

Donald Rare Earth and Mineral Sands Project RL2002 Ore Reserve Update & Project Financial Update

TIER 1 SOURCE OF CRITICAL MINERALS

Highlights

- Astron announced the Definitive Feasibility Study (DFS) results for Phase 1 of the Donald Rare Earth and Mineral Sands Project to the ASX on 26 April 2023. This Ore Reserve upgrade reinforces the potential for a phased, long-term approach to the commercialisation of the Donald Project and is supported by a Pre-Feasibility Study for Phase 2 of the Project
- The Donald Project comprises the Donald Deposit, contained within the tenements RL2002 and MIN5532, and the Jackson Deposit, contained within the tenement RL2003
- The Donald Deposit is host to Phase 1 of the Donald Project, in MIN5532, and Phase 2 of the Donald Project, in RL2002
- An updated Ore Reserve of 516Mt @ 4.6% HM has been estimated for RL2002 which, when combined with the Ore Reserve estimate for MIN5532, brings the total Ore Reserves for the Donald Deposit to 825Mt @ 4.5% HM
- Phase 2 of the Donald Project involves duplication of the Phase 1 mining and mineral processing operations (Phase 2a) with the addition of a mineral separation plant to process heavy mineral concentrate from both the Phase 1 and Phase 2a Projects to final zircon and titania products (Phase 2b)
- The combined Phase 1 and Phase 2 Donald Project is forecast to generate an after tax NPV₈ of \$2.2 billion over a 58-year mine life, at an IRR of 30.3%
- The capital cost of the Phase 2 Project is estimated to be \$566 million, consisting of \$431 million for Phase 2a (the duplication of mining and processing operations) and \$134 million for Phase 2b (construction of a mineral separation plant)
- Phase 2 construction is projected to start in 2029, with commissioning and commercial operations towards the end of 2030. It is expected that Phase 2 will be funded through internally generated cashflows
- Following the commissioning of the Phase 2 Project in 2030, Astron's annual life of mine production will average:
 - 13,000tpa of rare earth element concentrate (REEC) containing >60% TREO (Total Rare Earth Oxide);
 - 84,600tpa of premium zircon suitable for the ceramics market;
 - 8,900tpa of secondary zircon; and
 - 260,200tpa of titania (high-grade titanium feedstock)
- The life of mine forecast average revenue is \$678 million per annum leading to an average annual EBITDA of \$363 million

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

Astron Corporation Limited (ASX: ATR) ('Astron' or 'Company') is pleased to announce an updated Ore Reserve estimate for retention licence RL2002, which is the proposed site of Phase 2 of the Donald Rare Earth and Mineral Sands Project ('Donald Project' or 'Donald').

The Donald Project is an advanced, globally significant critical minerals project located 300km north-west of Melbourne in the Wimmera Region of Victoria (see Figure 1). Phase 1 of the Donald Project has the benefit of a favourably assessed Victorian Environmental Effects Statement (EES), a concluded Federal Environmental Protection and Biodiversity Conservation (EPBC) Licence and a granted Mining Licence (MIN5532).

The Donald Project comprises the Donald Deposit (MIN5532 and RL2002) and the Jackson Deposit (RL2003). The upgraded Ore Reserve for RL2002 brings the Donald Deposit into the reserves category, whereas the Jackson Deposit, for which a Mineral Resource has been estimated, represents further project upside potential from future development opportunities including production expansion and downstream processing.

The Ore Reserve for RL2002 is 516Mt @ 4.6% heavy mineral (HM) grade containing 23.7Mt HM. It comprises a Proved Ore Reserve of 152Mt @ 5.6% HM and a Probable Ore Reserve of 364Mt @ 4.1% HM (refer to Table 1 and Appendix A). The updated Ore Reserve Estimate brings the total Ore Reserve for the Donald Deposit to 825Mt at 4.5% HM.

The Ore Reserve for the Donald Deposit (comprising both MIN5532 and RL2002) has increased by 15.1% whilst the heavy mineral Reserves have increased by 15.2% to 36.9Mt, comprising:

- Rare earth minerals (including monazite and xenotime) – 724.0kt (an increase of 12.3%)
- Ilmenite – 10.5Mt (an increase of 18.9%);
- Leucoxene – 7.8Mt (an increase of 13.0%);
- Rutile – 2.7Mt (increase of 15.8%); and
- Zircon – 6.6Mt (an increase of 15.1%);

The updated reserves estimate confirms the Donald Project's position as a globally significant source of critical minerals, containing the third largest rare earth minerals resource outside of China and the largest zircon resource globally, underpinning commercial production for at least 58 years. This reserve and resource position represents an ideal basis for Astron to explore and evaluate downstream opportunities in advanced materials and chemicals manufacturing in the rare earths, titanium, zirconium and hafnium industries.

The Ore Reserve was prepared by AMC Consultants Pty Ltd (AMC), an experienced and prominent mining engineering consultant with appropriate mineral sands experience and industry knowledge. The Ore has been classified as a Proven Ore Reserve, based on Measured Mineral Resources and a Probable Ore Reserve, based on Indicated Mineral Resources. Ore Reserves are summarised below in Table 1 and Appendix A.

The updated Ore Reserve estimate is supported by the Phase 1 Project definitive feasibility study (DFS) which was announced on 26 April 2023 and is based on cost estimates carried out to an Association for the Advancement of Cost Engineering (AACE) Class 2 standard and the Phase 2 pre-feasibility study (PFS) which is based on cost estimates carried out to an AACE Class 3 standard.

The project is significantly de-risked by the selection of conventional mining techniques, extensive metallurgical test work and engineering evaluation, and the advanced pre-development status of Phase 1. In many cases, the technical studies completed for the Phase 1 Project are relevant to the Phase 2 Project due to the adjoining mineral tenements and the consistency of the resource across the tenements.

The combined Phase 1 and Phase 2 of the Donald Project contains approximately 43% of the total Donald Project Mineral Resource. Key components of the Donald Project's development phases include:

- **Phase 1** – 7.5Mtpa run of mine (ROM) ore mined and processed within MIN5532, to produce a heavy mineral concentrate (HMC) and a rare earth element concentrate (REEC) as announced on 26 April 2023;
- **Phase 2a** – Duplication of Phase 1 throughput, with 7.5Mtpa ROM ore mined and processed within RL2002 to produce HMC and REEC; and
- **Phase 2b** – Construction of a mineral separation plant (MSP) on MIN5532, sized to process the HMC equivalent of 15Mtpa ROM ore which will be mined from both MIN5532 (Phase 1) and RL2002 (Phase 2a). When the MSP is commissioned, HMC produced from Phase 1 and Phase 2a will be separated into premium (ceramic) and secondary (chemical) grade zircon and final titania products.

The Company intends to commence planning for Phase 2 development immediately following the commissioning of the Phase 1 Project with the objective of obtaining the requisite regulatory approvals, leading to the final investment decision (FID) for the project being made towards the end of calendar year 2028. Phase 2 construction is currently scheduled to commence in CY29, with commissioning and the start of commercial operations towards the end of CY30.

The combined Phase 1 & 2 Project is expected to deliver compelling economics with a post-tax real NPV₈ of \$2.2 billion at an IRR of 30.3%. It is forecast to generate \$13.4 billion of free-cashflows, \$39.0 billion of gross revenue and \$20.8 billion of EBITDA over its 58-year mine life.

The Donald Project has strong community support and is expected to make a significant contribution to the Gross Regional Product as well as provide employment and re-investment opportunities across the local area.

The Phase 1 DFS was announced on 26 April 2023 and should be read in conjunction with this report.

Astron Managing Director, Tiger Brown, commented:

“The announcement of Ore Reserves for RL2002 represents an important step towards commercialisation of the Donald Project beyond Phase 1, for which an Ore Reserve, DFS and detailed project economics have been previously announced, and confirms its unique reserve and resource position.

This Ore Reserve upgrade, in association with the Phase 2 PFS, underpins the physical and financial robustness of future phases of the Donald Project and, in conjunction with Astron’s technical background, is expected to lead to additional value realisation through the establishment of a vertically integrated critical minerals supply chain from resource to processed products.

Phase 1 and Phase 2 of the Donald Project represent a multi-generational opportunity for the local community, the Project’s workforce and the Company’s shareholders as well as for Australian-sourced global critical minerals market supply.”

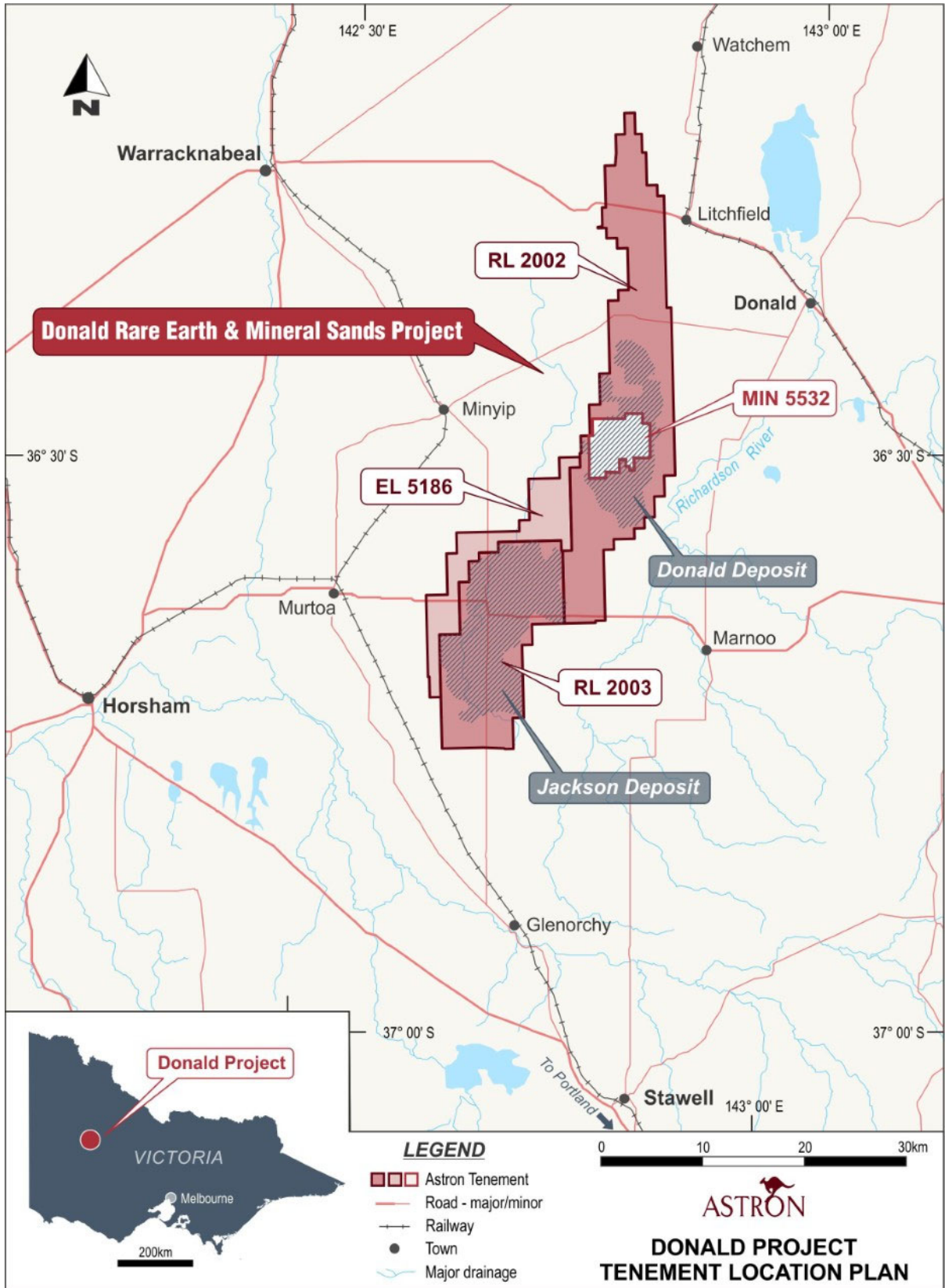


Figure 1 – Donald Rare Earth & Mineral Sands Project Map

Project Description

The Donald Project has the potential to become a globally significant, long-life supplier of critical minerals containing rare earth elements (REE) including neodymium, praseodymium, dysprosium, and terbium, as well as zirconium, hafnium and titanium. It contains over 2.6 billion tonnes of Mineral Resources at 4.4% heavy mineral (HM) grade and comprises two adjoining deposits, the Donald deposit (which constitutes the area covered by MIN5532 and RL2002) and the Jackson deposit (RL2003). The mining licence area covered by the tenement MIN5532 is the site of the Phase 1 Project and the subject of the recently announced DFS. The Phase 2 Project will be developed on retention license RL2002 which is split into two locations to the north and south of MIN5532 (refer to Figure 4).

