

# Progression of the Donald Project

One of Australia's Largest Undeveloped Rare Earth and Mineral Sands Projects

**Astron Corporation Limited (ASX:ATR)**  
Corporate Presentation – October 2022



# Astron Corporation – Company Snapshot



Defined strategy to create and deliver shareholder value - multiple value horizons

Extensive experience (30 years+) in mineral sands industry - downstream processing & marketing

*Astron's (ASX:ATR) prime focus is on the delivery of shareholder value through the phased development of the Donald Rare Earth and Mineral Sands Project in Victoria.*

Donald - globally significant, long-life supply of rare earths and mineral sands products.

Advanced evaluation & approvals stage  
Feasibility Study expected Q1 2023

**ASX Code**

ASX:ATR

**Shares/CDIs on Issue**

122.48M

**Share Price<sup>1</sup>**

A\$0.60

**Market Capitalisation<sup>1</sup>**

A\$73.49M

Material, high-value rare earth component ~50% of revenue

Favourable market conditions for supply/demand for both rare earth & mineral sands

**Net Assets<sup>2</sup>**

A\$85.5M

**Products**

Rare Earths, Zircon, Titania

**Project Location**

Wimmera Region, Victoria, Australia

1. Share price and market capitalisation as at 12 October 2022  
2. Based on June 2022 Audited Accounts

Flyover of Donald Project Test-Pit



# Experienced Board and Senior Management

## Aligning organisational capabilities to the progression of the Donald Project



**George Lloyd**

*Chairman*

George has 30 years resource industry and corporate business development and finance experience, including with RGC Limited, as well as serving as a senior executive and director of a number of listed and unlisted companies with interests in industrial minerals, base and precious metals, as well as energy sector.



**Tiger Brown**

*Managing Director*

Tiger 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 2019 and has overseen the detailed planning for the commercialisation of the Donald project.



**Gerard King A.M.**

*Non-Executive Director*

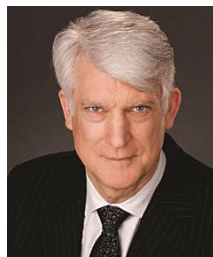
Gerard is a former partner of Lavan & Walsh, which became Phillips Fox Perth. Experienced in commercial contracting, mining law and corporate and ASX compliance. A former member of the Australian Mining & Petroleum Lawyers Association Served as a non-executive director for several companies.



**Sean Chelius**

*Donald Project Director*

Sean joined Astron in January 2022 as the Project Director for the Donald Mineral Sands and Rare Earth project. Sean has over 30 years international experience in mining project planning and implementation, including full responsibility for taking projects from concept through to commissioning and production. His experience involves project management and engineering roles in Australia, South Africa, Zimbabwe, Papua New Guinea and Fiji with BHP, Anglo American, Newcrest, Ausenco and Worley Parsons.



**Dr Mark Elliott**

*Non-Executive Director*

Mark has 27 years experience in corporate roles, both as chairman and managing director on several ASX-listed and private companies. Involved in identifying and securing resource projects, capital raisings, marketing and completing commercial agreements, feasibility studies, mine development plans and their execution.



**Greg Bell**

*Chief Financial Officer*

Greg's advisory and corporate experience spans more than 21 years, working initially in corporate advisory and assurance services with Deloitte, followed by 8 years with Mineral Deposits Limited (MDL) as Accounting Manager and then Chief Financial Officer. Subsequent to MDL, Greg held both consulting and executive roles with international mineral sands and resource companies, including in the critical minerals sector.



**Rong Kang**

*Executive Director*

Rong joined Astron in 1995 and has been a key contributor to the establishment of Astron's downstream processing and global marketing and sales activities, with a deep knowledge of the mineral sands product market and its key participants. Board member since 2012.



**Tim Chase**

*General Manager Global Operations*

Tim joined Astron in 2015 with over 25 years of experience in the mining industry, including extensive experience in mineral sands project design and planning, project management and execution, as well as operational roles. He was involved in the design and commissioning of several mineral sands projects in the Murray Basin, Victoria and NSW.

# Donald Project - Globally Significant Rare Earth Resource

## Rare Earth Mineral Rich Assemblage

Total contained in-site monazite resource of **2.0 Mt.** One of the largest in Australia.

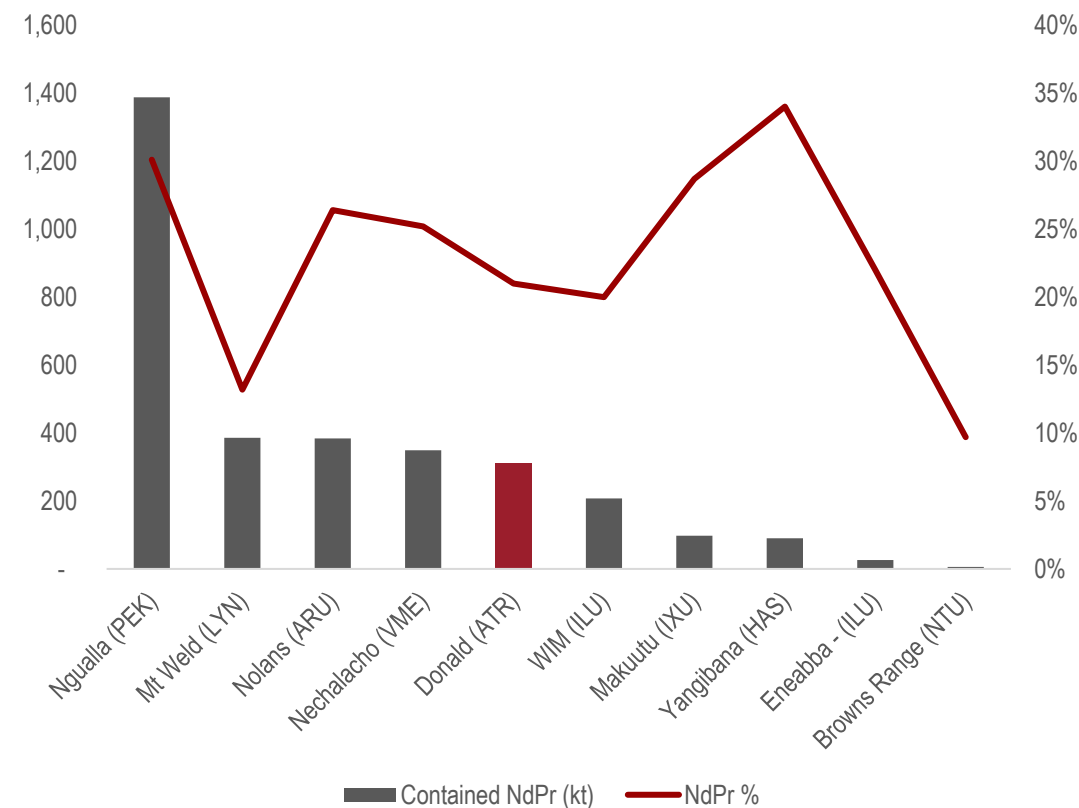
Expected Mine Life of **40+ years**, has the potential to be a pivotal source of Nd/Pr in both the short and long term

Donald project in-situ monazite Ore Reserves of **0.4 Mt.** Equivalent Nd/Pr reserves equivalent to 1.4 years of global demand, potential for further delineation.

