ASTRON CORPORATION LIMITED

ARBN 154 924 553

Incorporated in Hong Kong, company number 1687414

Notice to the Australian Securities Exchange
30 July 2021

Production and Exploration Report

Quarter Ended 30 June 2021

DONALD MINERAL SANDS PROJECT

Overview

Astron Corporation Limited's (Astron) proposed multi-stage Donald Mineral Sands Project is located near the town of Minyip in western Victoria, Australia. It comprises Retention Licences (RL) 2002 and 2003, Mining Licence (ML) 5532, and Exploration Licence (EL) 5186. All tenements are held 100% through Astron's wholly-owned subsidiary, Donald Mineral Sands Pty Ltd (DMS). The total licence area is 506 square kilometres (sq kms) and contains the Donald deposit (within RL2002 and including ML5186) and the Jackson deposit (within RL2003). The Donald Mineral Sands Project tenements contain a major mineral sands resource which is rich in valuable heavy minerals with a significant rare earth element component.

The measured, indicated and inferred mineral resource for the Donald Mineral Sands Project is 5.7 billion tonnes (Bt) at 3.2% Heavy Mineral (HM) (refer ASX Release 7 April 2016). Within this resource, resources for which the valuable heavy mineral assemblage has been determined comprise 2.4Bt at 4.8% HM containing 22.1Mt of zircon, 67.6Mt of titanium minerals and 2.3Mt of monazite.

The Donald deposit (RL2002) alone, with measured, indicated and inferred resources of 3.2Bt at 3.6% HM, is a globally significant valuable heavy minerals and rare earths resource. Its proved and probable ore reserves are 602 million tonnes (Mt) at 4.8% HM (refer ASX Release 18 February 2021) containing 28.9Mt of HM, comprising approximately 5.4 Mt of zircon; 9.2 Mt of ilmenite; 8 Mt of the higher titanium content minerals, rutile and leucoxene; and a rare earth element component of 491 thousand tonnes (kt).[1] The current Donald deposit Ore Reserves are sufficient to support an operation of at least 40 years at the proposed Stage 1 level of production.

[1] *Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition, sets out minimum standards, recommendations and guidelines for public reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves authored by the Joint Ore Reserves Committee of The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.* The Ore Reserve and Mineral Resource estimates were prepared by AMC Consultants Pty Ltd. For further details see Astron's ASX announcement 18 Feb 2021, "Donald Project Ore Reserve Update".

New Development Concept

Astron has changed its operating model from exporting HMC to China for processing to final products to now undertaking all aspects of the mineral sands operation in Australia (Fig. 1) to:

- ensure a high degree of control and certainty over final outcomes (product recoveries and specifications) and markets, thereby de-risking the operating model.
- enable Astron to quickly adapt its production settings to changing customer requirements and market conditions.

Astron is currently in a major organisational strengthening phase to move to DFS and detailed engineering, as well as obtaining the final regulatory approvals.

