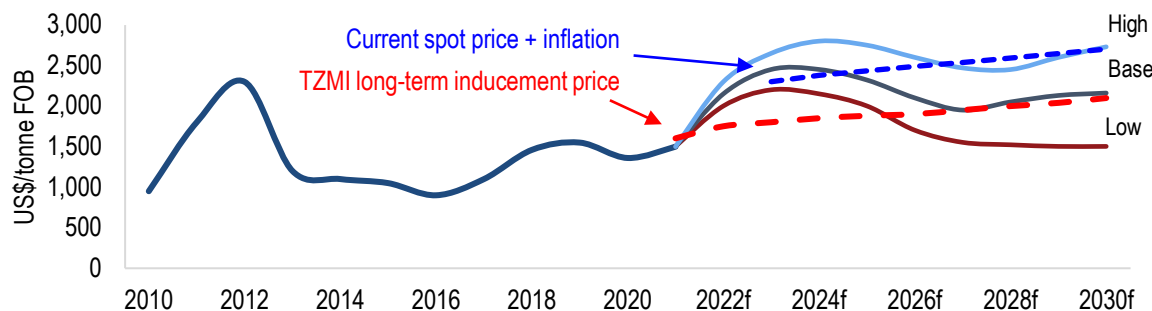
## Titania

- The Donald titania production stream is expected to be a favourable source of supply to chloride slag producers, particularly in China, due to its high TiO<sub>2</sub> content of ~ 66%
- TZMI forecasts global chloride slag demand will increase by an **8.6% CAGR** to 2030, and forecasts a market deficit in excess 400,000 TiO<sub>2</sub> from 2026 onwards in the event of no new supply – Phase 1 will produce 150ktpa of titanium feedstock (ilmenite) equivalents.

Global titanium feedstock supply demand balance:2010–2030

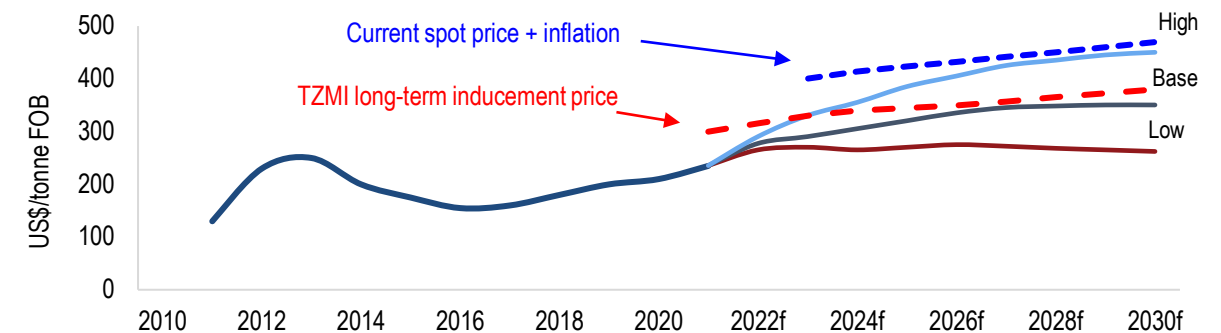


Forecast nominal zircon price



Source: TZMI market study, data as at Q2 2022

Forecast nominal chloride ilmenite price



Source: TZMI market study, data as at Q2 2022



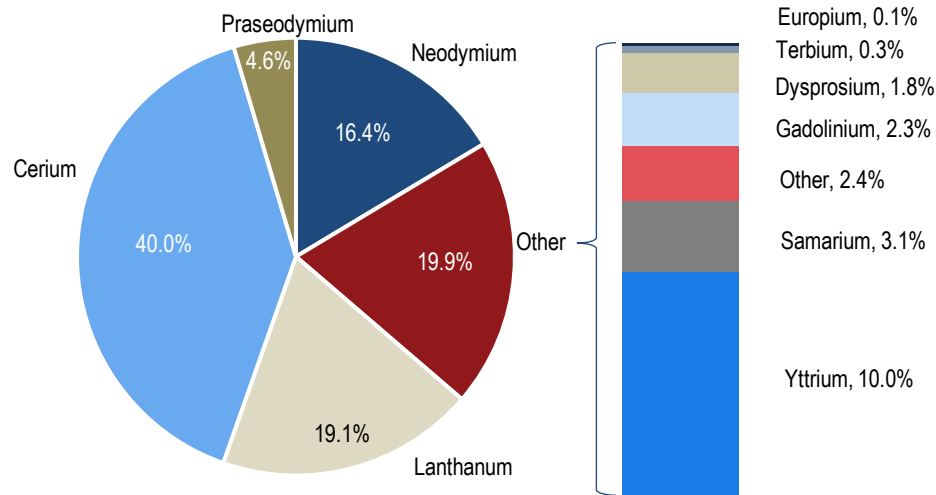
# Quality Product Attributes

Astron's attractive reserve assemblage translates into a high-quality product suite ensuring market acceptance

## Rare Earth Element Concentrate (REEC)

- Donald's REEC product is a high-quality monazite, xenotime concentrate that contains over 60% total rare earth oxide (TREO) content with Nd/Pr over 20% and Dy/Tb over 2% of TREO
- It also contains significant heavy rare earths (terbium and dysprosium), which are more strategically important and scarce when compared to the lighter rare earth elements
- Heavy rare earths are used in a variety of specialty applications and are key to electric vehicles, offshore wind and broader de-carbonisation
- The four critical magnet rare earth elements comprise 23.1% of the TREO contained in the Donald Project's REEC & 88.7% of total REEC value making it the most attractive product mix when compared to its peers, thus a major advantage for the purposes of offtake discussions