Heavy Rare Earths of **Dy, Tb** present in the ore body, as demonstrated in the company's extensive metallurgical evaluation<sup>2</sup>

1. Xenotime content to be determined by 2022 drilling results, expected Q4 2022

Donald – Relative In-situ Rare Earth Resource & Grade<sup>2,3</sup>



2. Selected ex-China producing and prospective rare earths projects with available resource data, based on publicly available information.  
 3. For Donald, the total contained Nd/Pr is calculated by assuming Nd/Pr oxides accounting for 21% of the TREO contained in monazite. It is assumed that monazite contains 67% TREO.

# Donald Project – Global Tier 1 Resource

## Zircon Rich Heavy Mineral Assemblage

With zircon reserves equivalent to ~5 years of global demand, Donald has the potential to be a pivotal source of global zircon supply with an expected mine life of 40+ years. The significant titania component (~65% TiO<sub>2</sub> product) provides an additional valuable product stream.

### Project Mineral Resource<sup>3</sup>

# 2.4 Bt

@ 4.8% Heavy Minerals (HM%)  
using 1% cut-off and VHM Resource

### In-Situ Zircon Resource

# 22.1 Mt

Largest undeveloped zircon resource globally

### Project Ore Reserve<sup>1</sup>

# 602 Mt

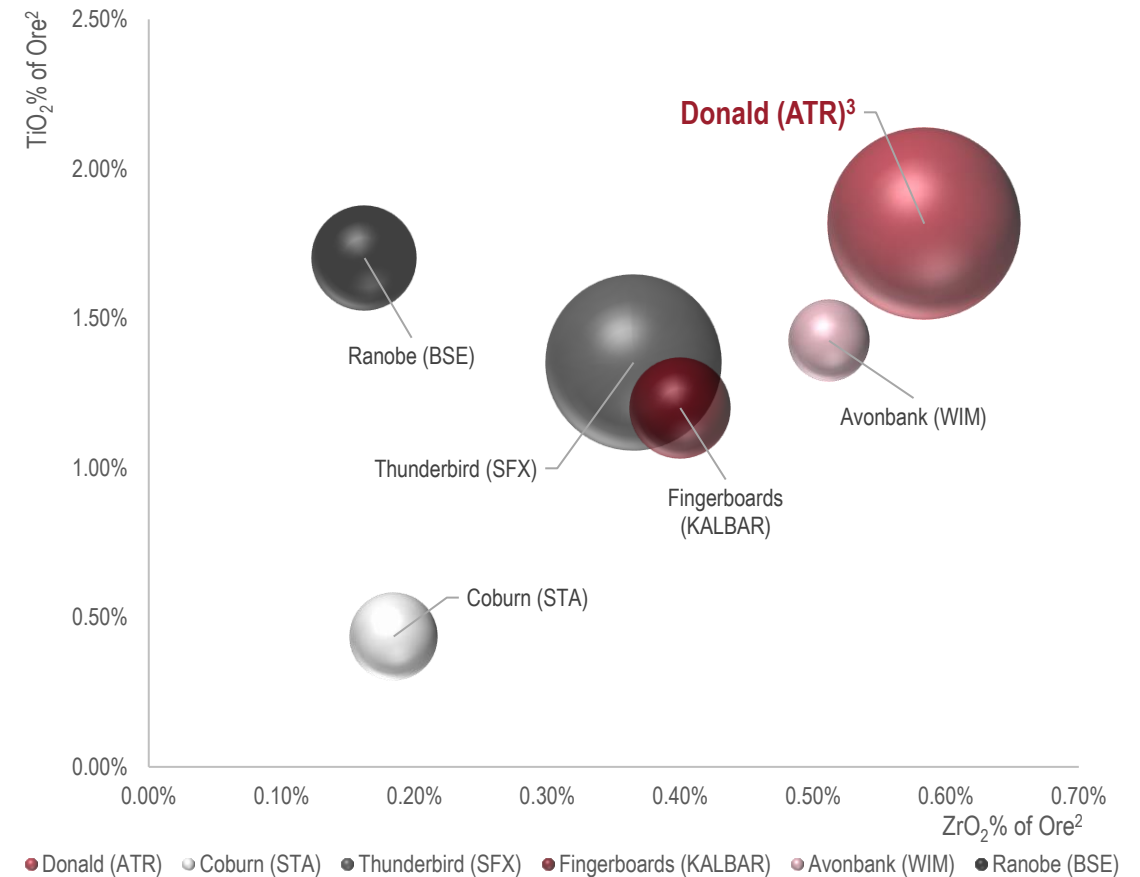
@ 4.8% Heavy Minerals (HM)  
using 1% Cut-off