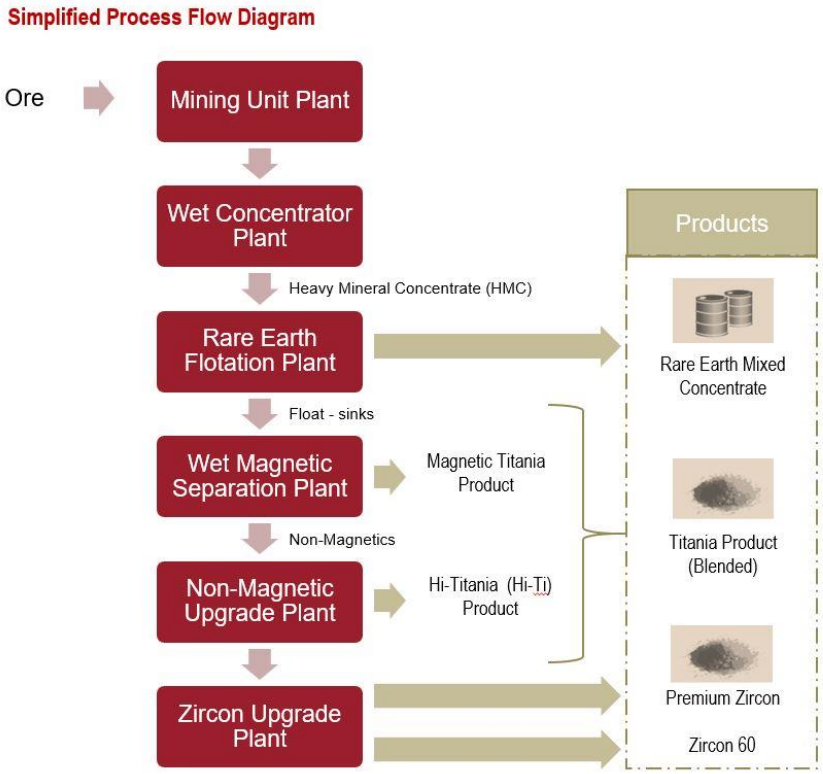

Figure 1. Donald Project's simplified process flow diagram

Astron is investigating a staged and scalable development approach for the Donald Minerals Sands Project. In this manner, capital expenditure can be phased, providing flexibility in determining production settings to reflect market conditions. The staged approach will also facilitate the progressive securing of regulatory approvals for the project.

Subject to the outcome of detailed engineering, the development concept comprises two stages of mining, concentrating and processing of heavy mineral ore to produce final products of zircon, a blended titanium dioxide (titania) product, and a rare earth concentrate. Progressive rehabilitation of areas disturbed by mining will be carried out as mining proceeds.

Stage 1 operations will commence in ML5532 and are planned to access proved and probable ore reserves of 194Mt at 5.3% HM containing approximately 10.2Mt of HM, including 1.95Mt of zircon. While production settings are subject to finalisation, indicative Stage 1 production is expected to be approximately 120ktpa of zircon (of which 80%, or 95 ktpa, will be a ~66% ZrO_2 premium grade product); 200ktpa of a blended (~60% TiO_2) titania product; and 16ktpa of mixed rare earths concentrate.[1] The ore reserves of ML5532 can sustain approximately 16 years of operations.

The currently envisioned Stage 2 operations represent a duplication of Stage 1 mining, concentrating and processing activities and are planned to encompass the remaining area of RL 2002. The timing of the commitment to stage 2 will be subject to prevailing market conditions as well as securing the necessary regulatory approvals and land access arrangements. In total, Stage 1 and Stage 2 encompass accessing Ore Reserves of 602Mt at 4.8% HM, representing 29Mt of HM containing approximately 5.4Mt of zircon, which can sustain operations for over 40 years.[2]

The southern area of the resource, covered by RL 2003 (the Jackson deposit), is available for subsequent development. It has JORC compliant indicated and inferred Mineral Resources of 823 Mt of ore with an average HM grade of 4.8% which contains in situ resources of 7.5Mt of zircon, 12.6Mt of ilmenite, 6.7Mt of Leucoxene, 3.6Mt of Hi-Ti (including Rutile) minerals and 0.8Mt of rare earth elements.[3]

Astron has received the main regulatory approvals for Stage 1, including an Environmental Effects Statement (EES), with a Work Plan still to be submitted and granted. The company has also secured water rights sufficient to meet the needs of the project. The EES allows production for a period of approximately 8 years, based on the current mine plan. Current project planning envisions an on site facility for the processing of HMC to produce final products of zircon, titania and rare earth elements. The local production of these minerals is expected to significantly enhance project value. Regulatory consultation is planned to recommence in the coming quarter, specifically in relation to the production of the Rare Earth component.

The Donald Mineral Sands Project is expected to make a significant contribution to the employment, economic and social benefits for the regional community as well as to the Victorian and national economies.

