

# Quarterly Activities Report

For the quarter ending 30 June 2023



## HIGHLIGHTS

- Astron continues to advance Phase 1 of the Donald Rare Earth and Mineral Sands towards a Final Investment Decision. The Phase 1 Project is located on the granted Mining Licence MIN5532 and accesses 17% of the Project's total resource.
- During the quarter, the Company announced a Definitive Feasibility Study for the Phase 1 Project which demonstrated an after-tax NPV<sub>8</sub> of \$852 million over a 41.5-year mine life.
- Significant advancement of work streams in relation to Phase 1 during the quarter included progressing product off-take negotiations; project approvals, principally, the Work Plan; and project financing arrangements.
- Initial soundings around Donald Phase 1 Project debt demonstrated significant interest from senior lenders.
- The Company also announced a Preliminary Feasibility Study for the combined Phases 1 & 2 of the Project, which together access 43% of the Project's total resource. Financial analysis of Phase 2 demonstrates an incremental NPV<sub>8</sub> of \$1.4 billion and extends the mine life of the combined project to over 58 years.
- Phase 2 of the Donald Project involves a duplication of Phase 1 mining and mineral processing operations (Phase 2a) as well as a mineral separation plant to process heavy mineral concentrate to final zircon and titania products (Phase 2b).
- The updated Ore Reserve for RL2002, the proposed site for the Phase 2 Project, is 516Mt @ 4.6% HM which, when combined with the Ore Reserve estimate for MIN5532, brings the total Ore Reserves of the Donald Project to 825Mt @ 4.4% HM.
- The Company also completed a private placement of \$7 million to Mr Tan Ruiqing, the former Vice Chairman and one of the founders of Lomon Billions Group.
- Organisational capabilities have also grown during the quarter through appointments of key management personnel.
- Astron China has secured several independent feedstock sources of heavy mineral concentrate for on-going operations of the Yingkou Plant. Production is expected to commence in the coming quarter following the installation of new separation spirals.
- The mining licence for Niafarang Mineral Sands Project in Senegal, West Africa was renewed for a term of 5 years.

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

The Board of Astron Corporation Limited (ASX: ATR) ('Astron' or 'Company') is pleased to deliver the June 2023 Quarterly Activities Report, highlighting a very successful quarter of completed corporate and operational milestones. The Donald Rare Earth and Mineral Sands Project continues to progress across a number of key areas as the project advances towards development as a Tier 1 global mining project, based approximately 300 kilometres north-west of Melbourne in regional Victoria.

## Summary of Main Activities

During the June quarter, Astron continued to advance towards the final investment decision (FID) for Phase 1 of the Donald Rare Earth and Mineral Sands Project (Donald Project) with a number of key milestones being achieved.

Principle work streams include:

- negotiating product offtake arrangements for both rare earth element concentrate (REEC) and heavy mineral concentrate (HMC) products;
- progressing final regulatory approvals relating principally to the Victorian government Work Plan;
- project financing arrangements, including a successful \$7 million private equity placement and appointment of ICA Partners, one of Australia's leading boutique advisory firms, for debt financing of the Phase1 Project; and
- appointment of a Human Resources Manager and a Commercial Manager as the Company continues to bolster its organisational capabilities in preparation for FID in Q1 2024.

Most notably, the company remains on schedule for submission of the Work Plan to the Victorian Government during the third quarter of 2023.

During the June quarter, Astron completed the Definitive Feasibility Study (DFS) for Phase 1 of the Donald Project based on the granted mining licence MIN5532. The DFS was carried out to an Association for the Advancement of Cost Engineering (AACE) Class 2 estimate standard and provides confidence that the project will represent a financially robust investment, significantly de-risked by the selection of conventional mining techniques, extensive metallurgical test work and engineering evaluation as well as advanced regulatory approvals.