The key features of Phase 1 operations, to be carried out on MIN5532, are:

- Conventional truck and shovel, open-pit mining, by an independent contractor, to produce 7.5Mtpa of ore for feed to an adjacent mining unit plant (MUP) and then to a processing plant comprising spiral concentration and rare earth flotation;
- Production of a heavy mineral concentrate (HMC) containing zircon (80% of which is premium quality) and titanium minerals, as well as a rare earth element concentrate (REEC) containing xenotime, which is a source of valuable heavy rare earth elements and monazite, which is a source of light rare earth elements;
- The two concentrate revenue streams will be directed to different customers for varying end-use applications, providing revenue diversification and reduced cyclicality when compared to a single commodity project;
- Over the first five full years of production, HMC will contribute between 44% to 47% to total revenue, and REEC will contribute between 53% to 56% to revenue; and
- The main financial and operational metrics for Phase 1 (as announced on 26 April 2023) are provided in Table 2.

Phase 2 operations will be carried out on RL2002 to the north and south of MIN5532. Phase 2 has been separated into two sub-phases:

Phase 2a operations involve a duplication of Phase 1 operations and comprise:

- conventional truck and shovel open-pit mining, by an independent contractor, to produce 7.5Mtpa of ore for feed to a mining unit plant (MUP) located adjacent to the pit;
- separately stockpiled topsoil, subsoil and overburden;
- concentration of ore using gravitational separation spirals in a wet concentration plant (WCP) to produce a raw heavy mineral concentrate, comprising rare earths, titanium and zircon minerals;
- processing of the raw heavy mineral concentrate through a concentrate upgrade plant (CUP), where a rare earth elements concentrate will be separated from the titanium and zircon concentrate by flotation to produce REEC and HMC product streams;
- REEC product drummed and made ready for sale to offtake partners;
- HMC loaded into half height containers ready for sale to offtake partners or pumped to the mineral separation plant (MSP) for processing to final products (refer Phase 2b);
- sand tailings, mixed with slimes, will be deposited in an above ground surface tailings storage facility (TSF) during start-up and commissioning and, subsequently, returned to the mined areas as part of the progressive mine rehabilitation; and
- topsoil will be replaced according to the original soil configuration, followed by revegetation and return to farmland or native vegetation (usually within 3-5 years of excavation).

The initial Phase 2a mining operations and the initial locations of the Phase 2a MUP, WCP and CUP will be on RL2002 to the south of the Phase 1 Project site. On completion of the initial Phase 2a mining operations, the Phase 2a MUP, WCP and CUP will be relocated on RL2002, to the north of the Phase 1 Project site, where mining and processing operations will resume (see Figure 4).

Phase 2b operations comprise:

- construction of an MSP on MIN5532 sized to process the HMC equivalent of 15Mtpa ore;
- pumping HMC from Phase 1 and Phase 2a CUP's to the MSP feed tank on MIN5532;

- processing the HMC feed through Low Intensity Magnetic Separator (LIMS) and two stages of Wet High Intensity Magnetic Separators (WHIMS) to produce magnetic and non-magnetic concentrate streams;
- beneficiation of the non-magnetic concentrates using a multistage gravity circuit to produce a zircon concentrate and a non-magnetic titanium mineral concentrate, comprising rutile and leucoxene, and rejecting the low specific gravity titano-silicates;
- processing zircon concentrates (non-magnetics) through a drying circuit using multi-stage electrostatic and magnetic circuits to produce premium grade and secondary (chemical grade) zircon products;
- processing the combined WHIMS magnetic and non-magnetic titania concentrate through a drying circuit using multi-stage electrostatic and magnetic circuits to produce a final titania product; and
- transporting the final zircon and titania products by truck to Dooen intermodal rail terminal before railing to a Victorian port for export.

The primary financial metrics for the combined Phase 1 and Phase 2 projects are provided in Table 2.

The Jackson deposit, which contains Mineral Resources of 823 million tonnes at 4.8% HM, represents further potential mining and processing opportunities which are outside the scope of these studies.¹

Ore Reserve Estimate

Table 1 – Ore Reserve for the Donald Deposit (MIN5532 and RL2002) as at May 2023

Classification	Tonnes (Mt)	Total HM %	Slimes %	Oversize %	% of total HM					
					Zircon	Rutile	Ilmenite	Leucoxene	Monazite	Xenotime
MIN5532²										
Proved	263	4.4	15.4	9.8	16.7	5.5	21.6	25.9	1.8	0.67
Probable	46	4.1	19.7	11.1	15.3	5.5	21.3	20.1	1.8	0.64
Total	309	4.4	16.1	10.0	16.5	5.5	21.6	25.1	1.8	0.66
Within RL2002 outside of MIN5532										
Proved	152	5.6	7.1	18.8	21.1	9.4	31.3	18.2	1.8	-
Probable	364	4.1	13.7	15.7	17.1	7.5	32.8	19.3	1.6	-
Total	516	4.6	11.7	16.6	18.6	8.2	32.3	18.9	1.7	-
Total Donald Deposit										
Proved	415	4.8	12.4	13.1	18.6	7.2	25.7	22.6	1.8	See Notes
Probable	410	4.1	14.4	15.2	16.9	7.3	31.5	19.4	1.6	See Notes
Total	825	4.5	13.4	14.1	17.8	7.2	28.4	21.2	1.7	See Notes

Notes to Table 1:

- Ore tonnes have been rounded to the nearest 1 Mt and grades have been rounded to one decimal place.
- The Ore Reserve is based on Indicated and Measured Mineral Resource contained within mine designs above an economic cut-off.
- The economic cut-off is defined as the value of the products less the cost of processing.
- Mining recovery and dilution have been applied to the figures above.
- The updated RL2002 Ore Reserve does not include an announced figure on xenotime due to historical samples used in the Ore Reserve calculation not being analysed for xenotime. Further drilling work consisting of a maximum of 958 drillholes may be undertaken to further define the Ore Reserve and delineate the xenotime content. Metallurgical test work confirms the rare earth element composition to be relatively consistent across the mineral deposit, which represents upside to the announced combined rare earth mineral figures. Thus, the xenotime content of the entire Donald Deposit has not been stated.

¹ See ASX Announcement, Donald Mineral Sands Project Mineral Resource Update, 7 Apr 2016

² See ASX Announcement, Donald Project MIN5532 Ore Reserves Update, 30 Mar 2023

Reported ore reserves for tenements making up the Donald Deposit use different heavy mineral in-size range classifications. For MIN5532, heavy minerals (HM) are defined as minerals heavier than 2.96 specific gravity (S.G.) and of a HM grainsize between 20µm and 250 µm. For the remainder of the Donald Deposit, that is within RL2002 outside of MIN5532, the HM in-size range is 38µm to 90µm. In reporting the total Donald Deposit ore reserves, tonnages and grades have been combined despite these different classifications.

Summary financial and operation metrics

The primary financial and operational metrics for Phase 1 and for the combined Phase 1 and Phase 2 of the Donald Project are outlined in Table 2 below:

Table 2 – Summary Financial Characteristics – Donald Project

Metric	Unit	Phase 1	Phase 1+2
Post-tax NPV ₈ (FID)	[A\$m]	852	2,235
Post-tax IRR	[%]	25.8%	30.3%
Pre-tax NPV ₈ (FID)	[A\$m]	1,294	3,343
Pre-tax IRR	[%]	33.9%	38.6%
Payback period from commencement of operations	[years]	3.75	4.0
Execution capital cost (incremental) ³	[A\$m]	364	566
Cumulative free cash flow	[A\$m]	3,869	13,350
Life of Mine	[years]	41.5	58
Ore processing throughput	[Mtpa]	7.5	15.0
Average ore grade	[HM%]	4.4%	4.5%
Average strip ratio	[Ratio]	1.6	2.2

The annual average financial and production metrics for Phase 1, and the combined Phase 1 and Phase 2 of the Donald Project are outlined in Table 3 below:

Table 3 – Annual average financial and production metrics

Metric	Unit	Phase 1	Phase 1+2
Revenue	[A\$mpa]	314	678
Operating costs	[A\$mpa]	167	315
EBITDA	[A\$mpa]	148	363
Free cash flow (post-tax)	[A\$mpa]	103	230
HMC Production	[ktpa]	228.7	N/A
Premium zircon	[ktpa]	N/A	84.6
Standard zircon	[ktpa]	N/A	8.9
Titania	[ktpa]	N/A	260.2
REEC Production	[ktpa]	7.2	13.0

³ Execution Capital Cost for Phase 1+2 includes \$364.7m for Phase 1, \$431.5m for Phase 2a (the duplication of forecasted Phase 1 throughput) and \$134.4 for Phase 2b (the construction of an MSP).

Confidence/Accuracy

The Phase 2 PFS is underpinned by independent technical reports undertaken by reputable and experienced external consultants, including:

- Mineral Technologies – metallurgical test work, process plant design engineering, capital and operating cost estimation;
- AMC Consultants – mine planning, Ore Reserve and Mineral Resource estimation, capital and operating cost estimation;
- ATC Williams – Tailings handling and storage (based on Phase 1 design);
- TAM International – Rare earths shipping and handling;
- TZMI – Mineral sands product pricing and market analysis;
- Adamas Intelligence – Rare earth product pricing and market analysis;
- ProjectWorx – General project engineering and management.

Astron is confident that it has met the requirements necessary for the classification of the cost estimates contributing to the PFS as an AACE Class 3 estimate. The PFS accuracy range is - 20%/+30%.

Astron is targeting a final investment decision (FID) for Phase 2 of the Donald Project in the fourth quarter of calendar year 2028. The estimated construction period is 14 months. Commissioning and first concentrate production are targeted for Q4 2030, with shipments beginning shortly thereafter and full-scale production from Q1 2031.

Table 4 – Donald Project Phase 2 Development Timeline

Activity	Phase 2
Environmental Effects Statement Positive Assessment	Q3 2027
EPBC approval	Q3 2027
Cultural Heritage Management Plan Approved	Q2 2027
Work Plan Approval and other licenses granted	Q3 2028
Design & Tender Completion (Infrastructure & Mining)	Q3 2028
Final Investment Decision (FID)	Q4 2028
Process Plant EPC Award	Q1 2029
Earthworks commenced	Q1 2029
Ordering of Long Lead Equipment Supply	Q1 2029
Construction Complete	Q3 2030
Commissioning & Ramp Up Complete	Q4 2030
Product Shipment Start	Q4 2030

Further Opportunities

Astron has identified a number of opportunities which are expected to enhance Donald Project economics, including:

- ongoing work to identify and realise synergies between the Phase 1 and Phase 2 projects is expected to lead to increases in the values of both projects;
- future resource definition on RL2002, including quantification of the xenotime mineral resource and fine-grained HM to 20µm is expected to lead to further upgrading of the RL2002 Ore Reserve reflecting Astron's experience with the recent drill programme on MIN5532; and
- the development of the Jackson Deposit, which adjoins the Donald Deposit and contains Mineral Resources of 823Mt @ 4.8% HM, provides potential for a significant future increase in critical minerals production from the Donald Project;

Furthermore, Astron’s unique resource position and long project life provide the potential for the establishment of downstream minerals processing and chemical facilities and the creation of a critical minerals processing hub in the Wimmera region.