Main Work Streams

The technical and market evaluation programmes for the Donald Project were progressed during the June Quarter . These are a precursor to detailed engineering, a detailed feasibility study (DFS) and the formulation of the investment case for project funding, and development approval by Astron's Board. The main work streams included the following:

[1] See ASX announcement 14 May 2021, "Clarify Donald Mineral Separation Metallurgical Testwork"

[2] See ASX announcement 18 Feb 2021, "Donald Project Ore Reserves Statement Update"

[3] See ASX announcement

Geology, including Ore Reserves and Mineral Resources

An Ore Reserve Statement was issued on 18 February 2021. This statement is an update of the 2012 Ore Reserve statement (refer ASX Release 18 June 2012) and the 2016 Mineral Resource Statement (refer ASX Release 7 April 2016). The revised ore reserve was prepared by independent mining consultant AMC Consultants (AMC) and incorporates and updates mine planning studies previously completed by AMC.

A number of work streams are in progress in relation to refining and updating geological and metallurgical information for incorporation into the new development concept for the DFS.

Metallurgical Test Work

Mineral Technologies (MT), the global leader in mineral sands processing technologies, was commissioned by Astron to undertake the design, construction and operation of a pilot wet concentration plant to treat approximately 1,000 tonnes of Donald project ore, recovered from a test pit on RL2003, and produce a heavy Mineral Concentrate. MT also carried out further processing of the HMC to produce final products.

The results of this work were released to the ASX on 30 March.[4]

MT commenced further pilot plant scale, lock-cycle flotation and heavy mineral sands concentrate upgrade processing during the quarter. It is planned that Astron, through its current work programme with MT, will produce a quantity of final products from existing heavy mineral concentrate which will complement existing sales kits and product samples. Results for this programme of works are expected Q4 2021.

Project Management Resourcing

Astron advised, as part of its March quarter report, that it had undertaken an exercise to identify critical project resources for the next stage of the evaluation of the Donald project. This included determination of the necessary management and technical resources to lead the project through the engineering, tendering, execution and operation phases.

During the June quarter, Projectworx Pty Ltd, a project management and engineering consultancy skilled in mineral sands project development and operations, was engaged as a key resource to provide project management and planning expertise to the Donald project management team. Projectworx Pty Ltd provides international and Australian mineral sands experience covering all phases of project development, from feasibility studies to project execution and appropriately supported multi-discipline engineering and project management expertise.

[4] See ASX announcement, 30 Mar 2021, “Donald Mineral Separation Metallurgical Testwork Update”

Project Development Activities

A detailed project schedule has been developed with key milestones, including:

- Engineering peer review and coordination of DFS engineering design;
- overall DFS development and project cost outcomes;
- a process for collaboration across internal teams and external consultants for the purpose of progressing necessary approvals related to: environmental approvals, tailing and slimes management, infrastructure and metallurgy test results and pilot study outcomes;
- development of detailed packaged scope documentation for power, roads, communications, water pipeline design consultants; and
- front end engineering (FEED) requirements leading to the ultimate construction and project management tendering arrangements.

As part of this work, MT has continued to develop DFS engineering packages for the following project components:

- Mining Unit Plant (MUP);
- Wet Concentrator Plant (WCP);
- Concentrate Upgrade Plant (CUP); and
- metallurgical flow sheet and floatation piloting (monazite and xenotime recovery).

An updated project risk register documentation is being developed to incorporate the project's current concepts and updated execution approach.

Regulatory Approvals and Engagement

Regulatory approvals for the first stage of the planned development of the Donald Mineral Sands deposit on ML 5332 are well advanced. The key outstanding regulatory approval is the Work Plan.

AECOM Consultants is developing a regulator engagement process to support the Project in relation to the modification of the original design concept to incorporate the on site processing of HMC to final products into the work plan.

Test Pit Rehabilitation and Monitoring – RL2003

Routine monitoring of the test pit, excavated during 2018 and subsequently rehabilitated back to the original land form, continued and included soil testing and crop yield data analysis by an agronomist.

Market Studies

Reviews of market demand and forecast pricing have continued, as has associated relevant industry engagement.

Product testing and Customer Offtake Arrangements

Pilot flotation and concentrate upgrade process testing will be carried out by Mineral Technologies late in the third quarter of 2021. Product samples from this work will be made available for customer testing as well as for establishing potential marketing and off-take opportunities. Initial engagement with a number of potential customers has commenced across all final products.