Phase 1 of the Donald Project has a positively assessed Victorian Government Environmental Effects Statement. It is the most advanced project of its type within Victoria. The Phase 1 Project is expected to deliver compelling economics with a post-tax real net present value (NPV)<sub>8</sub> of \$852m at an internal rate of return (IRR) of 25.8%. It is forecast to generate \$4.3 billion of free-cashflows, \$13.0 billion of revenue and \$6.1 billion of earnings before interest, tax, depreciation and amortisation (EBITDA) over its 41.5-year mine life. The Project has strong community support and is expected to contribute \$2.2 billion to the Gross Regional Product (GRP) over the first phase of its operations, as well as provide employment and reinvestment opportunities in the local area.

Further, Astron also announced 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. The Ore Reserves for RL2002 are 516Mt @ 4.6% heavy mineral (HM) grade, bringing the total Ore Reserves for the Donald Project to 825Mt @ 4.4% HM.

The updated Ore Reserve was supported by a Pre-Feasibility Study (PFS) level financial analysis, that has been completed to an AACE Class 3 estimate standard. The PFS analysis is based on Phase 2 of the Donald Project, which is planned to commence operations five years after the start of Phase 1 production. Phase 2 will involve the duplication of the Phase 1 mining and minerals processing infrastructure, as well as the construction of a mineral separation plant (MSP) to separate the HMC into final products of zircon and titania. Financial analysis completed as part of the PFS demonstrated a combined NPV<sub>8</sub> for Phase 1 and Phase 2 of the Donald Project of \$2.2 billion

During the June quarter, the Company successfully secured several independent feedstock sources for HMC for processing at the Yingkou Mineral Separation Plant. Production from these new sources is to commence in the coming quarter following the installation of new separation spirals.

## Donald Rare Earth and Mineral Sands Project

### Description

The Donald Project has the potential to become a globally significant, long-life supplier of critical rare earth elements (REE), including neodymium, praseodymium, dysprosium, and terbium as well as zirconium, hafnium and titanium minerals. It contains over 2.6 billion tonnes of Mineral Resources at 4.4% 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 MIN5532 area 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 licence RL2002 with proposed operations to the north and south of MIN5532 (refer to Figure 1).