This announcement is authorised by the Board of Astron Corporation Limited.

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About Astron

Astron Corporation Limited (ASX: ATR) is an ASX listed company, with over 35 years of experience in mineral sands processing and downstream product development, as well as the marketing and sales of zircon and titanium dioxide products. Astron’s prime focus is on the development of its large, long-life and attractive zircon assemblage Donald Rare Earth and Mineral Sands Project in regional Victoria. Donald has the ability to represent a new major source of global supply in mineral sands and rare earths. The company conducts a mineral sands trading operation based in Shenyang, China; operates a zircon and titanium chemicals and metals research and facility in Yingkou, China; and is the owner of the Niafarang Mineral Sands Project in Senegal.

Rare Earths	Zirconium	Titanium Minerals
		
<p>Wind turbines</p>	<p>Ceramics, kitchen and sanitaryware</p>	<p>Paint and pigment production</p>
		
<p>Electric vehicles and batteries</p>	<p>Casting and foundry applications</p>	<p>Aerospace and industrials</p>

Summary of Ore Reserve Statement and Reporting Criteria

In accordance with ASX Listing Rule Chapter 5.9.1, information material to the reporting of the Donald Ore Reserve estimate update is summarised below. More detail is included in the JORC 2012 Table 1 in Appendix B.

Material Assumptions and Outcomes of the Ore Reserve Declaration

Phase 2 is planned to begin production in 2030, five years after the start of Phase 1. RL2002 South will be mined through to completion in 2055 at 7.5Mtpa. RL2002 North will be mined from 2055 to 2082, at rates of 7.5Mtpa for the initial 10 years and 15Mtpa for the following 17 years (see Figure 4).

AMC has prepared the Ore Reserve estimate using studies completed on the RL2002 license area provided by Astron. They include cost and price inputs, a resource model, a strategic mine schedule and recovery rates. AMC has updated inputs and assumptions where appropriate, using external sources such as contractor prices and internal database benchmarks. These Inputs were used to determine economically minable blocks to be included in the Ore Reserve estimate. The basis of the estimate and related assumptions have been established to a $\pm 25\%$ level accuracy as appropriate for a Feasibility Study.

AMC has used an in-house proprietary tool to estimate mining and operating costs in many instances. The tool uses the inputs of the RL2002 studies provided by Astron to create an estimate from first principles, using AMC's database and experience with similar mining projects. Results have been compared with AMC benchmarks to demonstrate that they are robust and appropriate.

- Product pricing assumptions for mineral sands products are based on consensus real 2023 Q1 forecast prices provided by TZ Mineral International Pty Ltd (TZMI), in a commissioned mineral sands marketing report, and have been adjusted for the quality characteristics of Donald Project products. Downstream processing costs are considered in the pricing assumptions applied to the production of HMC;
- Product pricing assumptions for rare earth products are based on real 2023 Q1 forecast prices provided by Adamas Intelligence and consider the costs of processing REEC products into final products;
- Product specifications and recovery assumptions are based on metallurgical test work results derived from the Company's lab-scale and pilot-scale test work involving test-pit material and on-mine path Sonic drill bulk samples;
- The updated RL2002 Ore Reserve does not include an announced figure on xenotime due to historical samples used in the Ore Reserve calculation not being analysed for xenotime. Metallurgical test work confirms the rare earth element composition (monazite to xenotime ratio) to be relatively consistent across the mineral deposit. As such, the economic model used for the Ore Reserve estimate includes assumptions used in the MIN5532 Ore Reserve estimate to account for the xenotime content of REEC.
- Mining cost assumptions have been developed by AMC. Costs include clearing rehabilitation, and topsoil, subsoil and ore mining costs;
- Vehicle and haulage costs have been determined from first principles based of the required vehicle fleet, haulage travel times, operating hours and productivities;
- Processing cost assumptions were determined from first principles, with estimated operating costs for each stage of processing. Costs relate to ore processing, reagents, concentrate transport and zircon cleaning;
- Transport and logistics costs assumptions were based on current container freight and haulage costs to port and from Australia to international markets.
- Other operating costs such as administration, labour, environmental management and general expenses have been developed from first principles based on expected organisational structure and manning levels, operating schedules and rostering requirements, materials requirements, other equipment, communications, IT, consultants and recruitment costs.

Table 5 – Summary of material assumptions and outcomes of the Ore Reserve declaration

Criteria	Assumption (real 2022 terms)
Physical production parameters	First production (Phase 1) – H2 2025
	First production (Phase 2) – H2 2030
	Mine life – 58 years
	Average strip ratio – 2.2:1
	Mining equipment – truck and shovel
	Mining rate (Phase 1) – 7.5Mtpa ore Mining rate (Phase 2) – 7.5Mtpa up to 15Mtpa ore
Project timing	Phase 1: Execute Capex – Q2 2024 to H1 2025 First production – H2 2025
	Phase 2: Execute Capex – Q1 2029 to H2 2030 Final production – Q2 2083
	Ramp-up assumptions
	Month 1 – 68%, month 2 onwards 100%
Operating costs	LOM average costs:
	<ul style="list-style-type: none"> • Direct mining – \$6.15 per bcm of combined ore, overburden and topsoil • Processing – \$2.90 per tonne of ore mined • Other operating costs - \$3.86 per tonne of ore processed • Rehabilitation costs - \$0.07 per tonne of ore mined • Selling costs - \$2.26 per tonne of ore mined
	Escalation
	All modelling has been performed on a real basis based on assumed product pricing and quoted operating costs
	FX Rate
US\$0.70 : A\$1.00	
Discount rate	8% real post tax (11% nominal)

The estimated Ore Reserves underpinning the production targets detailed above have been prepared by a Competent Person in accordance with the requirements in Appendix 5A (JORC).

Criteria used for the classification of Ore Reserves

The Ore Reserve is the part of the Mineral Resource that can be economically mined using the selected mining methods.

Mineral Resources included within RL2002 classified as Measured were categorised as Proved Ore Reserves after adjustment for all mining, metallurgical, social, environmental, statutory and economic aspects of the Donald Project.

Mineral Resources included within RL2002 classified as Indicated were categorised as Probable Ore Reserves after adjustment for all mining, metallurgical, social, environmental, statutory and economic aspects of the Donald Project.

Mining method selected and other mining assumptions

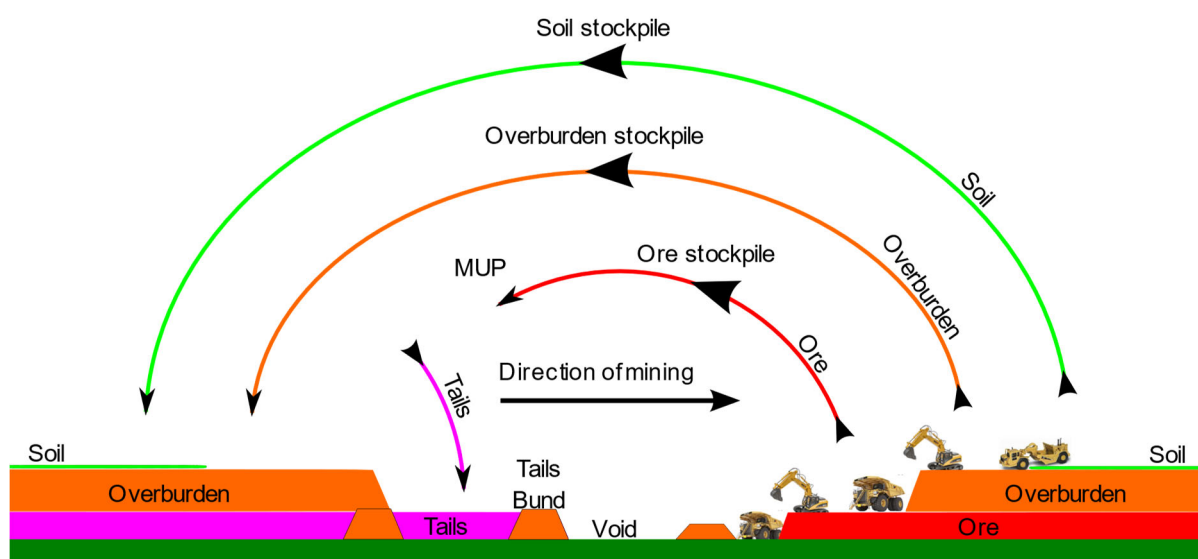


Figure 2 – Schematic cross-section of mining method

As shown in Figure 2, the Donald Project will utilise an open pit dry mining operation where ore and waste will be mined using excavators and trucks. Run of Mine (ROM) ore will be stockpiled at the Mining Unit Plant (MUP) and fed via front end loader into the MUP where it will be scrubbed, screened, slurried and pumped to the Wet Concentrator Plant (WCP). The MUP is designed to be relocated as it moves along the designated mining path.

Rehandle of ore into the MUP and related earthmoving activities (including clearing and grubbing, removal of topsoil, subsoil, overburden and ore, and construction of access ramps and tails embankments) will be undertaken by a mining contractor.

AMC completed block designs (refer Figure 4), including assumptions for in-situ bunds, constructed bunds and backfilled tails cells. This enabled the development of a strategic mine schedule, inclusive of rehandling and destination scheduling, and with consideration of equipment requirements, such as loading units and haulage. AMC also carried out a Lerchs-Grossman pit optimisation to a feasibility study level of accuracy, to identify the area that can be economically mined.