### In-Situ Zircon Reserve

# 5.4 Mt

Equivalent of **5 years** of global supply

## Relative In-situ Resource & Grade of Ti & Zr of the Donald Project

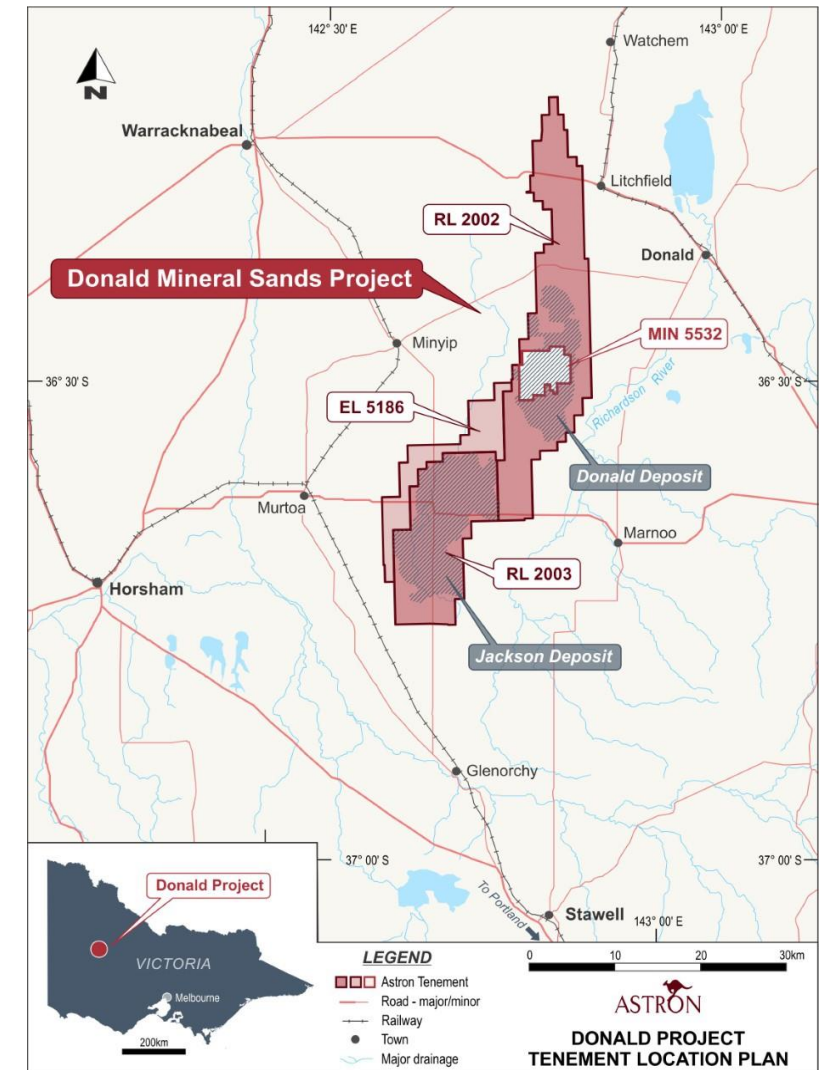


1. See Astron Corporation's ASX announcement on 18 Feb, 2021, *Donald Project Ore Reserves Update*
2. Selected prospective developing mineral sands projects with available mineral resource data, based on publicly available information. Metallurgical assemblages are converted from optical assemblages. ZrO<sub>2</sub> is calculated as a percentage of overall ore. TiO<sub>2</sub> converted using ilmenite TiO<sub>2</sub> of 55%, Leucocene TiO<sub>2</sub> of 72.5%, and Hi-Ti/Rut TiO<sub>2</sub> of 90%. Bubble size denotes overall size of zircon-equivalent resource.
3. Astron Corporation's Mineral Resource Information derived from ASX announcement, 7 April 2016, *Donald Mineral Sands Project – Mineral Resource Update*.

# Key Project Features

## Project features include:

1. Location: ~300 kms north-west of Melbourne on mainly freehold, arable land used for cropping and grazing.
2. Donald comprises a total licenced area of 506 km<sup>2</sup>. Mining licence MIN5532 supports 35yrs of production at Phase 1 throughput, representing 13% of the total Mineral Resource.
3. Close to existing infrastructure, power, water & export facilities.
4. Advanced regulatory approvals (including EES & EPBC) and water rights sufficient for project requirements (Phase 1 & Phase 2) already secured.
5. Cultural heritage approvals (CHMP) in place - no Native Title.
6. Strong local council & community support.



# 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.

### FM-01 Spirals

Developed in 2000s, the spirals represented a technological breakthrough for fine minerals recovery.

### MG-12 Spirals

The next iteration of spirals improved operating efficiencies and decreased processing plant footprint. MG-12 spirals enables cut-off recovery rates to drop from 38 to 20 microns

See Figure 1.

### Simplified Separation Process

Flotation of rare earths up-front simplified subsequent process and improved final product grade & metallurgical recoveries.



### Project Discovery

The Donald Project was initially discovered by CRA in the 1980s. Astron acquired the resource in 2004, given its size and market significance.

### Market evolution: growing applications, markets & demand for Donald Project Minerals

#### Zircon Market

Stabilised following a period of volatility, entering into steady demand growth, limited new supply with existing supply sources maturing.

#### Rare Earth Minerals

Increased demand for rare earths in electric vehicle production and renewable energy generation.



# Phased Development – Multiple Value Horizons

## Phase 1 - FY2024

1. 7.5 Mtpa Ore Throughput
  - REEC<sup>1</sup> ~9ktpa
  - HMC<sup>2</sup> ~250ktpa
  - ~\$350M Capex<sup>3</sup>
2. Defined timetable to development

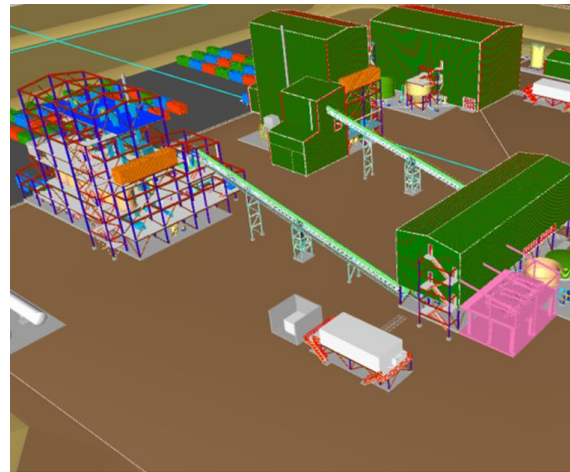
1. "REEC" Rare Earth Concentrate
2. "HMC" Heavy Mineral Concentrate
3. See ASX Announcement – 18 August 2022



Existing WCP Design

## Phase 2 - FY2027+

1. Increase Throughput to 15 Mtpa
  - REEC ~17ktpa
  - HMC ~500ktpa
2. Further On-shore Processing (MSP)
3. Direct to end user markets
4. Subject to further approvals



Existing CUP Design

## Phase 3 – FY2030+

1. Further increase of throughput
2. Downstream opportunities - potential Rare Earth Cracking Facility and/or Synthetic Rutile Plant





# Donald Project - Phase 1

Timely, lowest risk path towards production, opportunity to scale using cashflow



Conventional shallow, dry mining approach. Low strip ratio at 2.2:1 over life of mine, 1.9:1 over first four years of mining operations (Phase 1).



Proven conventional gravity based, using, demonstrated, well understood spiral technologies to produce HMC and flotation to produce the REEC.

### Key Metrics<sup>1</sup>

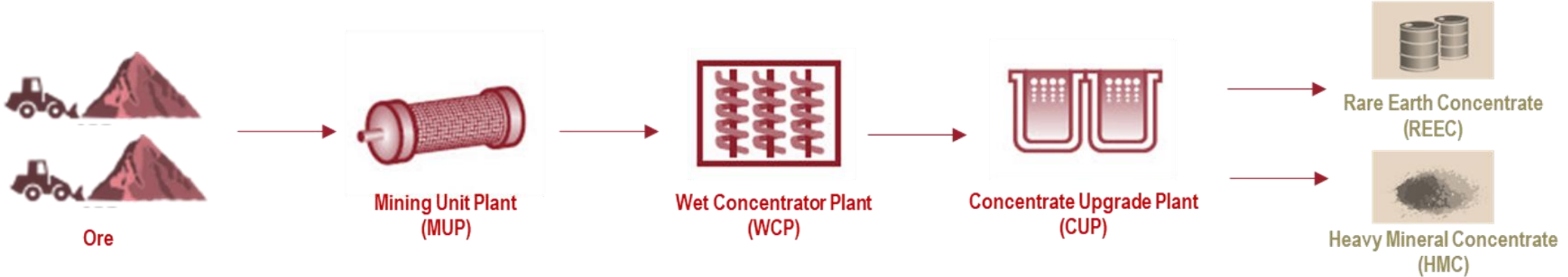
<b>Revenue<sup>2</sup></b>	<b>A\$286m p.a.<sup>2</sup></b>
REEC (50%)	A\$143m p.a.
HMC (50%)	A\$143m p.a.
<b>Capital Expenditure</b>	~A\$350m
<b>Total Capital Requirement</b>	~A\$400m