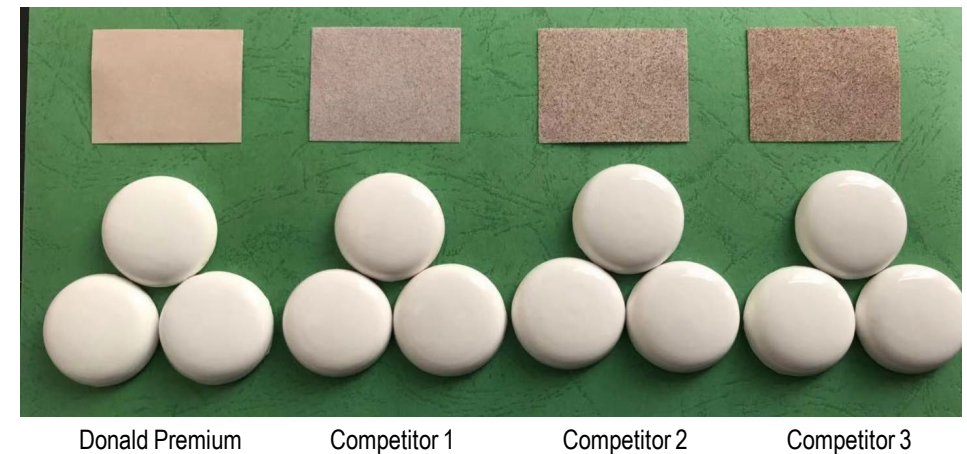
## Distribution of Rare Earth Oxides in Donald REEC



Source: Adamas Intelligence, data as at Q1 2023

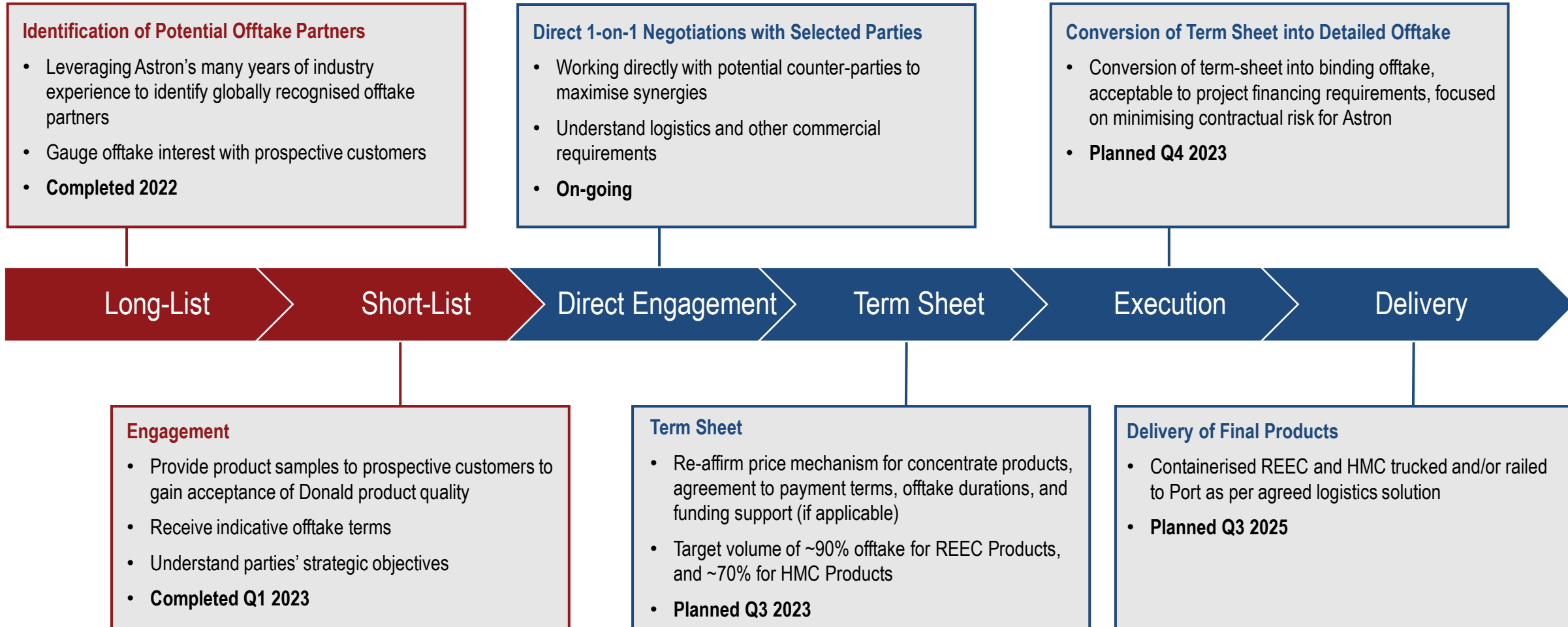
## Heavy Mineral Concentrate (HMC)

- Donald will target a 95% heavy mineral grade, resulting in a higher proportion of valuable minerals with lower waste
- The HMC product contains significant zircon (~20% ZrO<sub>2</sub>), of which a majority (over 80%) is recoverable to a premium zircon quality suitable for the ceramics market
- Internal and independent test work completed by Foshan Ceramics Institute on zircon contained in HMC produced by the Donald Project shows low impurity levels and high whiteness when grounded and applied as a coating to ceramics which provide an advantage over its competitors
- Astron had obtained an export licence for the Donald HMC product. Independent analysis undertaken by Foshan Ceramics Institute and downstream customers demonstrates that Donald premium zircon meets the requirements in relation to radiation levels for its use in the Chinese ceramics market



# Considered, Targeted Offtake Approach

Globally recognised offtake partners to be targeted





# Next Steps



# The Donald Project – Near Term Catalysts & Milestones

Methodical development of a globally significant critical minerals resource

## Regulatory

- **Lodge Work Plan demonstrating compliance with EES** – underway, approval expected Q4 2023
- **Secure secondary approvals for project facilities** - underway

## Financial

- **Debt Funding Advisor to secure debt component of funding** – ICA Partners appointed
- **Negotiate Offtake arrangements for HMC and REEC** – in progress
- **Assess project partnering opportunities in conjunction with Offtake agreements** – in progress

## Technical

- **Complete Phase 2 Pre-feasibility Study** – complete Q2 2023
- **Negotiate and appoint EPC Construction Manager**
- **Complete front engineering and design package (FEED)**
- **Complete secondary technical packages**

## Operational

- **Develop operational readiness plan and build operations team** – in planning
- **Finalise community planning for project impacts including transport, construction and operational workforces** – community consultation underway