Figure 3 – Donald Test Pit Excavation, 2018

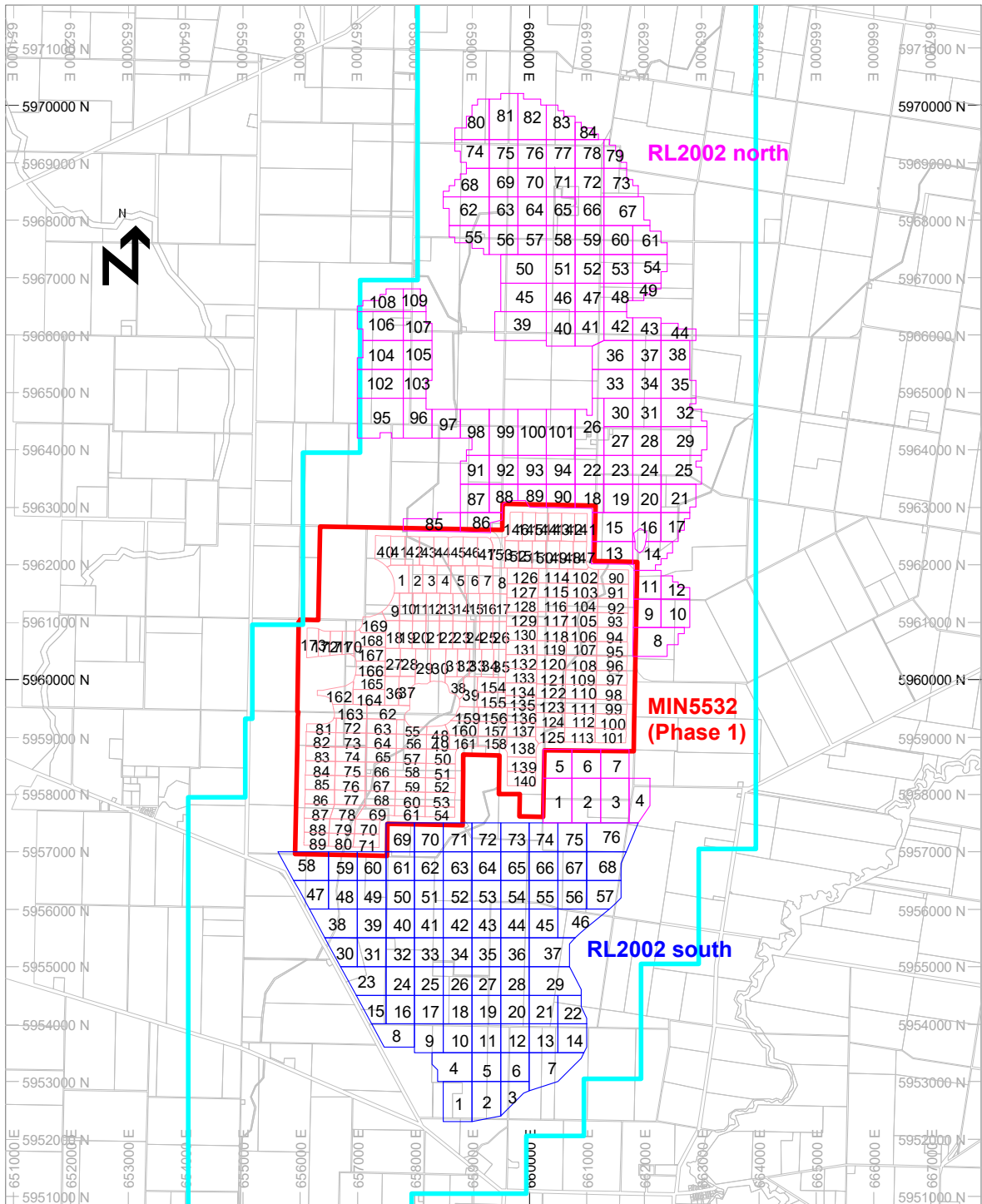


Figure 4 – Mining schedule block sequence (RL2002 north in pink, RL2002 south in blue)

Processing method and other processing assumptions, including recovery factors applied and allowances for deleterious elements

Phase 2 of the Donald Project will utilise modern on-site process beneficiation and mineral separation techniques using proven mineral sands processing technology to produce final zircon and titania products.

Processing infrastructure for the Donald Project is based on a fit-for-purpose design in accordance with Australian standards and includes the MUP, the WCP, the concentrate upgrade plant (CUP) and a mineral separation plant (MSP).

The MSP design utilised for Phase 2 operations includes conventional magnetic and electrostatic separation of HMC into final zircon and titania products.

The final HMC product from the CUP is pumped to the MSP and processed through both Low Intensity Magnetic Separators (LIMS) and Wet High Intensity Magnetic Separators (WHIMS) to produce separate magnetic and non-magnetic concentrates.

The non-magnetic concentrate is then beneficiated using a multistage gravity circuit to produce a Zircon concentrate and titania concentrate. The multi-stage spiral circuit allows greater control over the amount of unwanted minerals reporting to the respective concentrates for final downstream (dry) upgrade, minimising the amount of TiO_2 in the zircon concentrate and, conversely, the amount of ZrO_2 in the titania concentrate. The process flow sheet has been designed to include fully integrated recycling streams.

Non-magnetic concentrates are then pumped through a drying circuit and beneficiated using multi-stage electrostatic and magnetic circuits to produce final zircon products. Similarly, the combined WHIMS magnetic concentrate and titania concentrate are fed through a drying circuit and beneficiated using multi-stage electrostatic and magnetic circuits to produce final titania products.

MSP WHIMS plant pilot scale tests conducted in 2022 confirmed that:

- due to the prior removal of monazite by flotation, the WHIMS magnetic concentrates had a natural radioactivity $<3\text{Bq/g}$ and the WHIMS non-magnetic concentrates had a natural radioactivity $<6.5\text{Bq/g}$;
- chemical specifications were in line with design intent, with WHIMS conditions adjusted to minimize entrainment of ZrO_2 and SiO_2 particles to magnetic concentrates (at the expense of slightly higher TiO_2 minerals reporting to the non-magnetic concentrates);
- recovery of Zr-minerals to non-magnetic concentrates was 97.6% relative to the WHIMS feed; and
- recovery of Ti-Fe minerals to the WHIMS magnetic concentrates was 87.9% relative to the WHIMS feed (based on Fe_2O_3 assay).

The MSP dry plant pilot scale test work confirmed that the final product chemical specification was in line with the design study and overall project KPI:

- the bulk zircon (Premium) assayed $>66.0\%$ Zr(Hf)O_2 , $<0.12\%$ TiO_2 , $<0.10\%$ Fe_2O_3 . Radioactivity of the concentrate is calculated to be $<10\text{Bq/g}$; and
- the Single Ti product assayed $>58.9\%$ TiO_2 , with $<2\%$ SiO_2 . This is a material change from the DFS due to economic factors relating to the costs of recovering a higher TiO_2 content against the premium price being received on this higher TiO_2 content.

The process produced a secondary zircon concentrate assaying $>65\%$ Zr(Hf)O_2 and a zircon rich recycle stream suitable for reprocessing within the plant:

- the direct ZrO_2 recovery to zircon concentrate was calculated to be 87%, with a further 8.0% contained in the secondary concentrate, thereby indicating 95% of Zr-minerals is recovered to products in the dry upgrade circuit;
- the direct TiO_2 recovery to Single Ti concentrate was calculated to be 92% relative to the dry upgrade circuit; and
- processing of the Ti wet concentrate demonstrated that at least 58% of the zircon contained in this stream could be scavenged back to the zircon dry upgrade circuit.

As previously announced, the Project's REEC and mineral sands products are considered to be readily marketable within global markets. Samples derived from the test work were shared with industry participants, for the purposes of off-take assessment, and gained wide acceptance as being suitable for prospective customer downstream processes.

The REEC is expected to be very attractive given the significant proportion of the valuable heavy rare earth elements dysprosium and terbium in its assemblage. Amongst other high value uses, the addition

of dysprosium and/or terbium increases the temperatures at which permanent magnets can operate and has particular application to motors in electric and hybrid vehicles and wind turbines. Revenue generated by REEC sales is expected to represent approximately 50% of the total revenue of the Project.

Final zircon products are targeted for sale to Asian and European downstream processors in both the ceramics and chemicals industries. Internal and independent test work undertaken on zircon contained in HMC produced by the Donald Project shows high whiteness levels, and low levels of impurities, which provide an advantage over its competitors. Testing of the optical properties of the Donald premium zircon involved grinding the zircon to an ultra-fine flour and applying it to a ceramic glaze plate, which was then calcined at high temperatures. Comparisons were made with three other zircon products from industry competitors, which demonstrated that Astron's premium product is noticeably whiter, finer, and contains fewer coloured crystals. Further, the zircon grains from the Donald Project are significantly finer than those from other zircon resources, providing it with an advantage over coarser-grained materials. This results in downstream grinding time and energy consumption being reduced, and the final product surface being smoother. Final zircon products are expected to contribute more than 63% of total mineral sands product revenue.

External test work completed by Mineral Technologies indicated that 86.0% of the TiO₂ from the Donald HMC can be recovered to a titanium feedstock product with a TiO₂ content of 66%. However, impurities in the Donald titania means it may not be suitable as a direct feed to the chloride or pigment production processes. Rather, it could be used as a blended feed for chloride slag production, where its high TiO₂ content would be advantageous.

All non-processing infrastructure and related operating costs are taken into account in the estimation of the Ore Reserve. This infrastructure includes HMC and REEC product handling and distribution facilities, maintenance workshops, accommodation facilities, on-site roads, some external road upgrades, offices and crib rooms, fuel storage and refuelling area and other infrastructure typical of a mineral sands mining and processing operation.

Basis of the cut-off grade(s) or quality parameters applied

Ore is defined as material that meets the mill limited breakeven cut-off criteria. This is where the revenue from mining the ore will be greater than costs related to processing, overhead, marketing and royalties. Costs do not include mining or initial capital costs. Revenue is calculated after mining and processing recoveries. Materials below the cut-off grade and above the ore are mined as overburden or waste.

Mineral Resources & Estimation Methodology

AMC was commissioned in 2016 to carry out the RL2002 Mineral Resource estimate. The Mineral Resource for RL2002 was estimated using Ordinary Kriging. 100mE x 200mN x 1mRL size parent blocks with sub-blocks down to a minimum size of 20m x 40m x 0.25m were assessed at a cut-off grade of 1% HM. Sub-blocks were used to increase the precision at a boundary like topography and grade estimation boundaries.

The estimate is based on 377 drillholes with Heavy Mineral (HM) analysis. The general drillhole spacing varies from 125mE x 450mN to 250mE x 500mN. AMC prepared a resource block model and Mineral Resource Estimates of HM, slimes and oversize. All drillholes were sampled for HM at one-metre intervals.

Valuable heavy minerals (VHM) Mineralogy analysis was completed on 246 of the 377 drill holes. Approximate spacing of these drillholes were 200mE x 450mN. All drillholes that underwent VHM analysis were Reverse Circulation Air Core (RCAC) with a nominal rod diameter of 76mm. From these a VHM mineral resource was calculated at a 1% HM cut-off grade. Only the VHM Mineral Resource was used in the conversion to Ore Reserve for RL2002.

For reported mineral resources within RL2002 outside of MIN5532, heavy minerals are defined as those heavier than 2.96 specific gravity and with a grainsize in-size range between 38µm and 90µm.

Table 6 – Mineral Resource at a 1% HM cut-off within RL2002 (outside of MIN5532)

Classification	Tonnes (Mt)	HM (%)	Slimes (%)	Oversize (%)
Measured	343	3.9	19.8	8.1
Indicated	833	3.3	16.2	13.5
Inferred	1,595	3.4	15.7	6.0
Total	2,771	3.4	16.4	8.5

Table 7 – Mineral Resource where VHM data is available at a cut-off of 1% HM within RL2002 (outside of MIN5532)

Classification	Tonnes (Mt)	HM (%)	Slimes (%)	Oversize (%)	Zircon (% HM)	Rut+Anat (% HM)	Ilmenite (% HM)	Leucoxene (% HM)	Monazite (% HM)
Measured	185	5.5	19.1	7.3	20.8	9.4	30.9	18.7	1.8
Indicated	454	4.2	15.9	13.2	17.3	7.4	32.7	19.4	1.6
Inferred	647	4.9	15.2	5.8	18.4	8.5	33.2	17.1	1.8
Total	1,286	4.8	16.0	8.6	18.4	8.3	32.7	18.2	1.8

Notes to Table 6 and Table 7:

- Rutile grades are a combination of the rutile and anatase minerals (rut+anat).
- The rut+anat, monazite and leucoxene resource has been estimated using fewer samples than for zircon and ilmenite. The accuracy and confidence in the rut+anatase, monazite and leucoxene estimates are therefore lower.
- Rut+anat is to be blended into high titanium (HiTi) products.

Ore Reserve Estimation Methodology, including mining recovery factors and mining dilution factors

The methodology in determining the updated Ore Reserve was as follows:

- The deposit has been assessed through pit optimisation, detailed mine design, mine scheduling and economic modelling.
- Individual discrete mining blocks have been digitised around ore and overburden. Pillars of in situ material have been left between adjacent mining strips to prevent tails from entering the working areas. Mining dilution and ore loss are inherent in the process and no additional dilution or ore loss has been applied when converting the mineral resource model for mine planning.
- The extent and depth of the area to be mined were decided by pit optimisation using the Lerchs-Grossman (LG) algorithm. Nested pit shells generated and tested with sensitivities on mining cost, processing cost, metal price, and recoveries formed the basis of the optimal pit shell to maximize value and achieve operational design requirements.
- LG pit optimisations assessed Measured and Indicated classified material only. No Inferred material was included in the LG assessment.
- Vertical walls were used for the geotechnical slopes for the purpose of the LG optimisation. From experience, in WIM style deposits (typically wide and shallow) there is negligible difference in the resultant optimised shape and financial analysis between a mine designed with slopes and with vertical walls due to the shallow depth of the deposit. Any designs intended for construction, are required to be designed with safe slopes.
- Required capital expenditure mostly relates to mining vehicles, with a portion related to infrastructure such as fuel storage and a workshop.
- The pit will be mined in 500m NS long and 500m EW wide blocks in a strip sequence.
- The mining method will be by truck and excavator.
- Ore will be fed into a MUP where it is screened and slurried and pumped to the WCP on site.