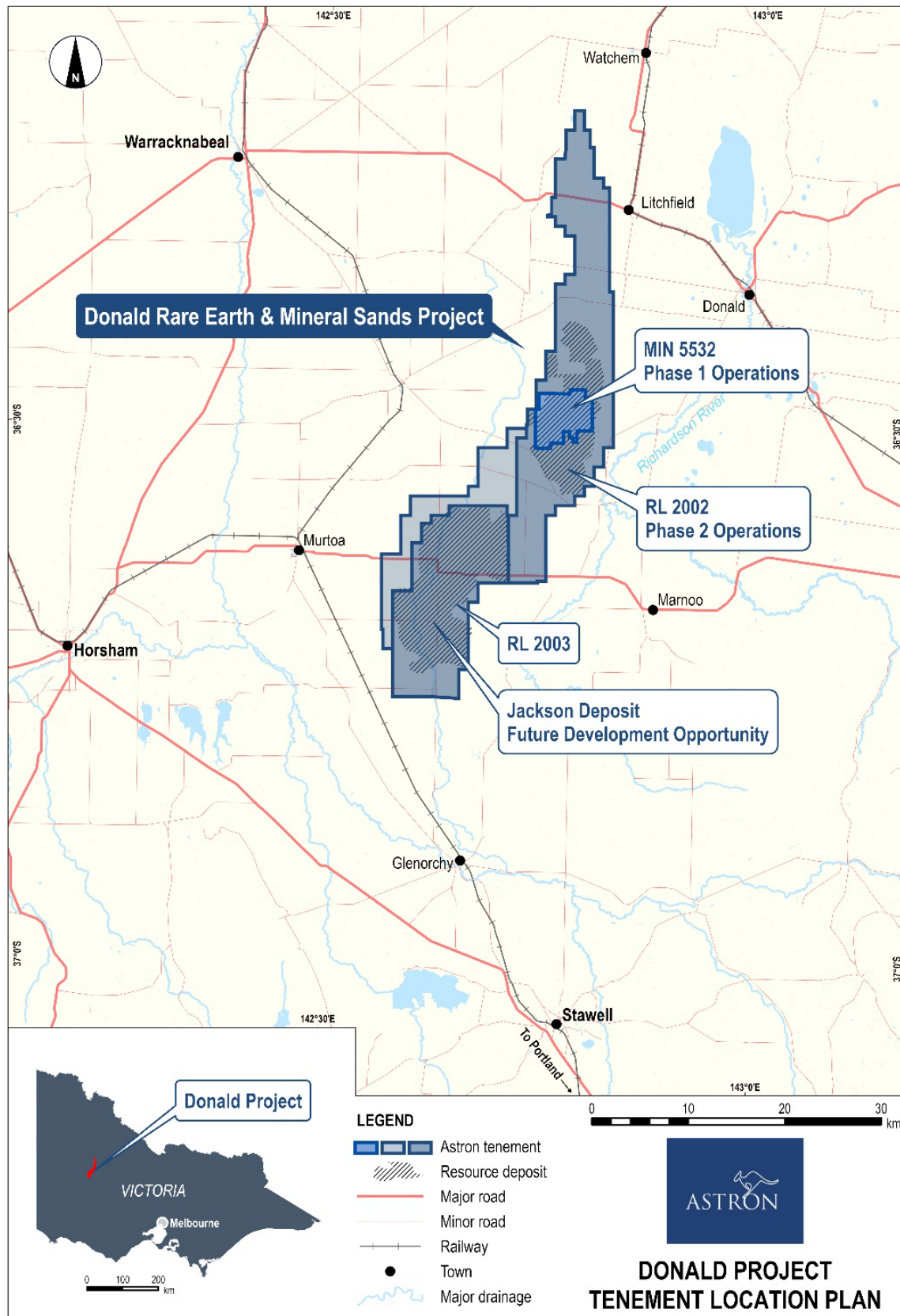


Figure 1– Location of the Donald Project and future development opportunities

## Project Execution Schedule

Astron remains on track for FID for Phase 1 in the first quarter of calendar year 2024. This is to be followed by an expected 18-month construction period, with commissioning targeted for the third quarter of 2025. Shipment of HMC and REEC is planned to commence shortly thereafter.

The second phase of the Donald Project will be subject to additional permitting requirements. Indicatively, construction for Phase 2 operations is planned to commence in the first quarter of 2029, with commissioning towards the end of 2030.

## Financial Analysis

As announced on 28 June 2023, 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 1 below:

**Table 1 – Summary Financial Characteristics – Donald Project**

Metric	Unit	Phase 1	Phase 1+2
Post-tax NPV <sub>8</sub> (FID)	[A\$m]	852	2,235
Post-tax IRR	[%]	25.8%	30.3%
Pre-tax NPV <sub>8</sub> (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) <sup>1</sup>	[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 2 below:

**Table 2 – 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

<sup>1</sup> 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).

### ***Project Resourcing***

The Company made additional key personnel appointments during the quarter, strengthening Astron's organisational capabilities for the next stage of development and operation of the Donald Project.

Karen Shelton has been appointed as the Company's Human Resources Manager. Karen has extensive experience in mining operations which includes gold, metallurgical and thermal coal, bauxite and underground silver/lead/zinc as well as minerals sands experience gained in NSW and WA. Karen has also delivered corporate HR functions within remote health, power distribution, defence contracting and higher education organisations in both private and public sector contexts and has a strong interest in rural communities and regional development.

Samantha Flockhart has been appointed as the Company's Commercial and Finance Manager. Samantha brings a wealth of experience in commercial contracts, enterprise resource planning (ERP) implementation and development and will assist significantly in the next progression of the Donald Project with over 15 years' experience in the mining industry, including as Commercial Lead at Gold Fields Australia and commercial manager at Barrick.

### ***Customer Engagement***

Discussions with potential customers in relation to off-take arrangements for both REEC and HMC continued during the quarter.

### ***Project Financing***

Following the completion of the DFS, Astron, with the help of external advisors is developing a detailed funding strategy for the Project and the Company, to facilitate the next stage of activities up to and including the FID and the subsequent pre-execution and project development expenditure stages.

The Company is now able to provide clarity around the planned debt structures for project development, with the plan to target a debt-to-equity ratio of circa 60:40 for the capital expenditure required for Phase 1. Initial soundings for debt have been undertaken with potential lenders which indicated strong interest.