### Indicative Production Profile For Phase 1 Operation

On-Site Products	Avg. of first 5 years	Avg. over Phase 1
REEC	~9 ktpa	~8 ktpa
HMC	~285 ktpa	~250 ktpa

1. See ASX Announcement 18 Aug 2022, Donald Project Configuration Update

### Simplified Process Flow Diagram



1. Strip ratio to be optimised pending drill results.  
 2. Revenue estimated using assumed AUD/USD rate of \$0.70.

# Rehabilitation & Environmental Management

Minimise environmental impact through sustainable mining & rehabilitation, assisting Astron's social license

- Mining operations will be conducted on mixed use, mainly cleared cropping land.
- Steps will be taken to ensure minimal impact on native vegetation, flora and fauna through mine-planning.
- The nature of the planned mining (shallow, open pit), enables progressive rehabilitation back to original landform.
- Rehabilitation of agricultural land will be monitored for yield characteristics, soil absorption, nutrient uptake and other factors
- Test pit excavation rehabilitated in 2019 to its original landform (see images)
- Recycling of process water; no site run-off, existing ground water hyper-saline (non-potable).

1. Excavation



2. Tailings Return



3. Topsoil Levelling

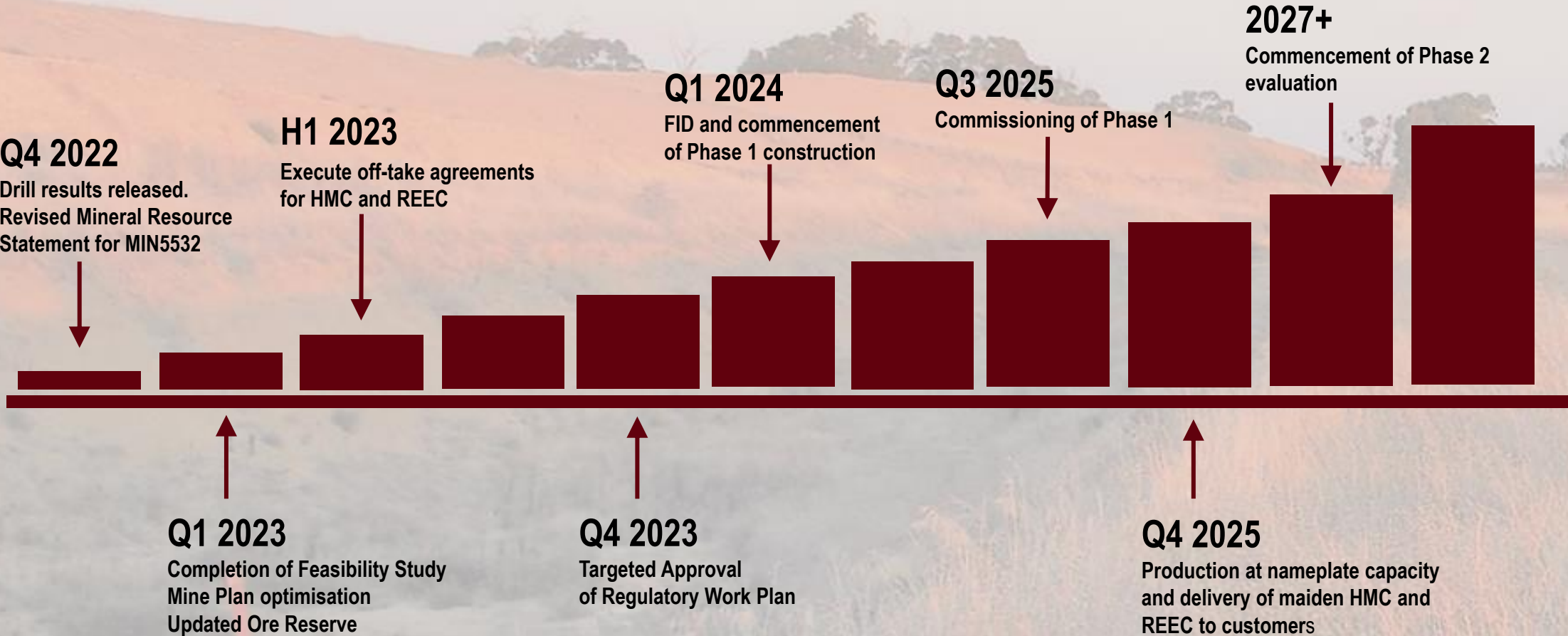


4. Rehabilitation



# Donald Project Development Timeline

Key catalysts for progressive value realisation via Astron’s defined execution strategy





# Appendix 1 - Product Applications



## VALUE PROPOSITION

- **Creation of shareholder value through delivery of a globally significant Tier 1 rare earth and mineral sands project**
- **Scale and longevity, premium zircon and rare earth production – represents a major value opportunity**
  - Ore Reserve underpins expected production life of over 40 years (Phase 1 35 years) with potential upside
  - One of the largest undeveloped zircon reserves globally (~5 years of global consumption)
  - High value minerals account for ~90% of revenue (rare earths 50% and zircon 40%), making Donald a strategic and independent source of these critical minerals
- **Favourable supply/demand market conditions**
- **Progress on project milestones, over next one to two years, to close the gap between Astron’s current market capitalisation and the Donald Project NPV**

1. Indicative Revenue Splits based on product volumes for first five years of mining operations announced on 18 Aug 2022, *Donald Project Configuration and Feasibility Study Update*, and long-term market pricing of zircon of ~US\$1,700, titania of ~US\$300, rare earth con. of ~US\$11,000.

## Revenue %<sup>1</sup>

**R.E.**  
~50%



Wind turbines

**Zr**  
~40%



Ceramics, kitchen & sanitaryware

**Ti**  
~10%



Paint and pigment production

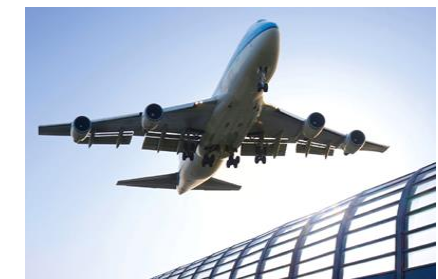
## Product Applications



Electric vehicles and batteries



Casting and foundry applications



Aerospace and industrials

## Appendix 2: Phase 1 – Key Regulatory Approvals & Permits

Key Approval Requirement <sup>1</sup>	Completed	Date	Expiry	ATR Land Holdings (In Donald Project Area) <sup>4</sup>
Environmental Effects Statement	✓	2008	N/A	On MIN5532
Environmental Protection & Bio-diversity Conversation Approval	✓	Mar-09	2034	831.3 Ha
Cultural Heritage Management Plan	✓	Jan-14	Life of mine	Off MIN5532
Water Rights <sup>2</sup>	✓	Jan-12	Jan-41	620.5 Ha
Radiation Licence <sup>3</sup>	✓	Dec-20	Dec-23	<b>Total land holdings</b>
Work Plan	Pending	Pending	Life of mine	<b>1,451.8 Ha</b>