Sand tails, from the wet concentrator, will be returned to the mine void and placed in constructed cells to be covered by previously stockpiled overburden prior to rehabilitation.

Material modifying factors, including the status of environmental approvals, tenements and approvals, other governmental factors and infrastructure requirements for selected mining methods and for transportation to market

Phase 2 development will expand mining operations within the immediate environment in which Phase 1 activities will occur. Planning, environment and heritage decisions and approvals will be sought prior to commencement of Phase 2 activities, with the benefit of having previously secured approval to mine Phase 1 under the same regulatory process. The strong relationships developed and maintained with key stakeholders are expected to facilitate successful, timely approvals and endorsement from the community. The key approvals required for commencement of Phase 2 operations include an Environmental Effects Statement (EES), Environment Protection Biodiversity and Conservation (EPBC) licence, Mining Licence, Cultural Heritage Management Plan (CHMP) and Work Plan.

Community engagement initiatives already in place for the development and construction of Phase 1 operations will continue to be provided throughout the life of mine (which includes the development and construction of Phase 2 of the Project) as well as the continued employment of a Community Liaison Officer and the implementation of a Community Engagement Plan that will develop initiatives that target and enhance social values identified by the community. It is expected that the Memorandum of Understanding with Yarriambiack Shire Council will be extended, with other cooperative arrangements being entered into with other relevant further local government entities and extended through Phase 1 and Phase 2 operations.

Currently, the Company does not own or occupy the land required for commencement of mining operations for Phase 2. The Company will need to acquire properties or negotiate appropriate access arrangements with the current landholders in order to commence development and operations of Phase 2. Due to the significant area of operations and the long mine life, the Company is currently designing a strategy relating to land access and ownership and the timetable over which it will be implemented.

The Project is close to major infrastructure including roads, rail, electricity and water supplies. The existing infrastructure is well developed with some additional upgrade work required over and above those upgrades planned for establishment of Phase 1 operations.

Phase 2 electricity supply is expected to be supplied by Powercor utilising the incoming 66kV overhead powerline to be constructed during Phase 1 and connecting to a HV substation to be built at the site of Phase 2 operations before being stepped down for site operations.

Water supply upgrades will be required for Phase 2 operations in order to upgrade infrastructure necessary to supply water to the mine including a new pump station and a proposed new 70km pipeline from Taylors Lake. The current design of the pump station and new pipeline have been established to ensure there is no interference with the water requirements of other users in the region.

Based on the current design for Phase 2 operations, there will be no requirement for further upgrades to public and private roads, accommodation or communications above those planned for Phase 1 operations.

The Project's location and co-location to existing transport infrastructure provide a number of logistics options for the transportation of saleable products. It is expected that final zircon and titania products will be loaded into specific half-height 20-foot shipping containers before being trucked and stored at the Dooen rail facility prior to rail transport to the Port of Melbourne or Geelong for shipment to global customers. The Project's REEC will be loaded into drums and transported via truck to either the Port of Melbourne or Port Adelaide.

Financial Analysis

The PFS financial analysis for Phase 2 operations illustrates attractive economic returns and free cash flow generation over a 58 year plus mine life including a combined Phase 1 and Phase 2 Project post-tax real NPV₈ of \$2.2 billion with a post-tax IRR of 30.3% and average annual real free cash flow of \$230.2 million.

The main financial and operational metrics of the Donald Rare Earth and Mineral Sands Project are outlined in Table 8 below:

Table 8 – Summary Financial Characteristics – Donald Project Phase 1

Metric	Unit	Phase 1	Phase 1+2
Post-tax NPV ₈ (FID)	[A\$m]	852	2,235
Post-tax IRR	[%]	25.8%	30.3%
Pre-tax NPV ₈ (FID)	[A\$m]	1,294	3,343
Pre-tax NPV ₈	[%]	33.9%	38.6%
Payback period from commencement of operations	[years]	3.75	4.0
Execution capital cost (incremental) ⁴	[A\$m]	364	566
Cumulative free cash flow	[A\$m]	4,279	13,350
Life of Mine	[years]	41.5	58
Ore processing throughput	[Mtpa]	7.5	15.0
Average ore grade	[%]	4.4	4.5
Average strip ratio	[Ratio]	1.6	2.2
REEC average production	[ktpa]	7.2	13.0
HMC average production	[ktpa]	228.7	N/A
Premium zircon	[ktpa]	N/A	84.6
Standard zircon	[ktpa]	N/A	8.9
Titania	[ktpa]	N/A	260.2
Average revenue per annum	[A\$m]	314.4	678.3
Average EBITDA per annum	[A\$m]	147.8	363.4
Average post-tax free cash flow	[A\$m]	103.1	230.2

The financial analysis is based on the following key assumptions:

- all product pricing assumptions stated on a real 2023 basis;
- REEC pricing based on CIF USA provided by Adamas Intelligence in February 2023. Long-term pricing from 2035 onwards are maintained at the same real price as 2034;
- HMC pricing based on CIF China provided by TZMI in Q1 2023. Long term pricing from 2030 onwards is based on TZMI long term inducement pricing on a real 2022 basis;
- Zircon and titania final product pricing is based on FOB pricing provided by TZMI in Q1 2023. Long term pricing from 2030 onwards is based on TZMI long term inducement pricing on a real 2022 basis;
- The updated RL2002 Ore Reserve does not include an announced figure on xenotime due to historical samples used in the Ore Reserve calculation not being analysed for xenotime. Metallurgical test work confirms the rare earth element composition to be relatively consistent across the mineral deposit. As such, the economic model used to evaluate Phase 2 financial characteristics includes assumptions used in the MIN5532 Ore Reserve estimate to account for the xenotime content of REEC.
- FID from Q4 2028;
- AUD/USD exchange rate of 0.70;
- Phase 2 first production and first product sales in Q4 2030.

The discounted cash flow evaluation of the project reflects the work completed in the DFS (as announced on 26 April 2023) and associated work completed for this PFS, and includes mining and

⁴ Execution Capital Cost for Phase 1+2 includes \$364.7m for Phase 1, \$431.5m for Phase 2a (the duplication of forecasted Phase 1 throughput) and \$134.4 for Phase 2b (the construction of an MSP).

processing data based on the tactical mining schedule, capital and operating costs (as outlined in Table 9 and

Table 10 below), product recoveries based on metallurgical test work on both laboratory and pilot plant scale and environmental and rehabilitation costs arising from compliance with regulatory guidelines.

Capital Expenditure

Phase 2 includes a duplication of Phase 1 operations (including a separate MUP, WCP and CUP), the construction of an MSP and associated on-site non-process infrastructure, and off-site infrastructure including electricity and water supply upgrades. Total Phase 2 execution capital, on a real 2023 basis, is estimated to an AACE Class 3 level of accuracy with a contingency of 23.3%. Note that, as a class 2 estimate, Phase 1 capital expenditure has a 12% contingency. Capital expenditures for both phases are outlined in Table 9 below:

Table 9 – Capital estimate – Donald Project Phase 2a and 2b

Project Area	Phase 1	Phase 2a	Phase 2b	Combined Phase 2
Mining Unit Plant	20.5	20.5	-	20.5
Wet Concentrator Plant	70.0	70.0	-	70.0
Concentrate Upgrade Plant	38.1	38.1	-	38.1
Mineral Separation Plant	N/A	-	65.3	65.3
On-site non-process infrastructure (on-site road, electricity and water upgrades)	33.6	31.7	4.8	36.5
Overhead 66kv powerline supply	27.6	5.3	-	5.3
Water supply upgrade	11.9	33.5	-	33.5
Off-site road upgrades	13.9	-	-	-
Other off-site infrastructure	10.0	1.6	-	1.6
Project engineering and technical services	47.9	75.9	15.6	91.5
Construction In-directs	26.9	27.5	16.3	43.8
Other	25.0	47.5	1.4	48.9
Contingency	39.2	79.8	31.0	110.8
Total	364.7	431.4	134.4	565.8

The capital estimate is based on the contributions of external, independent consultants and assumes 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 infrastructure has 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 recent and future projects using similar proven designs in Australia and Internationally. No forward escalation or environmental bond costs has been included in the capital estimate.

Phase 2 involves replicating MIN5532 mining operations on RL2002, with similar capex for the MUP, WCP, CUP, non-process infrastructure and indirect construction costs. Phase 2 also utilises Phase 1 infrastructure, increasing asset efficiency. For example, the overhead 66Kv powerline upgrade is estimated to cost \$5.3 million for Phase 2 electricity requirements compared to \$27.6 million in Phase 1. There are no further external road upgrades required and minimal offsite infrastructure investment is required.

Key components of Phase 2 capital expenditure include:

- Duplication of Phase 1 operations comprising a second MUP, WCP and CUP situated on RL2002 at an estimated cost of \$128.6 million (based on the estimated cost of Phase 1 construction as per the DFS);
- The construction of a new 70km water pipeline and pumping station from Taylors Lake to RL2002 with a cost estimate of \$33.5 million (based on cost estimates provided by independent consultants during the DFS process);
- Non-process infrastructure including the construction of a high voltage substation to reticulate electricity to the Phase 2 mine site (based on cost estimates provided during the DFS process) and slurry pumping system to transport HMC from RL2002 to the MSP situated on MIN5532;
- The construction of an MSP at an estimated cost of \$65.3 million to enable downstream processing of HMC into zircon and titania products. This cost estimate has been provided by independent consultants based on a pre-feasibility study design to an AACE Class 3 standard;
- The acquisition of the 2,500Ha of required land throughout the mine plan; and
- An allowance of \$91.5 million in capital expenditure to account for:
 - Development of a Definitive Feasibility Study for Phase 2 operations;
 - Further geological drilling to define the ore body;
 - Acquiring the necessary regulatory approvals (including an EES and Work Plan);
 - Complete design and engineering of Phase 2 operations; and
 - Project management and Owner's team costs.

The contingency for the Project has been estimated on a line-by-line basis for each area and reflects the Project's view 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 \$110.8 million represents 23.3% of the total capital estimate.

Phase 2a (expansion of mining operations on RL2002) and Phase 2b (construction of MSP for downstream processing) generate two independent cashflows. As such, following completion of rigorous due diligence and technical studies, the Company has the option to proceed with either Phase 2a or 2b individually or in parallel. As a consequence, an investment of \$431.5 million in Phase 2a or \$134.4 million in Phase 2b will generate their own independent economic returns which will be assessed in the lead up to FID.

Operating Expenditure

The annual operating expenditure estimate completed for the Phase 2 operations has been derived from a first principles build-up of operating costs and benchmarked against other similar projects in Australia. Offsite operating expenditure (such as transport) has been derived from other specialist consultants and service providers.

Variable costs for Phase 2a operations in relation to operations of the MUP, WCP and CUP have largely been sourced from the work undertaken during completion of the MIN5532 DFS as announced on 26 April 2023.

The key assumptions used in the evaluation of Phase 2 operating expenditure are:

- run of mine throughput of 7.5 million tonnes of ore per annum;
- average final REEC production of approximately 13.0kt per annum;
- average final zircon and titania production of approximately 93.5kt (comprising 84.6kt of premium grade zircon) and 260.2kt per annum respectively;
- based on a first principle cost build-up – no formal tenders have been issued for any operating expenditure included in the financial model;
- shown in 2023 real terms;
- consideration of the tactical mine schedule and therefore consideration of variations in grade, ore content, overburden, strip ratios and final REEC and HMC products; and
- inclusion of transport costs from Australian port to USA & China in accordance with CIF pricing.