### ***Geological Assessment***

Sonic drilling results, which formed the basis of the metallurgical studies, demonstrated, on a consistent basis, higher HM grades compared to twinned reverse core Air-core (RCAC) drill holes, which formed the basis of the Mineral Resource Estimation. A difference in the sample preparation technique used for the metallurgical test work, one where additional scrubbing was applied to the sample, was responsible for increased liberation of HM from oversize material or sample agglomerates. Sufficient scrubbing capacity has been designed within the process circuit to ensure that the 'oversized' HM material will be captured.

The difference in the results is significant but, as the metallurgical test results report higher values, the Mineral Resource Estimation is considered to represent a conservative outlook for the project.

### ***Mining Studies***

On 27 June 2023, the Company announced an Ore Reserves Update for RL2002. The Ore Reserve for RL2002 has been upgraded to 516Mt @ 4.6% 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 3). 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 HM 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%)
- Zircon – 6.6Mt (an increase of 15.1%)

**Table 3 – Donald Deposit combined Ore Reserve at June 2023**

Classification	Tonnes (Mt)	Total HM %	Slimes %	Oversize %	Zircon	Rutile	Ilmenite	Leucoxene	Monazite	Xenotime
<b>MIN5532<sup>2</sup></b>										
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
<b>Total</b>	<b>309</b>	<b>4.4</b>	<b>16.1</b>	<b>10.0</b>	<b>16.5</b>	<b>5.5</b>	<b>21.6</b>	<b>25.1</b>	<b>1.8</b>	<b>0.66</b>
<b>Within RL2002 outside of MIN5532<sup>3</sup></b>										
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	-
<b>Total</b>	<b>516</b>	<b>4.6</b>	<b>11.7</b>	<b>16.6</b>	<b>18.6</b>	<b>8.2</b>	<b>32.3</b>	<b>18.9</b>	<b>1.7</b>	<b>-</b>
<b>Total Donald Deposit</b>										
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
<b>Total</b>	<b>825</b>	<b>4.5</b>	<b>13.4</b>	<b>14.1</b>	<b>17.8</b>	<b>7.2</b>	<b>28.4</b>	<b>21.2</b>	<b>1.7</b>	<b>See Notes</b>

**Notes to Table 3:**

- 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.

## Mining, Earthworks and Tailings Management

ATC Williams commenced procurement design activities of the surface tailings facility and initial earthworks to open the first mining cell and provide access to a construction borrow pit. The design and specifications, ready for tender, will be completed in the next quarter, and a tender issued shortly thereafter.

## Metallurgical Studies

No further metallurgical studies were undertaken during the quarter, following the receipt of metallurgical study reports from Mineral Technologies earlier in the year, which confirmed the processing approach.

## Process Plant

Mineral Technologies developed engineering deliverables to support an Engineering, Procurement and Construction (EPC) tender for the process plant. Development of the EPC tender has commenced and is scheduled to be issued in the next quarter.

<sup>2</sup> See ASX Announcement, Donald Project MIN5532 Ore Reserves Update, 30 Mar 2023

<sup>3</sup> See ASX Announcement, Donald Rare Earth and Mineral Sands Project RL2002 Ore Reserve Update & Project Financial Update, 27 June 2023

## Infrastructure

Design work for project infrastructure continued during the June quarter.

Astron is working closely with Powercor to progress design, and approvals for the 66kV overhead powerline from Horsham substation to the mine site. The design package for the water reticulation requirements to provide raw water to the project has been completed and issued to GWM Water for review and 'in-principle' approval. Development of the integrated services (over-head powerline, water pipeline and road upgrade), to be installed in the road corridor between Minyip and the mine, has progressed.

Various studies for the workforce accommodation facility in Minyip have been completed including the feature survey, bush fire attack and storm water analysis.

Development of a Request for Proposal (RFP) tender for the transport of mine products (HMC and REEC) has commenced. The RFP is scheduled to be issued in the next quarter.

## Regulatory Approvals

The primary regulatory approval outstanding for Phase 1 Donald Project is a Victorian Work Plan. The Mining Work Plan design is complete and various other technical studies that will be included with the Work Plan submission, including groundwater modelling, surface water management design and radiation management are well advanced. Astron continues to liaise with Earth Resources Regulation regarding progress and the imminent submission.