### Notes

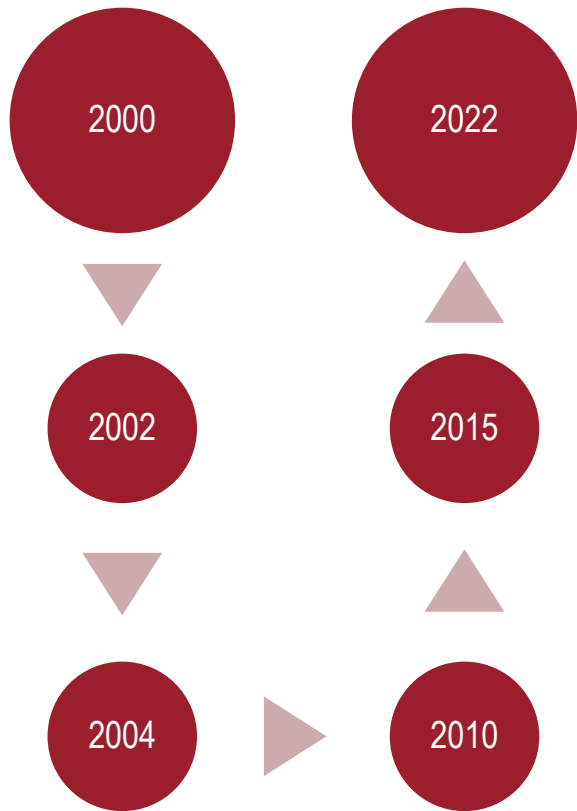
1. Environmental consultation with state regulators are on-going.
2. Water Rights include a 6.975 gigalitre water entitlement purchased from Grampians Wimmera Mallee Water in 2012 for **A\$17m**, sufficient for both Phase 1 and Phase 2. Astron retains the option to renew its water rights following the conclusion of current agreement.
3. Radiation Licence and Export Permits were first issued in 2014 and 2016 respectively, each have been renewed periodically. The company's export permit will need to be updated to align with updated final products specifications following the completion of the Feasibility Study and off-take agreements.
4. Astron Corporation through its subsidiary Donald Mineral Sands Pty Ltd has accumulated land-holdings over the project's history.

# Appendix 3: Project Upside – 2022 Drilling Campaign



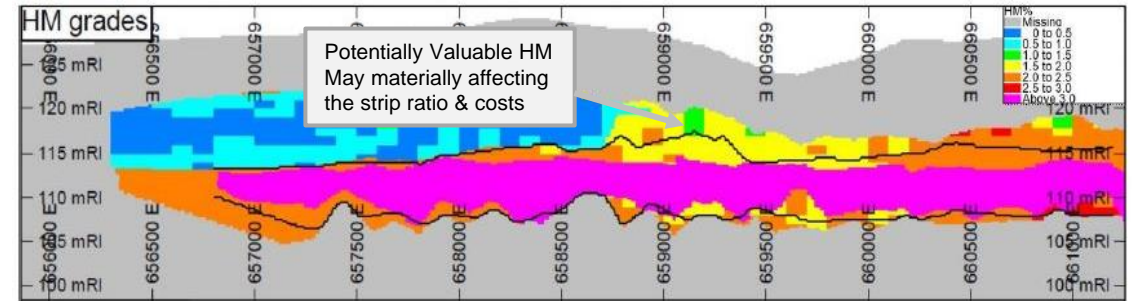
Discovered by CRA in the 1980s, the Donald tenement area and geology has been extensively evaluated. The project area has had a total of 2,789 drill holes over several drilling campaigns. The completed 2022 drilling campaign is expected to:

## Drilling Campaigns

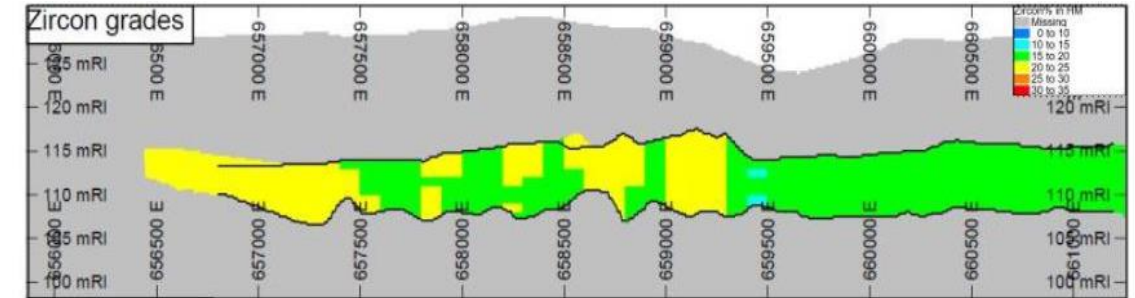


- Improve the understanding of the deposit's valuable heavy rare earth content (Xenotime%)
- Delineate the recoverable +20-38µm fraction HM for incorporation into MR/OR studies.
- Better define VHM component of the deposits (see right), including further definition of top of ore, and bottom of ore

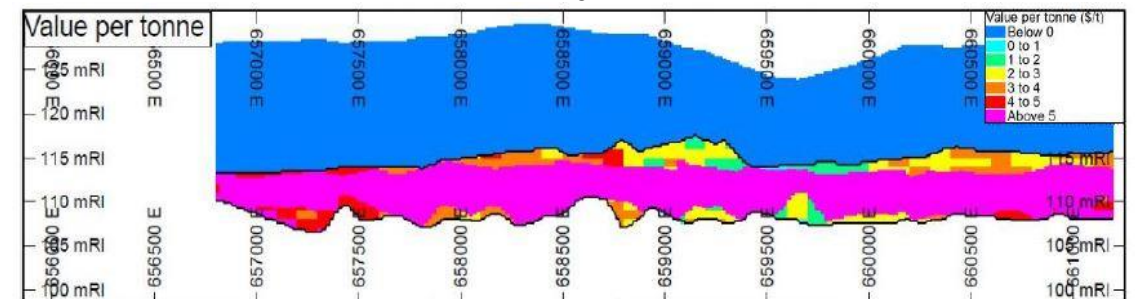
Cross-Section showing HM Grade at 5961500mN