The average operating expenditure and proportion of overall expenditure are shown in Table 10 below:

Table 10 – Average annual operating expenditure – Donald Project Phase 1 and Phase 2 (A\$m)

Operating area	Average Expenditure Phase 1	Average Expenditure Phase 1+2
Mining costs	65.9	145.5
Processing costs – HMC Production	23.9	45.8
Processing costs – MSP	-	7.9
Transport – mine site to port	13.3	28.0
Transport – port to customer	28.7	14.6
Royalties	7.5	17.7
Labour	17.9	38.4
Non-process operating and maintenance costs	6.1	11.1
Accommodation camp costs	2.0	3.7
Other operating expenses	1.3	2.1
Total	166.6	314.9

Mining costs are estimated on a contractor mining basis by AMC using a cost estimate model developed over the past 15 years. Variable costs are estimated by calculating individual equipment hours of designated mobile mining fleet according to mine physicals (strategic mine schedule) and time-usage assumptions (productivity and available engine hours). Projected assumptions are used to estimate inputs for unit operating costs for each item of equipment (generally per engine hour), to develop an overall cost estimate. 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 also benchmarked against AMC database and are within reasonable limits.

Processing costs for HMC production have been estimated by Mineral Technologies (MT) based on process flow sheets and DFS level engineering design to a confidence level of AACE Class 2. Pricing for material processing inputs such as reagents, electricity, diesel and water have been estimated using the latest available pricing. These estimates have been reviewed by MT and benchmarked against similar projects.

Processing costs for final zircon and titania production costs in the MSP have been estimated by Mineral Technologies (MT) based on the PFS level engineering design to a confidence level of AACE Class 3. Pricing for material processing inputs such as reagents, electricity, diesel and water have been estimated using the latest available pricing. These estimates have been reviewed by MT and benchmarked against similar projects.

Transport costs have been estimated for both pit-to-port and port-to-customer and are dependent on the basis of sale for final zircon and titania products (FOB) and REEC products (CIF USA). Road and rail transport of final zircon and titania products and REEC from pit-to-port are based on current freight pricing. Sea freight for transport of REEC from Port of Melbourne or Port of Adelaide is based on current container shipping rates for Class 7 materials.

An operational organisational structure has been developed to determine project staffing positions and working rosters. Labour costs included in the financial model include the salary, wages and associated on-costs of the organisational structure and the labour plan for efficient operations.

There is no contingency or forward escalation included within the operating expense estimates. Expense estimates are based on commencement of the project in Q3 2030 and operations at nameplate capacity in Q4 2030.

Sensitivity analysis of project parameters demonstrates that the combined Phase 1 and Phase 2 project is robust and able to withstand market fluctuations. Sensitivity test results are summarised in the following tornado chart which illustrates the impact of changes to project parameters on project NPV:

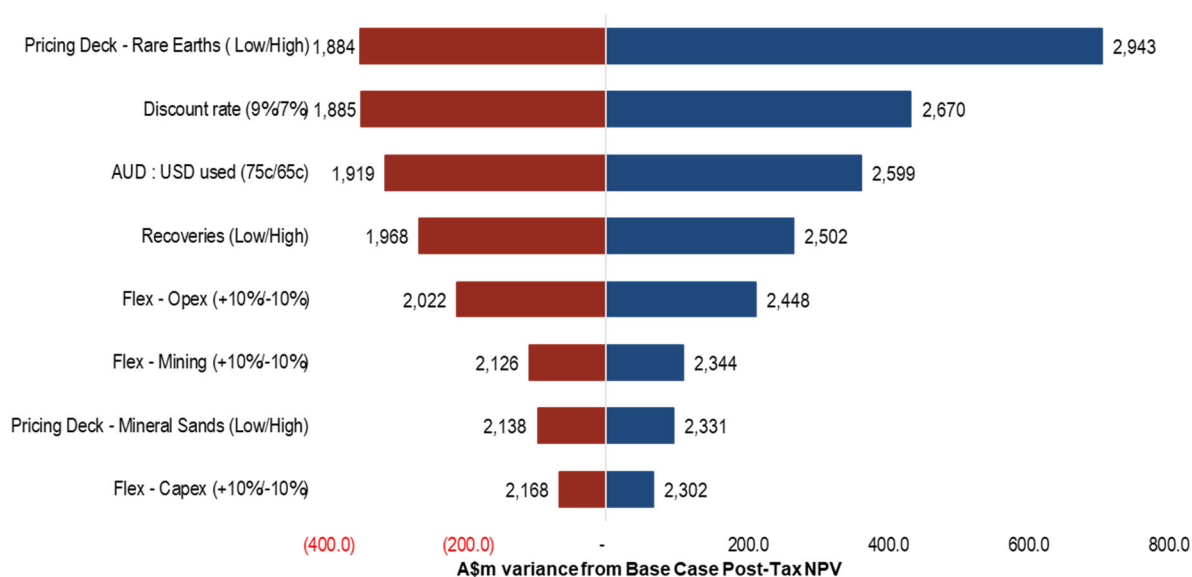


Figure 5 – Sensitivity analysis of key assumptions

Notably, the base case assumption for rare earth pricing assumes the exclusion of Chinese VAT (13%), resulting in an effective payability of ~33% of the company’s rare earth basket. The company made this assumption to be conservative. The REEC pricing for the high case has been adjusted to include the Chinese VAT margin as revenue, which is more aligned to the company’s objectives to sell REEC to western rare earth processors. It is also a better reflection of current market expectations around payability, expected to be in the range between 35% and 40%.

Competent persons statement

The information in this document that relates to the estimation of the RL2002 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 Astron Corporation Limited, 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 report that relates to the MIN5532 Mineral Resource estimate is based on, and fairly reflects, 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 Limited, 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 Ore Reserves for MIN5532 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 Corporation Limited. 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 materially modified from the relevant original market announcement.

The information in this report that relates to the RL2002 Ore Reserve estimate is based on, and fairly reflects, information and supporting documentation compiled by Mr Pier Federici FAusIMM(CP), a Competent Person who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Federici is a full-time employee of AMC Consultants Pty Ltd (AMC) and is independent of Astron Corporation Limited, the owner of the Ore Reserve. 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'. Mr Federici consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Cautionary Statements

Certain sections of this document contain forward looking statements that are subject to risk factors associated with, among others, the economic and business circumstances occurring from time to time in the countries and sectors in which the Astron group operates. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a wide range of variables which could cause results to differ materially from those currently projected.

The information contained in this document 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 document, 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 an investment decision.

This document 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 document (amongst other things).

This document is not, and does not constitute, an offer to sell or the solicitation, invitation or recommendation to purchase any securities and neither this document nor anything contained in it forms the basis of any contract or commitment.

Certain financial data included in this document 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 document. All financial amounts contained in this document are expressed in Australian dollars and may be rounded unless otherwise stated. Any discrepancies between totals and sums of components in tables contained in this document may be due to rounding.

Appendix A – Donald Rare Earths and Mineral Sands Project – RL2002 Ore Reserve

Based on the supporting mine planning completed, pit inventories to support and Ore Reserve estimate, in accordance with the JORC 2012 are shown in Table A. 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.

Table A – Donald Rare Earths and Mineral Sands Ore Reserve for RL2002 at May 2023

Classification	Tonnes (Mt)	Slimes (%)	Oversize (%)	HM (%)	Ilmenite (%HM)	Leucoxene (%HM)	Rutile (%HM)	Zircon (%HM)	Monazite (%HM)
Within RL2002 outside of MIN5532									
Proved	152	7.1	18.8	5.6	31.3	18.2	9.4	21.1	1.8
Probable	364	13.7	15.7	4.1	32.8	19.3	7.5	17.1	1.6
Total	516	11.7	16.6	4.6	32.3	18.9	8.2	18.6	1.7

Notes to Table A:

- *The ore tonnes have been rounded to the nearest 1 Mt and grades have been rounded to one decimal place.*
- *The Ore Reserve is based on Indicated and Measured Mineral Resource contained within mine designs above an economic cut-off.*
- *The economic cut-off is defined as the value of the products less the cost of processing.*
- *Mining recovery and dilution have been applied to the figures above.*
- *The mining licence (ML5532) is wholly within the retention licence (RL2002) and is excluded from the Ore Reserve estimate.*
- *HM is defined as minerals heavier than 2.96 S.G. and within a grainsize range of 38µm to 90µm.*

The JORC 2012 Table 1, Section 4 to support the Ore Reserve estimate is included in Appendix B. The Ore Reserve estimates have been compiled in accordance with the guidelines defined in the 2012 JORC Code.

Appendix B: JORC Code, 2012 Edition – Table 1

The table below summaries the assessment and reporting criteria used for the Donald Deposit Mineral Resource estimate and reflects the guidelines in Table 1 of The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012).

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralization that are Material to the Public Report.</i> <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> Air core drilling was used to obtain samples taken at 1m intervals. Samples collected were approximately 7 kg in weight which were riffle split to 2 kg for analysis for sample prior to 2013. After 2013 samples were rotary split. After the removal of slimes and oversize the HM content was determined using heavy liquid separation. For drilling from 2022 on rig sample rotary splitting was performed yielding samples averaging 1.62kg. The content of HM was assayed using grain counts with checks on the zircon, titanium and monazite content using XRF methods.

Criteria	JORC Code explanation	Commentary
Drilling techniques	<ul style="list-style-type: none"> • <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> • All holes drilled by DMS were aircore with a nominal diameter of 76 mm (NQ).
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i> 	<ul style="list-style-type: none"> • For holes drilled by DMS: <ul style="list-style-type: none"> – Sample recovery was visually checked. – Air core drilling was used to maximise recovery. • Zirtanium reported their drilling during 2004 had a consistent sample weight recovery of approximately 7.1 kg +/- 0.8 kg. • For DMS drilling from 2022 onward on rig rotary splitting of samples was performed with an average sample weight of 1.62kg. • Recovery and grade were checked with twin sonic drilling holes. • No relationship between recovery and grade was found.
Logging	<ul style="list-style-type: none"> • <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • The air core samples were geologically logged to a high level of detail at 1m intervals. • Geotechnical logging consisted of recording induration and hardness of the sample. • All samples were logged.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> • Riffle splits of dry samples were used for sub-sampling prior to 2013. Samples after 2013 were rotary split. • The sample preparation was appropriate. • Field and laboratory duplicates for HM, slimes and oversize were used as quality control. • Sonic drill twin holes were drilled for QAQC comparison to Air Core holes of recovery, HM, slimes and oversize. • Sample sizes were appropriate for the grain size of the material being tested. • For MIN5532, heavy minerals (HM) are defined as minerals heavier than 2.96 specific gravity (S.G.) and of a HM grainsize between 20µm and 250 µm. For the remainder of the Donald Deposit, that is within RL2002 outside of MIN5532, the HM in-size range is 38µm to 90µm.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<ul style="list-style-type: none"> • After the removal of slimes and oversize the content of HM was determined using heavy liquid separation. The HM content was assayed using grain counts with checks on the zircon, monazite and titanium content using XRF. • From 2022, Stationary XRF, Laser ablation-ICPMS and QEMScan instruments were used by industry independent laboratory Bureau Veritas Minerals Pty Ltd to determine valuable heavy minerals. • Quality control consisted of field duplicate samples prepared by DMS and the laboratory. • No blanks were submitted. • A second laboratory was not used. • Company standards of a defined HM, slimes and oversize grade were inserted in the field by DMS (1 in 40 samples) in drilling from 2016 onward (for MIN5532). Laboratory standards were also inserted by Bureau Veritas (1 in 28 samples) in the 2022 assay test work (for MIN5532)