Submission of the Victorian Work Plan is scheduled for the coming quarter.

## Community Engagement

The Project continues to enjoy strong community support. Regular community consultation by Astron's site-based personnel was supported by in-person participation from Astron's senior management team and included engagement with local groups, council representatives, and community organisations.

A transportation working group comprising the Victorian Department of Transport and Planning, local councils and emergency services was formed to facilitate their involvement in the development of the Project's transportation management plan. The plan details necessary road upgrades and controls to manage the safety and operability of the roads used for the Donald Project.

## Expenditure Summary

No commercial production was recorded during the quarter.

Expenditure Summary	Q4 2023	YTD2023
Production activities	-	-
Development activities	2,054,004	5,744,343

Note: the development activities expenditure includes procurement, design and consulting.

## Niafarang Mineral Sands Project

The Niafarang Project is located within a 397 square kilometre exploration licence area on the Casamance coast of Senegal, West Africa. Astron has the rights to a licence issued under Order Number 09042/MIM/TMG through its subsidiary company, Senegal Mineral Resources (SMR). Environmental and mining licences were granted to SMR in 2017 and a Small Mining Licence (SML) was granted in 2017, which has been renewed recently until May 2027.

Engagement with local, regional and federal governmental representatives has continued.

### Expenditure Summary

No commercial production was recorded during the quarter.

Expenditure Summary	Q4 2023	YTD2023
Production activities	-	-
Development activities	89,463	239,432

Note: the development activities expenditure includes procurement, design and consulting.

## Astron China Operations

### Description

In Yingkou, Liaoning, Astron operates a mineral separation plant with an annual capacity of 150,000 tonnes. The company holds intellectual property and production capabilities in a range of minerals processing areas, including pure hafnium-free zirconia production; a method for reducing impurities in zircon; fine rutile recovery and agglomeration; and the production of nuclear grade zirconium and zirconium oxychloride.

The Yingkou mineral separation plant undertakes two main commercial operations, the processing of concentrates and middlings (including zircon and rutile) to final products of zircon and rutile, as well as agglomeration technology to produce a pelletised rutile product from fine rutile feedstock and chloride slag fines.

### Operations Update

Production in the June quarter continued to be curtailed due to the lack of suitable feedstock. However, during the quarter, the Company has successfully secured several independent feedstock sources of HMC for on-going operations of the Yingkou Plant. Production from these new sources is expected to commence in the coming quarter following the installation of new separation spirals.

## Corporate

### Appointment of Debt Funding Advisor

Astron appointed ICA Partners (ASX 8 May), one of Australia's leading boutique advisory firms, as financial advisor in relation to the project financing of the Phase 1 of the Donald Rare Earth and Mineral Sands Project. The scope of the engagement includes:

- providing advice on the overall strategic funding plan to successfully establish the
- necessary development finance for the Project;
- providing advice in relation to material project contracts in the context of the financing;
- co-ordinating and managing engagement with prospective financiers; and
- negotiation and conclusion of project debt funding arrangements



The appointment follows the conclusion of the Donald Rare Earth and Minerals Sands Phase 1 Definitive Feasibility Study, which confirmed the project's technical and economical strengths.

ICA Partners is a highly credentialed boutique financial advisory firm with significant experience and a track record of providing independent and innovative advice to private clients and Governments across the natural resources, infrastructure, utilities and energy sectors. ICA's team has decades of experience in the resources sector including operating experience within leading mining corporates and advising on and executing mining transactions.

### ***\$7 million placement and capital raising***

In May 2023, the Company announced it had completed a private equity placement totalling \$7 million (Placement) to Mr Tan Ruiqing.

Mr Tan Ruiqing is the former Vice Chairman and one of the founders of Lomon Billions Group, a leading high-performance titanium dioxide pigments and zirconium chemicals manufacturing company with over 30 years of experience in the global mineral sands and downstream markets. Mr Tan Ruiqing is investing in his personal capacity.