Cross-Section showing Zircon Grade at 5961500mN



Cross-Section showing calculated value at 5961500mN





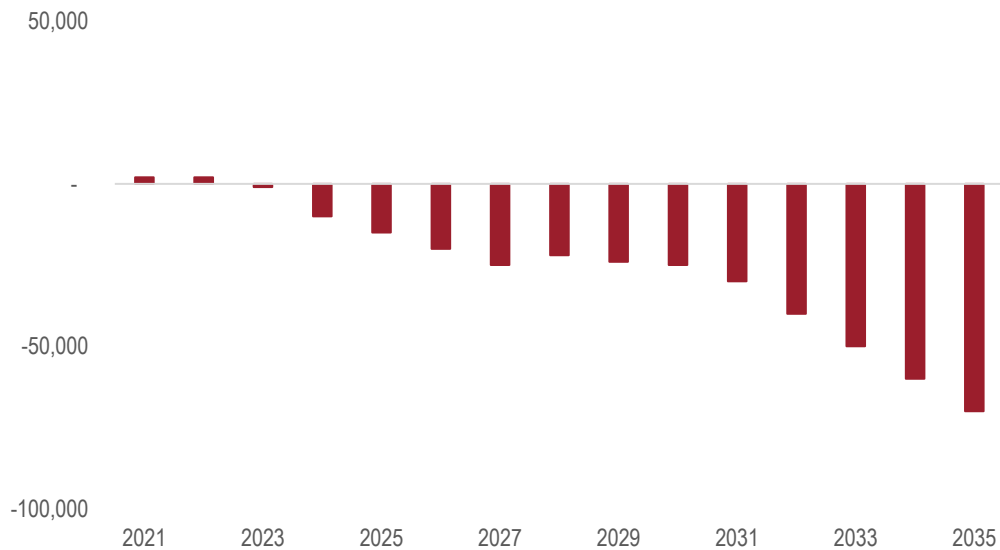
# Appendix 4: Favourable Long-Term Rare-Earth Market Dynamics

**Strong demand growth with limited new supply at a time when geopolitical tensions are increasing and major supply risks are emerging.**

- Significant supply deficits forecast from 2023 onwards, as supply grows driven by strong EV penetration and clean energy applications
- China is the leading market for and processor of rare earths.
- Ex-China production limited at present to Lynas Mt Weld and MP Materials Mountain Pass mines.
- Western countries are seeking to decrease dependence on Chinese supply.

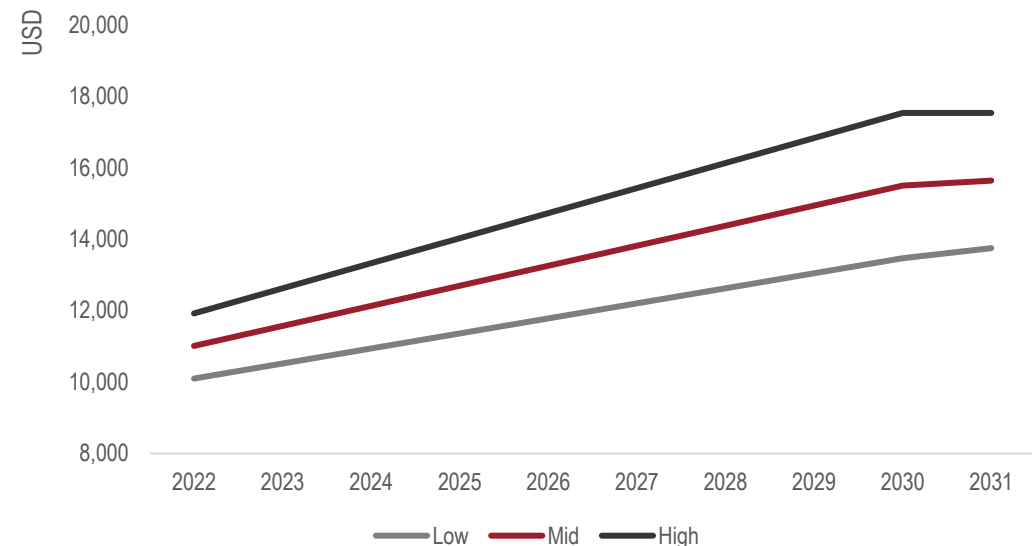
Donald is expected to commence production when market conditions are favourable – **strong demand growth** and limited new sources of supply. Donald is one of the few long life, scalable, well-delineated and advanced new sources of supply at a time when Western sources of supply are being sought and incentivised.

**Global NdPr Supply/Demand Forecast (replicate from MP, Pensana)<sup>1</sup>**



1. Pensana PLC Company Presentation, June 2022

**Standard Monazite Price Forecasts**



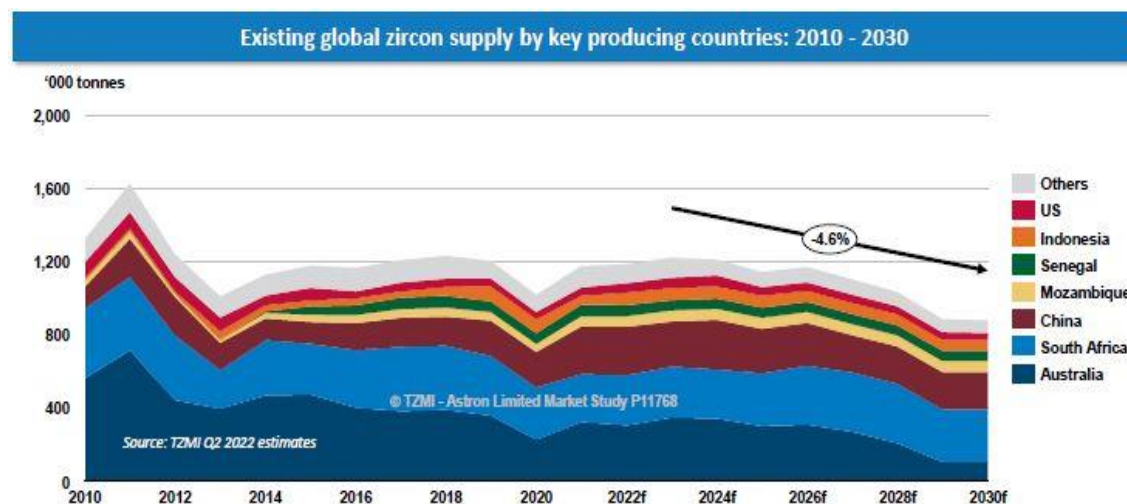
1. Ruidow Monazite Market Report, Aug 2022

# Appendix 5: Favourable Long-Term Zircon Market Dynamics

## Stable demand with limited new supply at a time when existing supply sources are maturing – major supply risks emerging

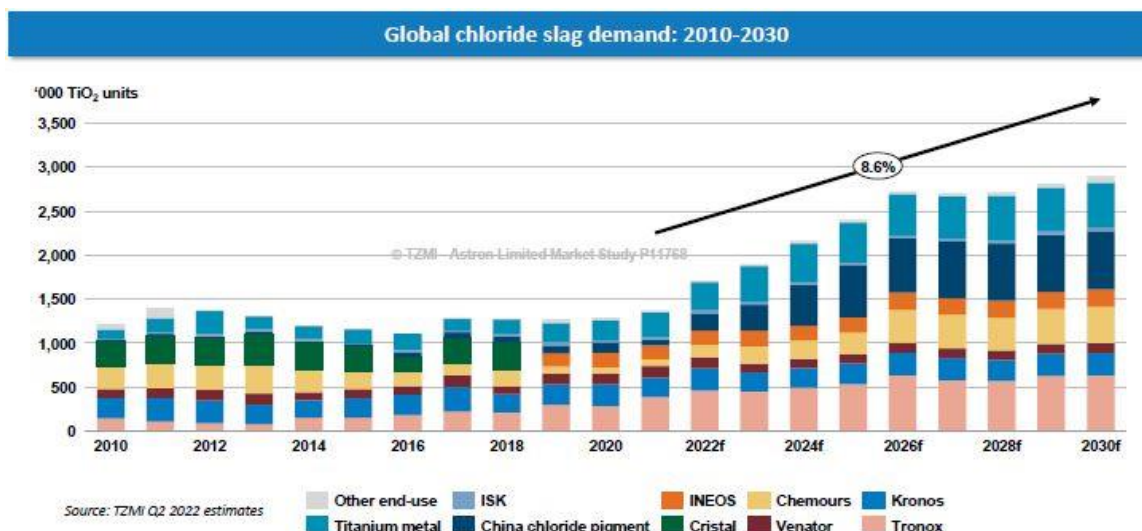
- Supply deficit forecast from 2023 onwards, 40% of existing supply is expected to leave the market over the next 5 years
- Ore Reserve depletion and jurisdictional challenges are expected to lead to a medium-term shortfall that is not demand driven (zircon demand forecast by TZMI to increase by 2.8% YoY from 2021 to 2030).
- Donald is expected to commence production when market conditions are favourable – **existing supplies maturing** and limited identified material new sources of supply.
- Donald Project’s titania product is expected to be a suitable feed source for burgeoning chloride slag demand for chloride pigment production.