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <i>The use of twinned holes.</i> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> Twin holes, both Air Core and Sonic drilling, were used to check the results of earlier drilling which showed consistency between the different drilling programs. The data was stored in an Access database and checked against the original sample reports. A series of adjustments to the sample data was made. This included: <ul style="list-style-type: none"> For zircon % derived from grain counting the Zircon_Min_pct value was used. For zircon % derived from XRF results the ZrO2_HfO2_pct value. For zircon % derived from XRF results use “ZrO2_HfO2_conv” value. Limited assay values for rutile + anatase % are available. The percentage of rutile is generally contained in the database. For resource estimation the following sample adjustments were made: <ul style="list-style-type: none"> Where rutile + anatase % only data was not available, rutile + anatase was calculated from the rutile % data using the following formula which was derived from a correlation plot where both sets of data are available. The ilmenite % values obtained from the DMS drilling contained magnetite. Based on a comparison with the CRA drilling the DMS ilmenite grades were decreased by 1.6 % to remove the magnetite from the assay.
Location of data points	<ul style="list-style-type: none"> <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> <i>Specification of the grid system used.</i> <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> The collar positions were located using survey equipment for the early drilling and differential GPS for the later drilling. Drilling for the MIN5532 resource was surveyed by Fergusson Perry Surveyors using a Leica Captivate GS18 unit and CS20 controller. The grid used was MGA94 Zone 54 co-ordinate system. The topographic surface was obtained from LIDAR data.
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> The drillhole spacing used in the Mineral Resource classification was: <ul style="list-style-type: none"> 250 mE by 350 mN for the MIN5532 reserve area <p>And for the remainder of RL2002 outside MIN5532:</p> <ul style="list-style-type: none"> Generally 150 mE x 500 mN grid as Measured Mineral Resource. Generally 250 mE by 500 mN as Indicated Mineral Resource. Wider grid spacing is classified as Inferred Mineral Resource. The HM, slimes and oversize samples were sampled at 1m intervals with no compositing. The VHM samples were taken at varied lengths which were composited to 1m for resource estimation.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> The mineralization is generally flat lying enabling vertical drilling to be appropriate. No bias was introduced by the drilling orientation.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were stored in sealed bags on private land. Sample were securely packed and sent to laboratory by courier.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Only internal reviews were carried out.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> This report covers the area of MIN5532 and RL2002 owned by Donald Mineral Sands. AMC has been informed that no third parties or other interests impact on the exploration licence. AMC is not aware of any known impediments to the tenure being in existence. Land use is broad acre cropping
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Drilling by CRA Exploration Pty Ltd in 1980's. Drilling by Zirtanium Ltd in 2004.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> WIM-style mineralisation, fine grained heavy mineral deposit within the Parilla Sand. The deposit can be described as a Tertiary succession of freshwater, marine, coastal and continental sediments deposited heavy minerals in the area. The deposit consist of a solitary or composite broad, lobate sheet-like body of considerable aerial extent, highly sorted and associated with fine micaceous sand. These deposits are thought to represent accumulations formed below the active wave base in a near shore environment, possibly representing the submarine equivalent of the strand style deposits.

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. • If the exclusion of this information is justified on the basis that the information is not • Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<ul style="list-style-type: none"> • Easting ranged from 653,400 m to 664,000 m. • Northing ranged from 5,943,300 m to 5,989,900 m. • RL ranged from 75 m to 137 m. • All holes were drilled vertically. • The holes ranged from 1 m to 30 m in length with an average of 22 m. • HM was first intersected at between 1 m and 40 m depth.
Data aggregation methods	<ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • All sampling for HM is done in metre intervals. • Normal weighted average techniques are used for compositing mineralogy samples. • VHM assays are on composited samples of varying intervals. • Metal equivalent figures are not used.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> • The mineralization is generally horizontal and the drilling was vertical. The drillholes intersected the mineralization generally at a 90 degree angle enabling true widths to be estimated and used in Mineral Resource Estimation.

Criteria	JORC Code explanation	Commentary
Diagrams	<ul style="list-style-type: none"> • <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i> 	<ul style="list-style-type: none"> • Refer to Figures 1, 2 and 3.
Balanced reporting	<ul style="list-style-type: none"> • <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i> 	<ul style="list-style-type: none"> • Not applicable as Exploration Results are not reported.
Other substantive exploration data	<ul style="list-style-type: none"> • <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> • In 2010 bulk sample within MIN5532 were taken using various composited drill holes around hole D10_044. • Test work was completed in 2010 to compare results from test pit bulk sample taken in 2005. • The entire Parilla sand horizon was sampled resulting in a composited low grade sample of 2%HM head grade. • In 2005 a test pit within former EL4433/current EL2002, material was processed at Mildura pilot plant and formed the basis of current process flow sheet design. • In 2000 a Caldwell hole within MIN5532 was drilled. Test work was carried out in 2001 and 2004 to develop process flow sheet design.
Further work	<ul style="list-style-type: none"> • <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> • <i>Diagrams clearly highlighting the areas of possible extensions, including the main</i> • <i>geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> • Grade control drilling is planned prior any potential mining.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<ul style="list-style-type: none"> The FROM and TO values were checked to ensure no overlaps or missing data. The collar coordinates were checked and converted to the MGA94 zone 54 co-ordinate system. All collar coordinates were checked to ensure they were located within the MIN5532 and RL2002. The assay results were reviewed for spurious values in excess of logical results.
Site visits	<ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<ul style="list-style-type: none"> The Competent Person visited the site on several occasions viewing drilling, sampling methods, bulk sample site and area of the deposit and held discussions with site technical personnel.
Geological interpretation	<ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<ul style="list-style-type: none"> The drillhole data confirms the geological interpretation. The HM is contained within the Parilla Sand unit which exists over the entire MIN5532 and RL2002. No alternative interpretations can be made. Geology was used to locate the top and bottom of the Parilla Sand and the mineralized zone. Mineralization continues across the MIN5532 and RL2002 with higher grade zones modelled separately.
Dimensions	<ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<ul style="list-style-type: none"> The whole MIN5532 and RL2002 contain mineralization. The mineralization ranges in depth from 1 m to 41 m.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	<ul style="list-style-type: none"> <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i> <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> <i>The assumptions made regarding recovery of by-products.</i> <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> <i>Any assumptions behind modelling of selective mining units.</i> <i>Any assumptions about correlation between variables.</i> <i>Description of how the geological interpretation was used to control the resource estimates.</i> <i>Discussion of basis for using or not using grade cutting or capping.</i> <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> The estimation method was Ordinary Kriging with an octant and ellipsoidal search. The mineralised zone was domained into three zones – low grade medium (>3<5 % HM) and high grade (above 5 % HM). A low grade HM domain (< 1 % HM) was modelled along the eastern side of MIN5532 and RL2002. Datamine software was used for the resource estimate. Geological and grade based domaining was used for modelling HM, slimes and oversize within MIN5532. Outside of MIN5532 no domaining was used for slimes and oversize. The VHM minerals were domained within the area of assaying for VHM. A previous estimate is available and gives similar results. No assumptions were made regarding the recovery of bi- products. No deleterious elements were considered in the estimate. Blocks sizes of 100 mE x 200 mN x 1 mRI were used. This is approximately half the drillhole spacing, in the better drilled areas. No assumptions were made regarding selective mining units. The correlation between variables was reviewed but not included in the resource estimate. Top caps were used for zircon and rutile + anatase based on the results of log probability plots. The model was visually checked against the drillholes and SWATH plots were used to check the average grade and trends in grades between the model and drillhole a data.
Moisture	<ul style="list-style-type: none"> <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i> 	<ul style="list-style-type: none"> The assay results were based on dry samples therefore the moisture content was not considered.
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> A 1% HM grade was used for reporting the Mineral Resources. Mining optimisation studies have shown the economic cut-off is approximately 2 % HM, based on dry mining methods. Wet mining methods that take all the minerals may lower the economic cut-off grade to approximately 1 % HM

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<ul style="list-style-type: none"> It is assumed the dry mining methods will be employed with the option of using wet mining methods.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<ul style="list-style-type: none"> Tests show all minerals reported can be processed. Metallurgical testing has shown the deposit can be processed. Within MIN5532 the heavy mineral sample in-size range is between 20 and 250µm. The samples above a 38 µm size were used for assaying and resource estimation outside of MIN5532. Additional material may be obtained between 38 µm and 20 µm that could add to the value of the project.
Environmental factors or assumptions	<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<ul style="list-style-type: none"> For DMS mining license MIN5532 conditional approval has been obtained from the Victorian Government for mining of the deposit and placement of all waste material back into the mined. The current understanding is that there are no social or environmental issues which will impact on processing or mining of the deposit.

Criteria	JORC Code explanation	Commentary
Bulk density	<ul style="list-style-type: none"> • <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i> • <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i> • <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<ul style="list-style-type: none"> • The prefeasibility report (Zirtanium, 2005) stated the bulk density measurements were obtained from the nearby WIM 150 deposit and applied to the MIN5532 deposit. Initial determinations were derived from weighing a known volume of competent drill core, providing a range from 1.8 t/m³ to 2.2 t/m³, with a mean of 2.0 t/m³. Bulk sampling costeans were subsequently excavated, permitting sand replacement densities to be collected. An average dry bulk density of 1.65 t/m³ was determined, with all results lying within a narrow range. • A plot of bulk density versus % HM showed a very good correlation therefore the block bulk density was estimated as Bulk density = 1.65 +(0.01*HM). • More recent bulk density test work was performed on undisturbed Sonic core samples from 2022 drilling for the MIN5532 resource estimation of 2022. This bulk density data was used in estimating the MIN5532 resource/reserves only.
Classification	<ul style="list-style-type: none"> • <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> • <i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> • The Mineral Resource classification was mainly based on the drillhole spacing. The mineralization and geology is consistent and continuous and the deposit reasonable well understood. Generally 100 mE x 500 mN grid is a Measured Mineral Resource, 250 mE by 500 mN is an Indicated Mineral Resource and wider grid spacing is classified as an Inferred Mineral Resource. • The drillhole data is considered to be suitable for the resource classifications used. • The classification reflects the Competent Persons view of the deposit.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • Previous Mineral Resource estimates using the same methodology have been audited by a third party independent consultancy.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	<ul style="list-style-type: none"> No statistical or geostatistical review of the accuracy of the resource estimate was undertaken. The resource statement is a global estimate based on addition of local estimates. There has been no production to date.

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul style="list-style-type: none"> Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves. 	<ul style="list-style-type: none"> The Mineral Resource estimate for the Donald Mineral Sands deposit, which formed the basis of this Ore Reserve Estimate, was compiled by AMC Consultants Pty Ltd geologists utilising relevant data. The estimate includes mining licence area ML5532 and retention licence area RL2002 and is based on 377 drillholes of exploration drilling and assay data. The data set, geological interpretation and model was validated using AMC's internal and Quality Assurance and Quality Control (QAQC) processes. The Mineral Resources are reported inclusive of the Ore Reserve.

Criteria	JORC Code explanation	Commentary
Site visits	<ul style="list-style-type: none"> • <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> • <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> • The Competent Person, Mr Pier Federici FAusIMM(CP), conducted a site visit in July 2013. The site visit provided: <ul style="list-style-type: none"> – Familiarization with the site including current mining conditions, proposed pit limits, waste dump locations, site drainage and geotechnical considerations, identification of vegetation to be preserved. – Observation of samples being prepared for analysis. – General landforms. – Access to the deposit. • The competent person is of the opinion that no material changes have occurred in the region since the last site visit.
Study status	<ul style="list-style-type: none"> • <i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i> • <i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i> 	<ul style="list-style-type: none"> • The Ore Reserves are supported by the recent completion of updated mine planning work undertaken by AMC Consultants Pty Ltd completed to a prefeasibility study level of accuracy. • The proposed mine plan is considered technically and economically achievable involving the application of conventional mining technology of excavator and haulage. • Modifying Factors (mining, processing, infrastructure, environmental, legal, social, and commercial) have been considered during the Ore Reserve estimation process. • Economic modelling was completed as part of the mine planning identified that the project is economically viable and robust under current assumptions.
Cut-off parameters	<ul style="list-style-type: none"> • <i>The basis of the cut-off grade(s) or quality parameters applied.</i> 	<ul style="list-style-type: none"> • A Mill limited break-even cut-off has been applied to define ore for processing. This cut-off is based on the value of the concentrate and the cost of processing applied to define economic material.