He is also a board member of Fudan University, and has served as a Chairman of the Henan Yintai Investment Co., Ltd and as Managing Director of Henan International Chemical Co. The Placement price of \$0.54 per Chess Depositary Interests represented a premium of approximately 15% to the closing price of Astron shares of \$0.47 on 18 May 2023.

The funds for this placement were received in June 2023.

### ***Placement details***

On 22 June 2023 and 5 July 2023, 12,962,962 new CDIs were issued in two equal tranches to raise \$7 million (before costs), using the Company's available placement capacity pursuant to ASX listing rules 7.1 and 7.1A. The new CDIs issued under the Placement rank equally with Astron's existing CDIs.

### ***Noosa Mining Investor Conference Presentation***

In July 2023, Astron Corporation's Managing Director Tiger Brown presented at the Noosa Mining Investor Conference. A replay of Mr. Brown's presentation can be found at:

[Astron Noosa Mining Conference Presentation](#)

### ***ASX Additional Information***

ASX listing rule 5.3.5 – Payment to related parties of the entity and their associates as per Appendix 5B, Section 6.1 – Description of payments:

Total Directors' remuneration for the quarter - \$155,230 (includes superannuation)

This announcement is authorised by the Managing Director of Astron Corporation Limited.

#### **For further information, contact:**

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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 rare earths and mineral sands. 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.

## 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 Statement

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.

## Schedule 1: Donald Mineral Sands and Rare Earth Project Interests in Tenements

Location	Tenement	% held	Holder
Victoria Australia	RL 2002	100	Donald Mineral Sands Pty Ltd
Victoria Australia	RL 2003	100	Donald Mineral Sands Pty Ltd
Victoria Australia	MIN5532	100	Donald Mineral Sands Pty Ltd
Victoria Australia	EL5186	100	Donald Mineral Sands Pty Ltd