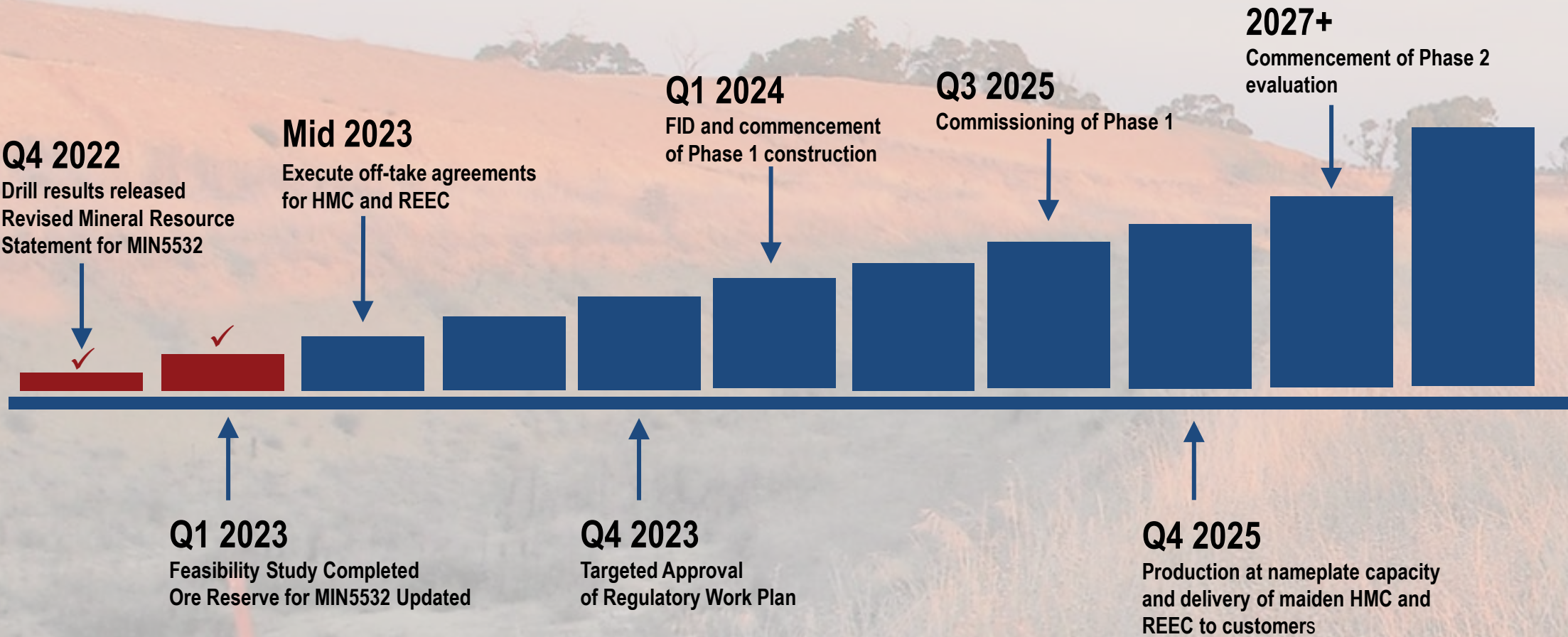
## State & National

- **Establish State and Federal recognition of importance of project, cement State and Federal support**
- **Continued alignment with Federal Government Critical Minerals Strategy**
- **Coordinate critical minerals funding opportunities with Federal Government**



# Donald Project Development Timeline

Clearly defined project execution strategy for effective project delivery





# Further Information



## **Tiger Brown**

**Managing Director**

Tel: +61 3 5385 7088

Email: [contact@astronlimited.com](mailto:contact@astronlimited.com)

## **Joshua Theunissen**

**Company Secretary**

Tel: +61 3 5385 7088

Email: [contact@astronlimited.com](mailto:contact@astronlimited.com)





# Appendix: Rehabilitation & Environmental Management

Minimise environmental impact through sustainable mining & rehabilitation

- Test pit excavation in 2019 rehabilitated to its original landform demonstrating yield in-line with surrounding areas
- Community recognition of the Company's rehabilitation practices
- The nature of the planned mining (shallow, open pit), enables progressive rehabilitation back to original landform within 3-5 years
- Mining operations will be conducted on mixed use pastoral land, mainly cleared
- Detailed mine planning enables to preservation of areas covered by native vegetation, flora and fauna
- Topsoil, subsoil to be stock-piled separately and returned according to original soil profile
- Rehabilitation of agricultural land will be monitored for yield characteristics, soil absorption, nutrient uptake and other factors
- CO<sub>2</sub> emissions reduction plan as part of mine planning followed
- Recycling of process water; no site run-off, existing groundwater is hypersaline and has no competitive uses

1. Excavation



2. Leveling



3. Topsoil



4. Rehabilitation

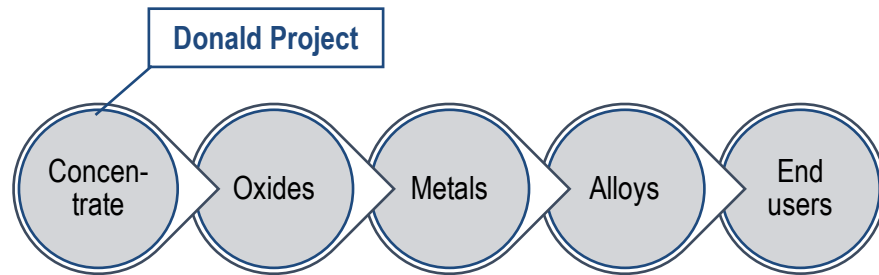




# Appendix: Rare Earth Product Testing – Valuable REEC

Strategically positioned at the head of the value chain, Astron is in active discussions with prospective processing partners for off-take agreements. By producing a rare earth concentrate on-shore, Astron can adapt to the growth of global rare earth metals and permanent magnet markets.

## Rare Earth Value Chain



## Valuable Heavy Rare Earth Component

- Donald's REEC product is expected to be highly attractive with its rare earth assemblage given the significant proportion of valuable heavy rare earth elements of Dysprosium and Terbium.
- Dysprosium and Terbium are used in electric and hybrid vehicles to increase the temperature at which the permanent magnets can operate.