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Mining factors or assumptions	<ul style="list-style-type: none"> <i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i> <i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i> <i>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</i> <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i> <i>The mining dilution factors used.</i> <i>The mining recovery factors used.</i> <i>Any minimum mining widths used.</i> <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i> <i>The infrastructure requirements of the selected mining methods.</i> 	<ul style="list-style-type: none"> The deposit has been assessed through pit optimization, mine design, mine scheduling and economic modelling. Individual discrete mining blocks have been digitised around ore and overburden. Pillars of in situ material will be left between adjacent mining strips to prevent tails from entering the working areas. Ore loss has been accounted for these pillars being left. Mining dilution and ore loss are inherent in the process and no additional dilution or ore loss has applied when converting the mineral resource model for mine planning. The mine extents and depth were decided by pit optimization using the Lerchs-Grossman (LG) algorithm with Whittle software. Nested pit shells generated and tested with sensitivities on mining cost, processing cost, metal price, recoveries formed the basis of the optimal pit shell to maximize value and achieve operational design requirements. LG pit optimizations assessed Measured and Indicated classified material only. No Inferred material was included in the LG assessment. Geotechnical slope parameters were based on a geotechnical study completed in 2022 by ATC Williams focused on the external and in-pit embankment designs for tails storage facilities. The in situ embankments and pit slopes also applied these parameters due to in-pit storage of tails. Infrastructure requirements included development of tails and slimes storage, topsoil, and subsoil stockpiles, over burden stockpiles, haul roads, external tails storage facility, office, fuel bay and storage, salvage yard, and workshop. Key infrastructure will be located in the north-western corner of MIN5532 adjacent to the wet concentrator plant. The pit will be mined in blocks of general dimension of 500 m wide and 250 m long. These will be mined in a strip sequence. The mining method will be a truck and excavator for the overburden and ore, while scrapers will be used for soil stripping and rehandling. Ore will be fed into a mining unit plant (MUP) where it is screened and slurried and pumped to the wet concentrator plant (WCP) on site. Sand tails, from the WCP will be returned to the mine void placed in constructed cells after which overburden will be placed above prior to rehabilitation.

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Metallurgical factors or assumptions	<ul style="list-style-type: none"> <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i> <i>Whether the metallurgical process is well-tested technology or novel in nature.</i> <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i> <i>Any assumptions or allowances made for deleterious elements.</i> <i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i> <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i> 	<ul style="list-style-type: none"> Two concentrates are generated at site. <ul style="list-style-type: none"> A heavy mineral concentrate (HMC) which is predominantly ZrO₂+HfO₂, and TiO₂ minerals. A rare earth mineral concentrate (REMC) which is predominantly CeO₂ and Y₂O₃ The associated recoveries and costs to generate concentrates, were applied in the mine planning work. The process will involve gravity and magnet separation to generate the concentrates for export. The metallurgical assumptions are based on metallurgical test work undertaken by Mineral Technologies in 2022 developing the recoveries, flowsheet and concentrate upgrade validation base on site bulk samples.
Environmental	<ul style="list-style-type: none"> <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i> 	<ul style="list-style-type: none"> Environmental Effects Study: The Donald project completed the Environmental Effect Statement (EES) process and was granted approval in November 2008. The plan is to return disturbed areas to similar topography preserving water surface flow directions. Slimes and sand tails will be buried below ground level and capped with overburden. Licenses will be sort for in pit tailings disposal and any associated discharge.

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Infrastructure	<ul style="list-style-type: none"> <i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i> 	<ul style="list-style-type: none"> Power and water will be accessible from existing grid infrastructure in the local area. Additional infrastructure required for open pit mining has been designed and costed and includes: <ul style="list-style-type: none"> – Mining Unit Plant (MUP) – Wet concentrator plant (WCP) – HMC and REMC product handling facilities including weigh bridge – Reagents receipt and distribution – Maintenance workshops – Internal Roads and External Road Upgrades – Offices and crib rooms – Fuel storage and refuelling area – 66kV Overhead Power from Horsham – GWM Water reticulation upgrades to transfer fresh water from storage in Taylors Lake to mine site – Fresh water, process water and sediment control Dams – Wash Bay – Stores – Tyre Repair Facility – Vehicle Parking Facilities – Salvage Yard – Pit dewatering – Land purchase Accommodation facility in nearby town

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Costs	<ul style="list-style-type: none"> <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i> <i>The methodology used to estimate operating costs.</i> <i>Allowances made for the content of deleterious elements.</i> <i>The source of exchange rates used in the study.</i> <i>Derivation of transportation charges.</i> <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i> <i>The allowances made for royalties payable, both Government and private.</i> 	<ul style="list-style-type: none"> Operating and capital costs have been based on: <ul style="list-style-type: none"> Sales and logistics costs Processing costs based on first principal cost estimates First principal mining cost estimates based on mine schedule physicals First principal estimates based on infrastructure design External TSF and in-pits tailings prepared by ATC Williams Marketing studies - TZMI for HMC and Adamas Intelligence for REMC Relevant government royalties for concentrate products Processing prepared by Mineral Technologies Power prepared by Powercor GWM Water reticulation prepared by W3Plus Road upgrades prepared by Driscoll Engineering Accommodation facilities prepared by BM Projects Dewatering infrastructure by Projectworx
Revenue factors	<ul style="list-style-type: none"> <i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i> <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i> 	<ul style="list-style-type: none"> The value of the concentrate and the cost of processing was applied to define economic material. Commodity prices and exchange rate forecast were advised by Donald Mineral Sands Limited (DMS) and are based on consensus forecast prices – TZMI July 2022 and updated in March 2023, and Adamas Intelligence in February 2023. Product specifications are based on metallurgical test work including processing of bulk sample material. Treatment charges are linked to forecast commodity prices and align with five-year historical rates. Off-site marketing and freight costs are based on DMS forecast linked to industry indices. Key value driver inputs into the financial model included: <ul style="list-style-type: none"> Heavy mineral concentrate and Rare Earth mineral concentrate forecast pricing Exchange rate from AU\$ to US\$ used 0.7:1. Discount rate of 8%.

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Market assessment	<ul style="list-style-type: none"> <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i> <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i> <i>Price and volume forecasts and the basis for these forecasts.</i> <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i> 	<ul style="list-style-type: none"> The current short-term reduction in zircon demand is expected to return to the long-term demand in 2023. The macro trend in zircon demand is driven by urbanisation. Maturation of existing supply sources will lead to a reduction in zircon supply. The long life of this project (>40 years) provides opportunity to move through the rise and fall of global supply and demand. Titanium feedstock market is large and it is expected that the Donald Mineral Sands Project will fill a small section of the existing supply shortage in the marketplace. The DMS Ti product has a major advantage in its grade (High in TiO₂%, over 60% overall). It is anticipated that the benefits for the high Ti content will be significant for the downstream producers as the high Ti content enables high Ti grade in the final products, as well as a decrease in the by-product, pig-iron of the slag process. With 95% of the Rare Earth market situated in China, a macro-trend in the rare earth space is that western governments have started to heavily invest in the Rare Earth sector. Under the Australian Governments \$2B critical minerals facility, the Australian federal government is investing over \$1.25B in Eneabba rare earth refinery announced in April 2022 which is currently in design / construction by Iluka in Western Australia. Rare Earths, as a Total Rare Earth Oxide (TREO), was priced by Adamas Intelligence in February 2023. Following a 7.1% pandemic-induced drop in global TREO consumption in 2020, Adamas Intelligence data indicates that global consumption jumped 13.2% higher in 2021, bolstered by the materialisation of some pent-up consumer and industrial demand from the year prior. By volume, permanent magnets and catalysts were collectively responsible for over 65% of global TREO consumption in 2021. However, by value, permanent magnets alone were responsible for 95% of the total value of global TREO consumption in 2022. Demand for and prices of neodymium, praseodymium, dysprosium and terbium (all of which are contained in the DMS TREO) are expected to continue to rise strongly in the years ahead.
Economic	<ul style="list-style-type: none"> <i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i> <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i> 	<ul style="list-style-type: none"> Discounted cash flow modelling and sensitivity analysis has been completed to evaluate the economic performance of the Ore Reserve. The Ore Reserve returns a positive NPV (pre-tax) under the assumptions detailed herein. Sensitivity testing of the project identified changes to mining costs and product prices produced the largest difference in the project NPV. All reasonable sensitivity variations to inputs resulted in a positive NPV.

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Social	<ul style="list-style-type: none"> <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i> 	<ul style="list-style-type: none"> Cultural & Heritage Management Plan (CHMP) for a large portion of MIN5532 was approved in 2014. An expanded CHMP will be required to cover the remaining RL2002 area prior to mining. DMS is engaged with stakeholder groups through regular Community Reference Group meetings and has established a Transport Working Group that had its inaugural meeting in January 2023. A Memorandum of Understanding was executed with the Yarriambiack Shire Council in November 2022 with key areas for collaboration between the two parties being Optimising Economic and Social Outcomes – to work cooperatively and in good faith to facilitate as many positive outcomes from the Donald Mineral Sands Project as possible whilst also working jointly to minimise and mitigate any potential negative economic employment and social outcomes associated with the project and building relationships to support the Donald Mineral Sands Project by working cooperatively and in good faith to develop an advocacy and relationship management program which will aid the timely delivery of the project and wider community benefits.
Other	<ul style="list-style-type: none"> <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i> <i>Any identified material naturally occurring risks.</i> <i>The status of material legal agreements and marketing arrangements.</i> <i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i> 	<ul style="list-style-type: none"> Mining Licence (ML5532) expires August 2030 Retention Licence (RL2002) expires October 2029 Export Licence was renewed in October 2020. Radiation Licence has been granted. A draft Work Plan has been submitted to the relevant Victorian Government Department and a final draft will be submitted when all details of the final stages of the project development are completed. Where practical native vegetation is avoided. There is a vegetation offset management plan for other areas. Sufficient water has been secured for the project. The area occasionally floods. Diversion bunds will be constructed around the mine workings to control surface flood water. The natural phreatic water level is above the base of the pit. Because of low permeability, ground water will be managed by a series of spear bore pumps installed either side of the mining blocks. In pit pumps and sumps will also be used as required. Some risk is considered related to the trafficability of haul trucks in the pit based on the material properties and moisture content.
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i> 	<ul style="list-style-type: none"> Ore has been classified as Proven and Probable Ore Reserve, based on Measured and Indicated Mineral Resources. The results of the Ore Reserve estimate reflect the Competent Person's view of the deposit.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Ore Reserve estimates.</i> 	<ul style="list-style-type: none"> The supporting mine planning work has not been externally audited.

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<p>Discussion of relative accuracy/ confidence</p>	<ul style="list-style-type: none"> • <i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i> • <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i> • <i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i> • <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> • The Ore Reserve estimate is based on a continuation of project related studies, metallurgical testing, and updated mine planning work, with a level of accuracy $\pm 25\%$. Costs are based on estimated first principle operating costs and capital costs. All providing a high level of confidence in the economic basis of the Ore Reserve and assessment of the project value. • In the opinion of the Competent Person, cost assumptions and modifying factors applied in the process of estimating Ore Reserves are reasonable. • Mineral price and exchange rate assumptions were set out by DMS and are subject to market forces and therefore present an area of uncertainty. • In the opinion of the Competent Person, there are reasonable prospects to anticipate that all relevant legal, environmental, and social approvals to operate are currently granted or will be granted within the project timeframe. • Sensitivity testing of the project identified changes to product prices produced the largest difference in the project NPV. Regardless, the project produces a positive NPV over a range of product prices and operating costs.