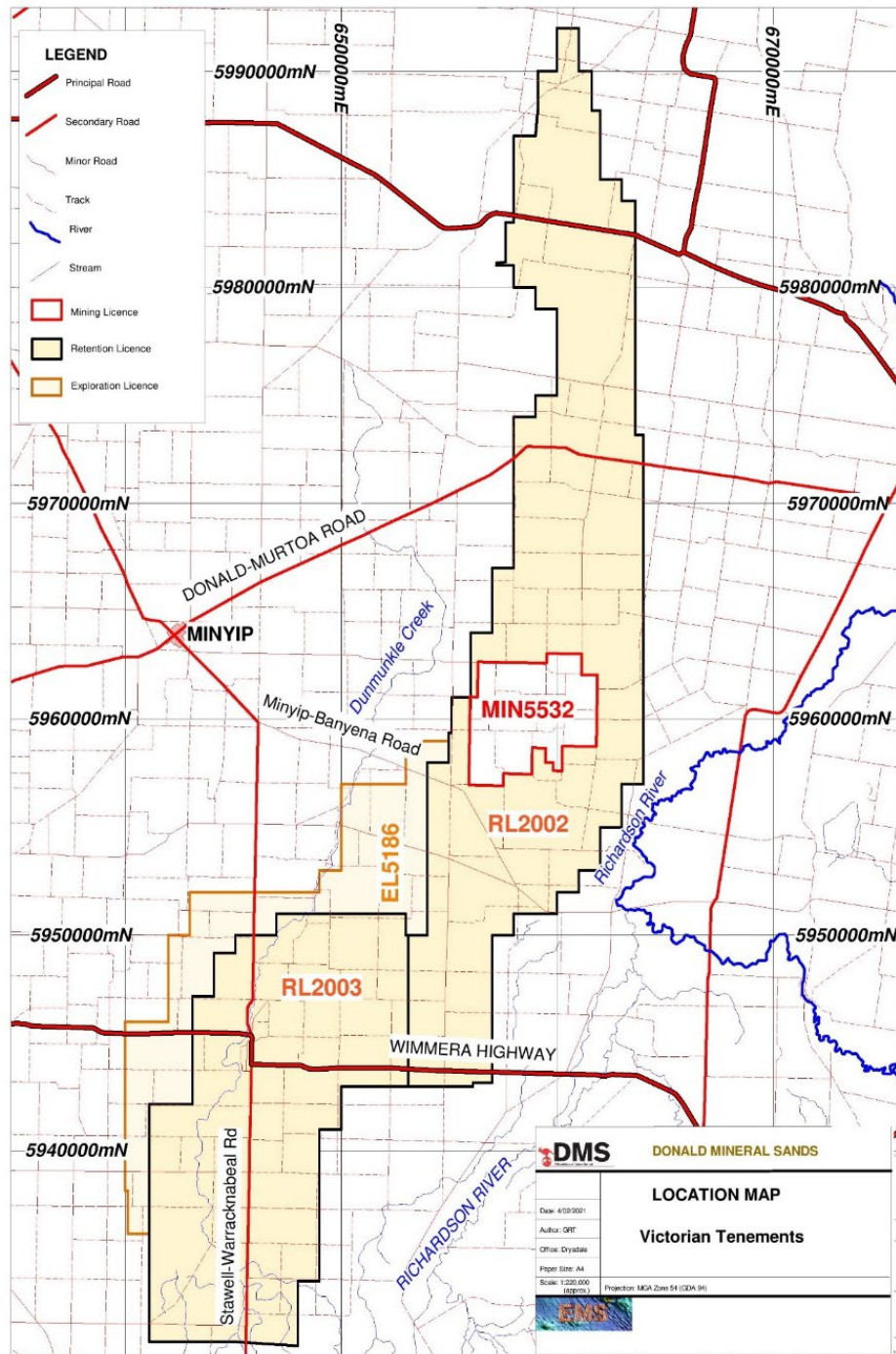


Figure 2 – Donald Project Tenement Map

## Schedule 2 – Donald Rare Earth and Mineral Sands Project Mineral Resources

**Table 4 – Total MIN5532 resource with product values above a 1% HM cut-off**

Classification	Tonnes (Mt)	HM (%)	Slimes (%)	Oversize (%)	% of total HM			
					TiO <sub>2</sub>	ZrO <sub>2</sub> +HfO <sub>2</sub>	CeO <sub>2</sub>	Y <sub>2</sub> O <sub>3</sub>
Measured	394	4.2	16	10	34	10.9	0.51	0.28
Indicated	110	3.5	24	11	29	9.9	0.48	0.26
Inferred	20	2.3	22	14	30	8.9	0.40	0.23
<b>Subtotal</b>	<b>525</b>	<b>4.0</b>	<b>18</b>	<b>10</b>	<b>33</b>	<b>10.7</b>	<b>0.50</b>	<b>0.27</b>

**Notes to Table 4:**

- Mineralisation reported above a cut-off grade of 1.0% total HM.
- The Mineral Resource has been classified and reported in accordance with the guidelines of the JORC Code (2012).
- Total HM is from within the +20 µm to -250 µm size fraction and is reported as a percentage of the total material. Slimes is the -20 µm fraction and oversize is the +1 mm fraction.
- Estimates of the mineral assemblage (zircon, ilmenite, rutile and leucoxene) and are presented as percentages of the total HM component, as determined from grain counting, QEMScan, XRF and laser ablation analysis. QEMScan data was aligned with the grain counting data and the following breakpoints are used for used definition of the titania minerals: rutile >95% TiO<sub>2</sub>, leucoxene: 50 to 95% TiO<sub>2</sub>, ilmenite: 30 to 50% TiO<sub>2</sub>.
- TiO<sub>2</sub>, ZrO<sub>2</sub>+HfO<sub>2</sub> and CeO<sub>2</sub> from XRF and Y<sub>2</sub>O<sub>3</sub> from laser ablation data are presented as percentages of the total HM component. All tonnages and grades have been rounded to reflect the relative uncertainty of the estimate, thus the sum of columns may not equal.