Astron is actively investigating transport options regarding the rare earth mineral concentrate and plans to provide detailed updates subsequent to negotiation of offtake discussions. Based on the DFS, REEC will be transported as a Class 7 product.

## Typical Donald Project Rare Earth Product<sup>1</sup>

	Company		Astron	
	Mineral type		Monazite +Xenotime	
	Location		Australia	
	Rare Earth Oxide	REO price <sup>2</sup> (US\$/kg)	% of total	Basket Value
Light REO	Lanthanum	1.40	19.1%	0.27
	Cerium	1.45	40.0%	0.58
	Praseodymium	125.00	4.6%	5.77
	Neodymium	128.75	16.4%	21.13
	Samarium	2.75	3.1%	0.08
Heavy REO	Europium	30.00	0.1%	0.03
	Gadolinium	66.00	2.3%	1.53
	Terbium	2,150.00	0.3%	7.40
	Dysprosium	410.00	1.8%	7.20
	Holmium	170.00	0.4%	0.60
	Erbium	48.50	1.0%	0.46
	Thulium	0.0	0.1%	0.00
	Ytterbium	17.10	0.8%	0.14
Oth.	Lutetium	865.00	0.1%	0.96
	Yttrium	10.00	10.0%	1.00
<b>Basket Price US\$/kg</b>				<b>47.16</b>
<b>TREO%<sup>3</sup></b>				<b>~61.5%</b>

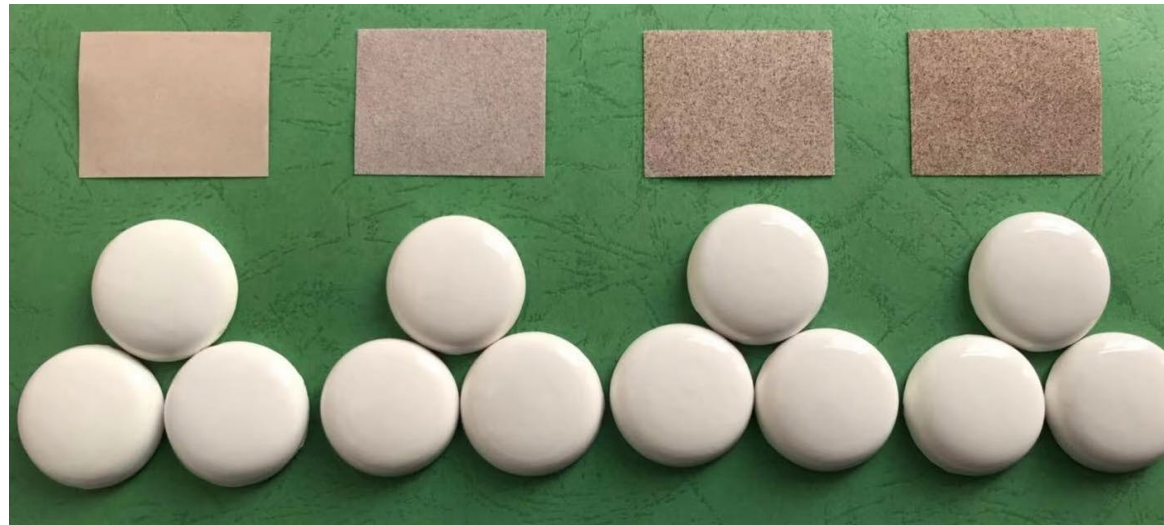
1. Typical product specifications developed from the lab-scale test works as announced on 14 May 2021, *Clarify Donald Mineral Separation Metallurgical Test Work*.
2. REO based upon Adamas Intelligence, Q1 2023
3. TREO grade of 60% refers to the Donald Project rare earth product specification only, as pure mineral monazite and xenotime contain 67% TREO.

# Appendix: Premium Zircon – Superior Attributes

The premium zircon produced from Donald HMC has been independently confirmed by Foshan Ceramics Institute (leading Chinese ceramics institute) to be suitable for the premium ceramics market. Astron has extensive and long-term engagement with Zircon customers in China, Europe, North America and other markets with Donald premium zircon product samples being made available to potential customers for assessment prior to commercial off-take agreements.

## Premium Zircon Product CIE Whiteness Test Results<sup>1</sup>

Product testing conducted on Donald premium zircon, expected to represent over 80% of the zircon production stream, at Astron's research facility in Yingkou, China. The results confirmed that Donald premium zircon rates favourably with industry zircons.



**Donald Project**

**Competitor 1<sup>2</sup>**

**Competitor 2<sup>2</sup>**

**Competitor 3<sup>2</sup>**

Product	L - Brightness	A – Red-Green Scale	B – Yellow-Blue Scale
Donald Premium Zircon	94.84	0.12	3.86
Competitor Zircon 1	94.39	1.02	4.08
Competitor Zircon 2	93.57	0.86	3.82
Competitor Zircon 3	94.32	0.23	4.22