### Global Zircon Supply Forecast<sup>1</sup>



1. Based on TZMI Market Report, June 2022

### Global Chloride Slag Demand

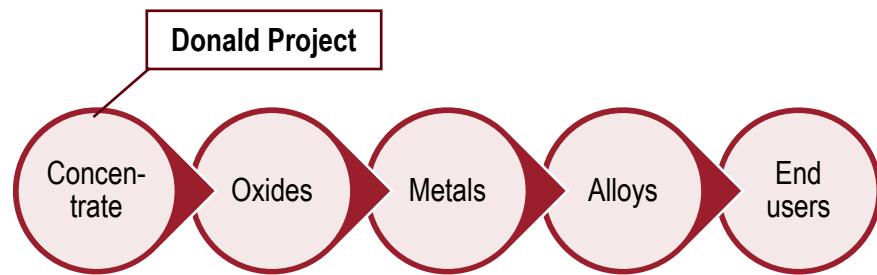


1. Based on TZMI Market Report, June 2022

# Appendix 6: High Value Rare Earth Concentrate Product Stream

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 R.E. 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 E.Vs and Hybrid vehicles to increase the temperature for which the permanent magnet can operate.

Astron is actively investigating transport options regarding the rare earth mineral concentrate and plans to provide detailed updates subsequent to materialization of offtake discussions. It is anticipated that the 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	1.0	19.1%	0.18
	Cerium	1.0	40.0%	0.42
	Praseodymium	97.5	4.6%	4.48
	Neodymium	98.9	16.4%	16.22
	Samarium	2.4	3.1%	0.07
Heavy REO	Europium	27.4	0.1%	0.03
	Gadolinium	47.7	2.3%	1.10
	Terbium	1802.6	0.3%	5.41
	Dysprosium	318.4	1.8%	5.73
	Holmium	92.6	0.4%	0.37
	Erbium	36.5	1.0%	0.36
	Thulium	0.0	0.1%	0.00
	Ytterbium	12.6	0.8%	0.10
	Lutetium	785.6	0.1%	0.79
Oth.	Yttrium	12.6	10.0%	1.26
<b>Basket Price US\$/kg</b>				<b>36.53</b>
<b>TREO%</b>				<b>&gt;60%</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 Shanghai Metals Market pricing as of 26 September 2022.

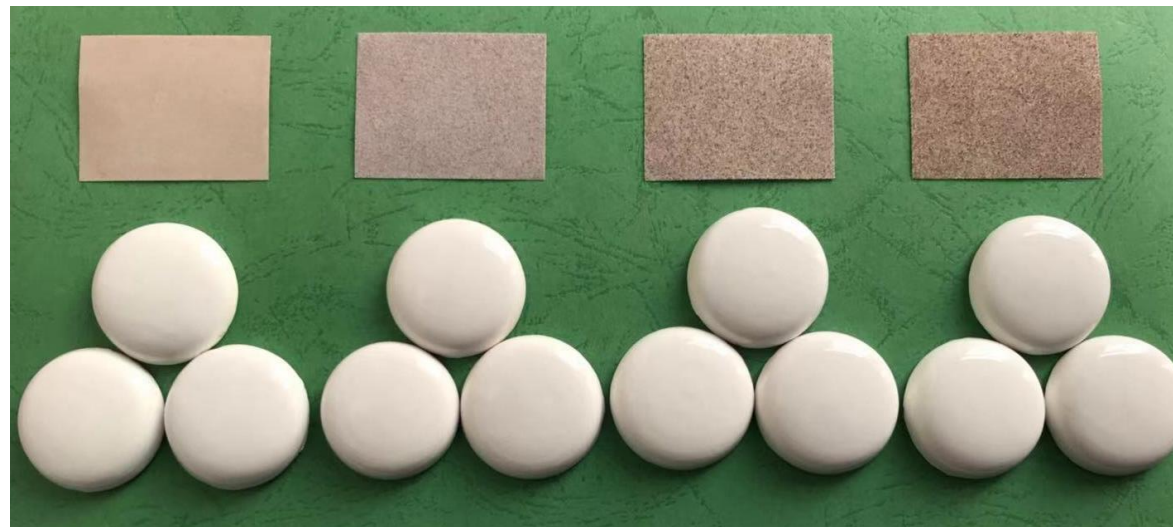


# Appendix 7: Premium Zircon – Superior Attributes

Donald 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**

**Competitor 2**

**Competitor 3**

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

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**

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

# Appendix 8: Donald Project – Ore Reserves Statement

Based on the supporting mine planning completed, pit inventories to support an Ore Reserve Estimate, in accordance with JORC 2012 are shown in Table 1.1. Ore has been classified as Proven Ore Reserve, based on Measured Mineral Resource and Probable Ore Reserve, based on Indicated Mineral Resource. 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.

For ASX announcement see: [https://astronlimited.com.au/wp-content/uploads/2021/03/PU\\_18\\_02\\_21\\_Donald-project-Ore-Reserves-Statement-update.pdf](https://astronlimited.com.au/wp-content/uploads/2021/03/PU_18_02_21_Donald-project-Ore-Reserves-Statement-update.pdf)

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

**Table 1.1 Donald Mineral Sands Ore Reserve for RL 2002 at February 2021**

<b>Classification</b>	<b>Tonnes (mt)</b>	<b>Slimes (%)</b>	<b>Oversize (%)</b>	<b>HM (%)</b>	<b>Ilmenite (%HM)</b>	<b>Leucoxene (%HM)</b>	<b>Rutile (%HM)</b>	<b>Zircon (%HM)</b>	<b>Monazite (%HM)</b>
<b>Within ML5532</b>									
Proved	170	14.2	11.9	5.3	31.4	22.1	7.1	18.8	1.9
Probable	24	13.4	12.5	4.9	33.2	21.3	6.7	20.2	2.0
<b>Total</b>	<b>194</b>	<b>14.1</b>	<b>12.0</b>	<b>5.3</b>	<b>31.6</b>	<b>22.0</b>	<b>7.0</b>	<b>19.0</b>	<b>1.9</b>
<b>Within RL2002 Outside of ML5532</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>
<b>Total within Donald Deposit (RL2002)</b>									
Proved	310	16.4	9.8	5.4	31.2	20.4	8.2	19.9	1.8
Probable	292	15.6	14.2	4.1	32.4	19.7	7.4	17.3	1.6
<b>Total</b>	<b>602</b>	<b>16.0</b>	<b>11.9</b>	<b>4.8</b>	<b>31.7</b>	<b>20.1</b>	<b>7.9</b>	<b>18.8</b>	<b>1.7</b>

**Note**

1. The ore tonnes have been rounded to the nearest 1mt and grades have been rounded to one decimal place.
2. The Ore Reserve is based on indicated and Measured Mineral Resource contained with mine designs above an economic cut-off. The economic cut-off is defined as the value of the products less the cost of processing
3. Mining recovery and dilution have been applied to the figures above.