**Table 5– Total mineral resource where VHM data available for the Donald Project not including MIN5532, above a 1% HM cut-off**

Classification	Tonnes (Mt)	HM (%)	Slimes (%)	Oversize (%)	Zircon	% of total HM			
						Rutile+ Anatase	Ilmenite	Leucoxene	Monazite
Within RL2002 excluding MIN5532									
Measured	185	5.5	19	7	21	9	31	19	2
Indicated	454	4.2	16	13	17	7	33	19	2
Inferred	647	4.9	15	6	18	9	33	17	2
Subtotal	1,286	4.8	16	9	18	8	33	18	2
Jackson Deposit (RL2003)									
Measured	-	-	-	-	-	-	-	-	-
Indicated	668	4.9	18	5	18	9	32	17	2
Inferred	155	4.0	15	3	21	9	32	15	2
Subtotal	823	4.8	18	5	19	9	32	17	2
Total Donald Project excluding MIN5532									
Measured	185	5.5	19	7	21	9	31	19	2
Indicated	1,122	4.6	17	9	18	8	32	18	2
Inferred	802	4.7	15	5	19	9	33	17	2
Total	2,109	4.8	17	7	18	8	33	18	2

**Notes to Table 5:**

- MRE is based on heavy liquid separation analysis and mineralogy by XRF and optical methods
- The total tonnes may not equal the sum of the individual resources due to rounding.
- The cut-off grade is 1% HM.
- The figures are rounded to the nearest: 1Mt for tonnes, one decimal for HM, whole numbers for slimes, oversize, zircon, rutile + anatase, ilmenite, leucoxene and monazite (outside MIN5532).
- Zircon, ilmenite, rutile + anatase, leucoxene, monazite and xenotime percentages are reported as a percentage of the HM.
- Rutile + anatase, leucoxene and monazite resource has been estimated using fewer samples than the other valuable heavy minerals outside MIN5532. The accuracy and confidence in their estimate is therefore lower.
- For further details including JORC Code, 2012 Edition – Table 1 and cross-sectional data, see previous announcements dated 7 April 2016, available at ASX's website at [www.asx.com.au/asxpdf/20160407/pdf/436cjqc93cf47.pdf](http://www.asx.com.au/asxpdf/20160407/pdf/436cjqc93cf47.pdf)



## Schedule 3 – Donald Rare Earth and Mineral Sands Project Ore Reserves

**Table 6 – Donald Deposit MIN5532 Ore Reserve – as at Mar 2023**

Classification	Tonnes (Mt)	Total HM %	Slimes %	Oversize %	Zircon	Rutile	% of total HM			
							Ilmenite	Leucoxene	Monazite	Xenotime
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
<b>Total</b>	<b>309</b>	<b>4.4</b>	<b>16.1</b>	<b>10.0</b>	<b>16.5</b>	<b>5.5</b>	<b>21.6</b>	<b>25.1</b>	<b>1.8</b>	<b>0.66</b>

**Notes to Table 6:**

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

**Table 7 – Donald Deposit RL2002 Ore Reserve – as at May 2023**

Classification	Tonnes (Mt)	Total HM %	Slimes %	Oversize %	Zircon	Rutile	% of total HM			
							Ilmenite	Leucoxene	Monazite	Xenotime
Proved	152	5.6	7.1	18.8	21.1	9.4	31.3	18.2	1.8	N/A
Probable	364	4.1	13.7	15.7	17.1	7.5	32.8	19.3	1.6	N/A
<b>Total</b>	<b>516</b>	<b>4.6</b>	<b>11.7</b>	<b>16.6</b>	<b>18.6</b>	<b>8.2</b>	<b>32.3</b>	<b>18.9</b>	<b>1.7</b>	<b>N/A</b>

**Notes to Table 7:**

- The ore tonnes have been rounded to the nearest 1mt and grades have been rounded to two significant figures.
- The Ore Reserve is based on indicated and Measured Mineral Resource contained with mine designs above an economic cut-off. The economic cut-off is defined as the value of the products less the cost of processing.
- Mining recovery and dilution have been applied to the figures above.
- The JORC Code 2012 Table 1, Section 4 to support the Ore Reserve Estimate is included in Appendix B of the Donald Project Ore Reserve Statement released 27 June 2023.
- The Ore Reserve estimates have been compiled in accordance with the guidelines defined in the 2012 JORC Code.
- 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.

## Schedule 4 – Niafarang Project Tenement Interests

Location	Tenement	% held	Holder
Casamance, Senegal	09042/MIM/TMG	100	Senegal Mineral Resources S.A.