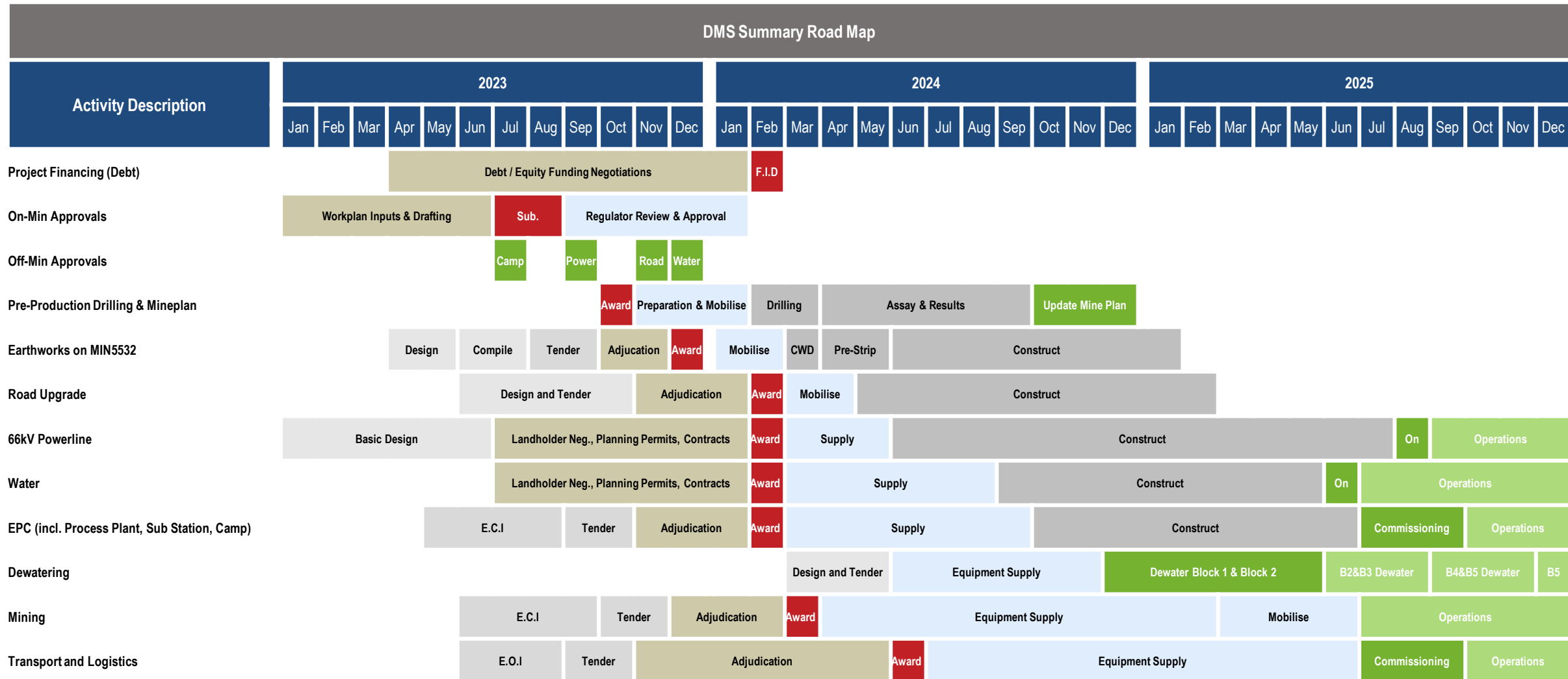
### Note

- Results are measured on the CIE whiteness scale, L represents 'brightness', A represents 'red-to-green' scale, B represents 'yellow-to-blue' scale.
- The CIE system is used to characterise colour by a luminance parameter and two colour co-ordinates.
- Results were produced using a calibrated 'brightness tester' and standard deviation error can be expected

- For further information refer Astron ASX announcement, 12 May 2021, *Updated Donald Project Premium Zircon Test Results*.
- Competitor premium zircon products are selected from available products in China.

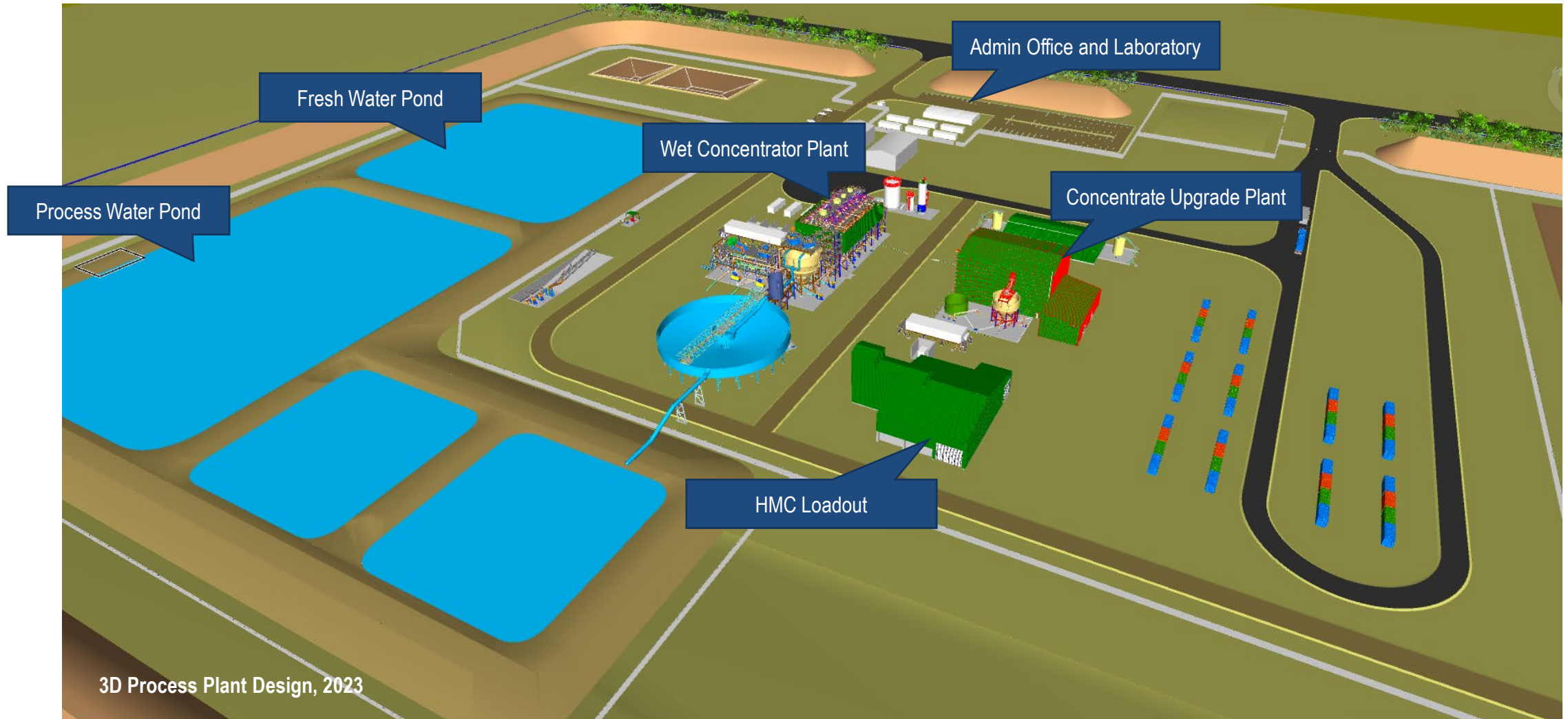
# Appendix: Donald Project Development Timeline