# Appendix 9: Donald Project - Mineral Resource Statement

**Table 1.2 Mineral Resource at a 1% Cut-off**

Classification	Tonnes (mt)	HM (%)	Slimes (%)	Oversize (%)
<b>Within ML5532</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
Subtotal	454	4.4	14.2	12.8
<b>With RL2002 Outside of ML5532</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
Subtotal	2,771	3.4	16.4	8.5
<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
Subtotal	3,225	3.6	16.1	9.1
<b>Total within Jackson Deposit (RL2003)</b>				
Measured	0	0.0	0.0	0.0
Indicated	1,903	2.8	19.0	5.8
Inferred	584	2.9	16.7	3.3
Subtotal	2,497	2.9	18.5	5.2
<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
Total	5,712	3.2	16.9	7.3

**Note**

1. The total tonnes may not equal the sum of the individual resources due to rounding.
2. The cut-off grade is 1% HM.
3. The figures are rounded to the nearest: 10M for tonnes, one decimal for HM, Slimes and Oversize.
4. For further details including JORC Code, 2012 Edition – Table 1 and cross sectional data, see previous announcements dated **7 April 2016**, available at ASX's website at: [www.asx.com.au/asxpdf/20160407/pdf/436cjqc3cf47.pdf](http://www.asx.com.au/asxpdf/20160407/pdf/436cjqc3cf47.pdf)

**Table 1.3 Mineral Resource where VHM Data is Available at a Cutoff of 1% HM**


Classification	Tonnes (mt)	Slimes (%)	Oversize (%)	HM (%)	Ilmenite (%HM)	Leucoxene (%HM)	Rutile (%HM)	Zircon (%HM)	Monazite (%HM)
<b>Within ML5532</b>									
Measured	264	14.2	12.2	5.4	31	22	7	19	2
Indicated	49	13.6	12.1	4.9	33	22	7	20	2
Inferred	5	13.5	10.2	4.2	36	20	7	22	3
Total	317	14.1	12.1	5.3	32	22	7	19	2
<b>Within RL2002 Outside of ML5532</b>									
Measured	185	19.1	7.3	5.5	31	19	9	21	2
Indicated	454	15.9	13.2	4.2	33	19	7	17	2
Inferred	647	15.2	5.8	4.9	33	17	9	18	2
Total	1,286	16.0	8.6	4.8	33	18	8	18	2
<b>Total within Donald Deposit (RL2002)</b>									
Measured	448	16.2	10.2	5.4	31	21	8	20	2
Indicated	503	15.7	13.1	4.3	33	20	7	18	2
Inferred	652	15.2	5.8	4.9	33	17	8	18	2
Total	1,604	15.6	9.3	4.9	32	19	8	18	2
<b>Total within Jackson Deposit (RL2003)</b>									
Measured									
Indicated	668	18.1	5.4	4.9	32	17	9	18	2
Inferred	155	15.1	3.1	4.0	32	15	9	21	2
Total	823	17.6	5.0	4.8	32	17	9	19	2
<b>Total Donald Project</b>									
Measured	448	16.2	10.2	5.4	31	21	8	20	2
Indicated	1,171	17.1	8.7	4.6	32	18	8	18	2
Inferred	807	15.2	5.3	4.7	33	17	9	19	2
Total	2,427	16.3	7.0	4.8	32	18	8	19	2

**Note**

1. The total tonnes may not equal the sum of the individual resources due to rounding.
2. The cut-off grade is 1% HM.
3. The figures are rounded to the nearest: 1mt for tonnes, one decimal for HM, Slimes and Oversize and whole numbers for zircon, ilmenite, rutile + anatase, leucoxene and monazite.
4. Zircon, ilmenite, rutile + anatase, leucoxene and monazite percentages are report as a percentage of the HM.
5. Rutile + anatase, leucoxene and monazite resource has been estimated using fewer samples than the other valuable heavy minerals. The accuracy and confidence in their estimate is therefore lower.





# Appendix 10: Astron Corporation Simplified Organisation Chart

 **Astron Corporation Limited**  
 ASX Listed (ASX:ATR)  
 (Hong Kong)




 **Astron Pty Limited**  
 (Australia)


 **Senegal Mineral Resources**  
 (Hong Kong)

 **Astron Titanium (Yingkou)**  
 Hong Kong Holdings Ltd.  
 (Hong Kong)



 **Donald Mineral Sands Pty Ltd**  
 (Australia)

 **Senegal Mineral Resources**  
 (Senegal)

 **Astron Titanium (Yingkou) Ltd.**  
 (P.R.C)

# Appendix 11: Astron Corporation Balance Sheet

ASTRON LIMITED	Audited as at
CONSOLIDATED BALANCE SHEET	30 June 2022
<b>ASSETS</b>	
<b>Current Assets</b>	
Cash and Cash equivalent	2,447,986
Term deposits greater than 90-days	46,112
Trade and other receivables	13,510,716
Inventories	2,746,131
Available-for-sale financial assets	7,575
<b>Total current assets</b>	<b>18,758,520</b>
<b>Non-current assets</b>	
Property, plant and equipment	23,605,398
Exploration and evaluation assets	76,701,459
Development costs	8,374,798
Land use rights	2,974,558
<b>Total non-current assets</b>	<b>111,656,213</b>
<b>TOTAL ASSETS</b>	<b>130,414,733</b>

<b>LIABILITIES</b>	
<b>Current liabilities</b>	
Trade and other payables	11,791,607
Contract liabilities	2,962,559
Short term borrowings	13,668,492
Convertible notes	4,622,272
Provisions	201,624
<b>Total current liabilities</b>	<b>33,246,554</b>
<b>Non-current liabilities</b>	
Deferred tax liabilities	10,928,950
Long-term provisions	735,944
<b>Total non-current liabilities</b>	<b>11,664,894</b>
<b>TOTAL LIABILITIES</b>	<b>44,911,448</b>
<b>NET ASSETS</b>	<b>85,503,285</b>

Astron Corporation also holds a contingent asset by way of an ICSID Judgement Award against the State of Gambia worth ~A\$33m.

# Further information



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