Clearly defined project execution strategy for effective project delivery

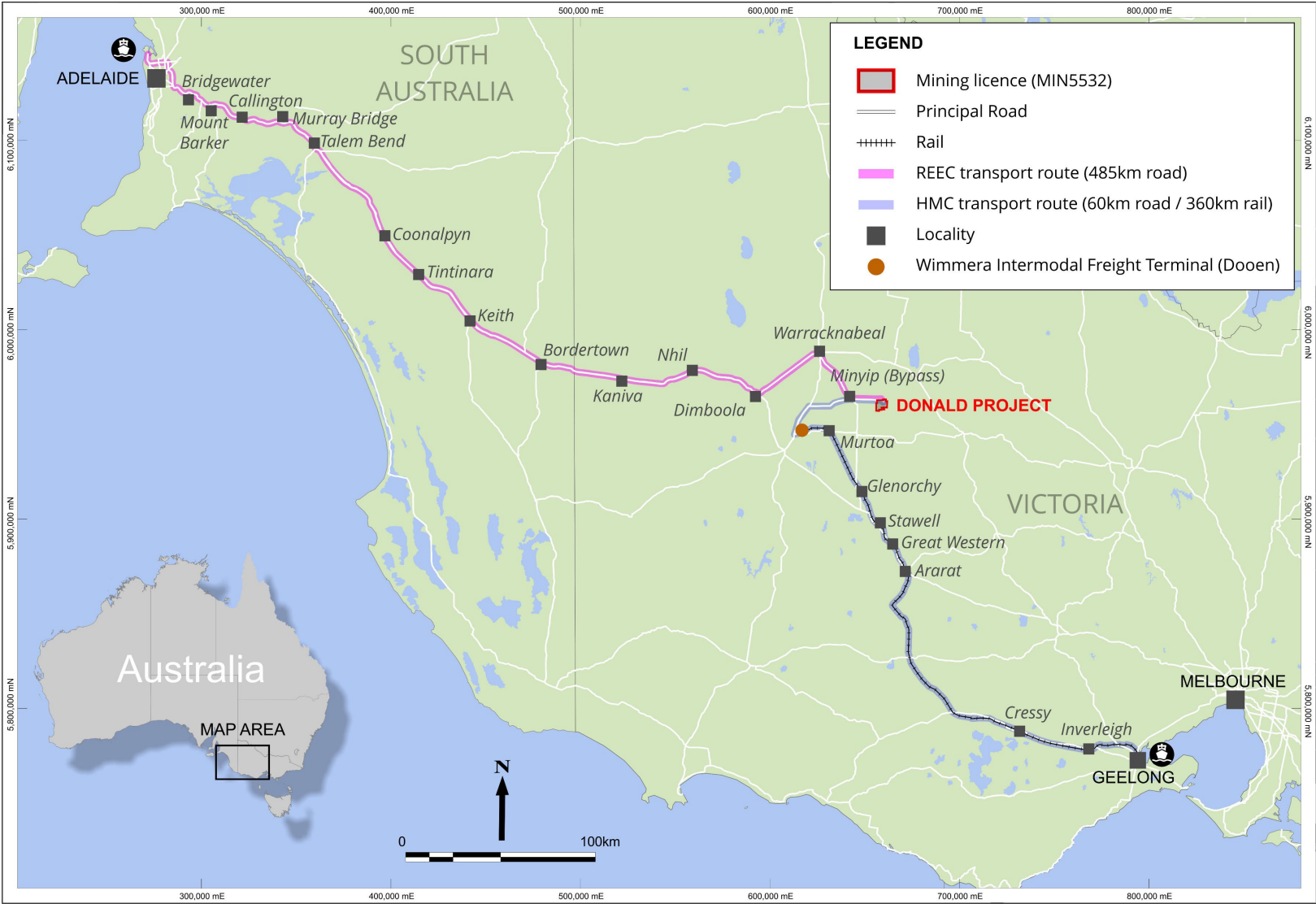




# Appendix: Process Plant Design



# Appendix: Planned Transport Routes



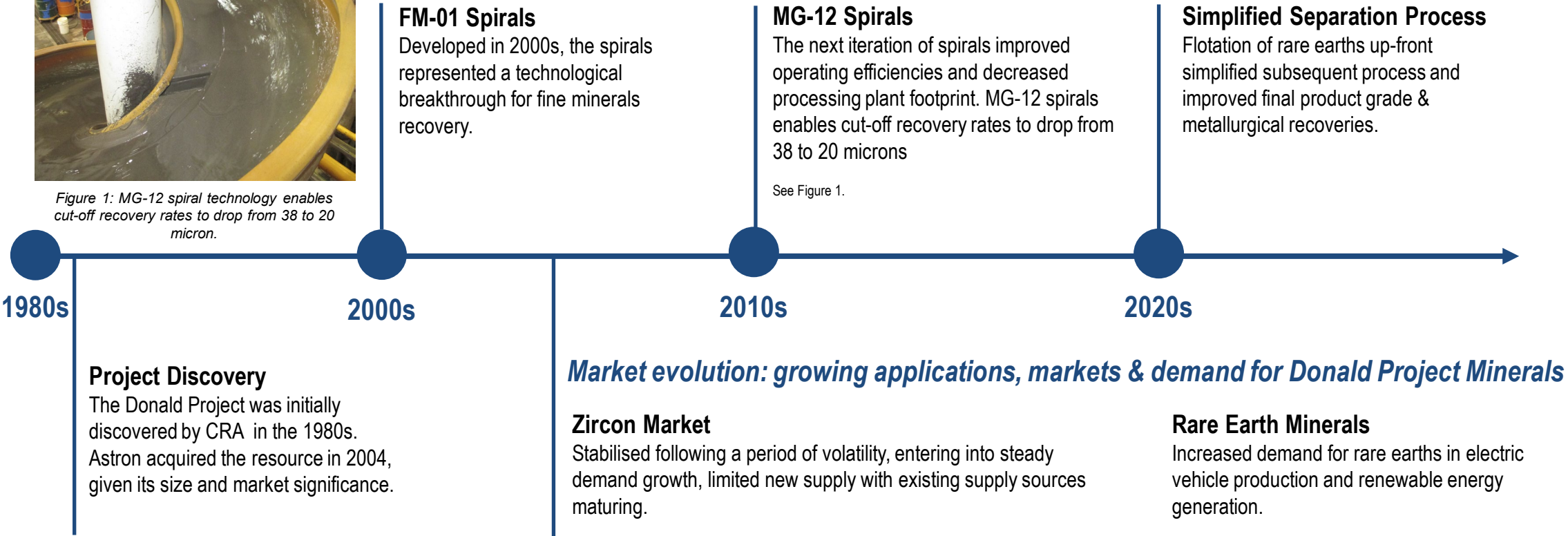
# Appendix: Donald Project Development Timeline

Technological innovations and market evolution cement Donald Project viability



Figure 1: MG-12 spiral technology enables cut-off recovery rates to drop from 38 to 20 micron.

Historically, the commercial recovery of fine minerals has been seen as an impediment to the development of WIM-style deposits. Astron’s technology and extensive metallurgical testing over nearly 20 years has addressed these challenges.





# Appendix: History of Astron Corporation

Listed in 1983, Astron Corporation has nearly 40 years' experience in Mineral Sands



# Appendix: Donald Project – Ore Reserve Statement

## MIN5532

The Ore Reserve has been classified as Proven Ore Reserves, based on Measured Mineral Resources and Probable Ore Reserves, based on Indicated Mineral Resources. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit.

The JORC Code 2012 Table 1, Section 4 to support the Ore Reserve Estimate is included in Appendix B of the Donald Project Ore Reserve Statement released **31 March 2023**. The Ore Reserve estimates have been compiled in accordance with the guidelines defined in the 2012 JORC Code.

Note that Mineral Resources are reported inclusive of the Ore Reserve.

Classification	Tonnes (Mt)	Slimes (%)	Oversize (%)	HM (%)	Ilmenite (%HM)	Leucoxene (%HM)	Rutile (%HM)	Zircon (%HM)	Monazite (%HM)	Xenotime (%HM)
<b>Within MIN5532</b>										
Proved	263	15.4	9.8	4.4	21.6	25.9	5.5	16.7	1.8	0.67
Probable	46	19.7	11.1	4.1	21.3	20.1	5.5	15.3	1.8	0.64
<b>Total</b>	<b>309</b>	<b>16.1</b>	<b>10.0</b>	<b>4.4</b>	<b>21.6</b>	<b>25.1</b>	<b>5.5</b>	<b>16.5</b>	<b>1.8</b>	<b>0.66</b>

### Note:

1. The ore tonnes have been rounded to the nearest 1Mt and grades have been rounded to two significant figures.
2. The Ore Reserve is based on Indicated and Measured Mineral Resource contained within mine designs above an economic cut-off.
3. A break-even cut-off has been applied defining any material with product values greater than processing cost as Ore.
4. Mining recovery and dilution have been applied to the figures above.
5. The area is wholly within the mining licence (MIN5532).
6. The rutile grades are a combination of rutile and anatase minerals.
7. The Ore Reserve estimates have been compiled in accordance with the guidelines defined in the 2012 JORC Code

## RL2002 outside of MIN5532

The Ore Reserve has been classified as Proven Ore Reserves, based on Measured Mineral Resources and Probable Ore Reserves, based on Indicated Mineral Resources. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit.

The JORC Code 2012 Table 1, Section 4 to support the Ore Reserve Estimate is included in Appendix B of the Donald Project Ore Reserve Statement released **18 February 2021**. The Ore Reserve estimates have been compiled in accordance with the guidelines defined in the 2012 JORC Code.

Note that the Mineral Resources are reported inclusive of the Ore Reserve.

Classification	Tonnes (Mt)	Slimes (%)	Oversize (%)	HM (%)	Ilmenite (%HM)	Leucoxene (%HM)	Rutile (%HM)	Zircon (%HM)	Monazite (%HM)
<b>RL2002 outside MIN5532</b>									
Proved	140	19.1	7.1	5.6	31.0	18.4	9.6	21.2	1.8
Probable	268	15.8	14.4	4.0	32.3	19.5	7.5	17.0	1.6
<b>Total</b>	<b>408</b>	<b>16.9</b>	<b>11.9</b>	<b>4.5</b>	<b>31.8</b>	<b>19.0</b>	<b>8.4</b>	<b>18.8</b>	<b>1.8</b>

### Note:

1. The ore tonnes have been rounded to the nearest 1Mt and grades have been rounded to two significant figures.
2. The Ore Reserve is based on Indicated and Measured Mineral Resource contained within mine designs above an economic cut-off.
3. A break-even cut-off has been applied defining any material with product values greater than processing cost as Ore.
4. Mining recovery and dilution have been applied to the figures above.
5. The rutile grades are a combination of rutile and anatase minerals.
6. The Ore Reserve estimates have been compiled in accordance with the guidelines defined in the 2012 JORC Code.



# Appendix: Donald Project – Mineral Resource Statement

## Mineral Resource above a 1% total HM cut-off

Classification	Tonnes (Mt)	Total HM (%)	Slimes (%)	Oversize (%)
<b>Within MIN5532</b>				
Measured	372	4.5	14.4	12.8
Indicated	75	4.0	13.8	13.1
Inferred	7	3.5	13.5	10.6
<b>Subtotal</b>	<b>454</b>	<b>4.4</b>	<b>14.2</b>	<b>12.8</b>
<b>Within RL2002 outside of MIN5532</b>				
Measured	343	3.9	19.8	8.1
Indicated	833	3.3	16.2	13.5
Inferred	1,595	3.3	15.7	6.0
<b>Subtotal</b>	<b>2,771</b>	<b>3.4</b>	<b>16.4</b>	<b>8.5</b>
<b>Total within Donald Deposit (RL2002)</b>				
Measured	715	4.2	17.0	10.6
Indicated	907	3.4	16.0	13.4
Inferred	1,603	3.4	15.7	6.0
<b>Subtotal</b>	<b>3,225</b>	<b>3.6</b>	<b>16.1</b>	<b>9.1</b>
<b>Total within Jackson Deposit (RL2003)</b>				
Measured	-	-	-	-
Indicated	1,903	2.8	19.0	5.8
Inferred	584	2.9	16.7	3.3
<b>Subtotal</b>	<b>2,487</b>	<b>2.9</b>	<b>18.5</b>	<b>5.2</b>
<b>Total Donald Project</b>				
Measured	715	4.3	18.1	11.1
Indicated	2,811	3.0	17.9	8.2
Inferred	2,187	3.3	16.4	5.5
<b>Total</b>	<b>5,712</b>	<b>3.2</b>	<b>16.9</b>	<b>7.3</b>

### Note:

1. MRE is based on heavy liquid separation (HLS) analysis only.
2. The total tonnes may not equal the sum of the individual resources due to rounding.
3. The cut-off grade is 1% HM.
4. The figures are rounded to the nearest: 10M for tonnes, one decimal for HM, slimes and oversize.
5. For further details including JORC Code, 2012 Edition – Table 1 and cross-sectional data, see previous announcements dated 7 April 2016 and 1 December 2022, available at ASX's website.

## Mineral Resource where VHM data is available reported above a cut-off of 1% total HM

Classification	Tonnes (Mt)	HM (%)	Slimes (%)	Oversize (%)	Zircon	Rutile/Anatase	% of total HM			
							Ilmenite	Leucoxene	Monazite	Xenotime
<b>Within MIN5532</b>										
Measured	394	4.2	16	10	16	7	21	24	1.8	0.66
Indicated	110	3.5	24	11	15	6	19	18	1.7	0.61
Inferred	20	2.3	22	14	13	7	19	20	1.4	0.55
<b>Subtotal</b>	<b>525</b>	<b>4.0</b>	<b>18</b>	<b>10</b>	<b>16</b>	<b>7</b>	<b>21</b>	<b>23</b>	<b>1.8</b>	<b>0.65</b>
<b>Within RL2002 outside of MIN5532</b>										
Measured	185	5.5	19	7	21	9	31	19	2.0	
Indicated	454	4.2	16	13	17	7	33	19	2.0	
Inferred	647	4.9	15	6	18	9	33	17	2.0	
<b>Subtotal</b>	<b>1,286</b>	<b>4.8</b>	<b>16</b>	<b>9</b>	<b>18</b>	<b>8</b>	<b>33</b>	<b>18</b>	<b>2.0</b>	
<b>Total within Donald Deposit (RL2002)</b>										
Measured	579	4.6	17	9	18	8	25	22	1.9	
Indicated	564	4.1	17	13	17	7	31	19	2.0	
Inferred	667	4.8	15	6	18	9	33	17	2.0	
<b>Subtotal</b>	<b>1,811</b>	<b>4.6</b>	<b>16</b>	<b>9</b>	<b>18</b>	<b>8</b>	<b>30</b>	<b>19</b>	<b>1.9</b>	
<b>Total within Jackson Deposit (RL2003)</b>										
Measured	-	-	-	-	-	-	-	-	-	
Indicated	668	4.9	18	5	18	9	32	17	2.0	
Inferred	155	4.0	15	3	21	9	32	15	2.0	
<b>Subtotal</b>	<b>823</b>	<b>4.8</b>	<b>18</b>	<b>5</b>	<b>19</b>	<b>9</b>	<b>32</b>	<b>17</b>	<b>1.0</b>	
<b>Total Donald Project</b>										
Measured	579	4.6	17	9	18	8	25	22	1.9	
Indicated	1232	4.5	18	9	17	8	31	18	2.0	
Inferred	822	4.7	15	5	18	9	33	17	2.0	
<b>Total</b>	<b>2,634</b>	<b>4.6</b>	<b>17</b>	<b>8</b>	<b>18</b>	<b>8</b>	<b>31</b>	<b>18</b>	<b>2.0</b>	

### Note:

1. MRE is based on heavy liquid separation analysis and where valuable heavy minerals (VHM) have been determined.
2. The total tonnes may not equal the sum of the individual resources due to rounding.
3. The cut-off grade is 1% HM.
4. The figures are rounded to the nearest: 1Mt for tonnes, one decimal for HM, monazite, whole numbers for slimes, oversize, zircon, rutile + anatase, ilmenite and leucoxene and two decimals for xenotime.
5. Zircon, ilmenite, rutile+anatase, leucoxene, monazite and xenotime percentages are reported as a percentage of HM.
6. Rutile + anatase, leucoxene and monazite resource has been estimated using fewer samples than the other valuable heavy minerals outside MIN5532. The accuracy and confidence in their estimate is therefore lower.
7. For further details including JORC Code, 2012 Edition – Table 1 and cross-sectional data, see previous announcements dated 7 April 2016 and 1 December 2022, available at ASX's website

# Appendix: Competitor Information & Disclosure

## SELECT COMPETITOR INFORMATION SOURCES

1. ASX Announcement, Sheffield Resources, ASX:SFX, *Investor Presentation*, 11 April 2023, Construction Stage
2. Kalbar Operations Pty Ltd, *Investor Presentation to TZMI*, November 2020, Development Stage
3. WIM Resources, <https://www.wimresource.com.au/irm/content/avonbank.aspx?RID=312>, extracted 7 February 2023, Development Stage
4. ASX Announcement, VHM Ltd, ASX:VHM, *Prospectus*, 5 January 2023, Development Stage
5. ASX Announcement, Strandline Resources, ASX:STA, *Annual Report to Shareholders*, 31 August 2022, Production Stage
6. ASX Announcement, Base Resources, ASX:BSE, *2022 Annual Report to Shareholders*, 22 August 2022, Development Stage
7. ASX Announcement, Northern Minerals, ASX:NTU, *Annual Report to Shareholders*, 21 October 2022, Development Stage
8. ASX Announcement, Iluka Resources, ASX:ILU, *2022 Annual Report including Appendix 4E*, 21 February 2023
9. ASX Announcement, Hastings Technology Metals Ltd, *Annual Report to Shareholders*, 30 September 2022
10. ASX Announcement, Ionic Rare Earths Ltd, *Annual Report to Shareholders*, 11 October 2022