Stakeholder Engagement and Other

A Community Reference Group (CRG) terms of reference has been developed and invitations will be issued to identified community groups. It is expected that the CRG will transition into the Environmental Review Committee (ERC) as the project progresses. The timing for initial meetings of the CRG is to be determined.

Astron made a virtual presentation to the students of registered Victorian regional schools as part of the Victorian Careers Expo. The presentation covered the transition from school to careers in operations, trades, administration and engineering as part of Astron's efforts to encourage young people to consider career pathways in the mining and minerals processing sectors.

Funding

Astron has continued to consider and evaluate the most appropriate funding options for the Donald Mineral Sands Project. No specific actions were undertaken during the June quarter.

PRODUCTION

As the project is at an advanced evaluation stage, no commercial production activities were conducted during the quarter.

EXPENDITURE SUMMARY

Total expenses incurred were:

Production Activities	June Qtr 2021	YTD 2021 FY
	Nil	Nil
Development Activities	June Qtr 2021	YTD 2021 FY
	$726,767	$1,059,161

Niafarang Mineral Sands Project, Senegal

OVERVIEW

Astron Corporation owns a licence issued under Order Number 09042/MIM/TMG via its subsidiary Senegal Mineral Resources. (SMR).

The Niafarang project is located within an exploration licence zone covering an area of 397 square kilometres along a 75 kms stretch of the Casamance coast of Senegal, West Africa. The project is designed to access high-grade coastal mineral sands deposits using simple dredge mining and concentrating methodologies. The ore is high-grade coarse-grained sands producing high quality ilmenite and zircon.

Environmental and Mining licences were awarded in 2017. A small mining licence (SML) was initially awarded to Astron and transferred to its Senegalese based subsidiary. Mining operations will involve surface mining with little or no overburden, utilising conventional mining equipment as well as spiral wet concentration to produce a heavy mineral concentrate. Astron has acquired all of the necessary mining equipment for the first stage of the project. Extensive community and stakeholder engagement has occurred.

PRODUCTION

There was no production activity during the quarter.

DEVELOPMENT

Given the priorities associated with the Donald Mineral Sands Project, minimal activity was conducted during the June quarter in relation to the Niafarang project. Arrangements are required to be finalised for the temporary resettlement of a small localised population to allow the commencement of mining activities. Subject to completion of outstanding negotiations with the Government of the Republic of Senegal, production could commence quickly, with minimal capital expenditure.

EXPENDITURE SUMMARY

Total expenses incurred:

Production Activities	June Qtr 2021	YTD 2021 FY
	Nil	Nil
Development Activities	June Qtr 2021	YTD 2021 FY
	$54,855	$146,651

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

Astron China

Astron Corporation, through its subsidiary Astron Titanium (Yingkou) Ltd, owns and operates a mineral sands processing plant in Yingkou, Liaoning, China. Subsequent to the end of the quarter, at a meeting on 19 July 2021, the securityholders of Astron Corporation approved the demerger of Astron Titanium (Yingkou) which will allow Astron Corporation to focus almost exclusively on development of the the Donald Minerals Sands Project. Following implementation of the demerger in the coming quarter, the Chinese interests of Astron Corporation will be held by a new company, Astron Titanium (Yingkou) Hong Kong Holdings Ltd, which will be independent of Astron Corporation.

MINERAL SEPARATION PLANT (MSP)

Astron has concluded its United States operations, where previously feed material for the mineral separation plant was sourced, and remains in active discussions with a number of different supplies for the sourcing of new feedstock supplies.

Astron's titanium dioxide (TiO_2) processing plant in Yingkou during the June quarter produced 1,781 tonnes of rutile, (an increase of 14.2%) and 9,041 tonnes of rutile for the 12 months to 30 June 2021. During the quarter, the plant focused on further recovery of previous work-in-progress material, which has a lower feed grade. It is expected that the lower feed grade material and the decreasing feedstock volume had an adverse effects on the final product quality and the cost of production for the company.

During the June quarter, Astron sold 1,682 tonnes of rutile into the Chinese market (a decrease of 33.0% from the previous quarter) principally for customers using the product for the pigment and welding rod markets bringing the total sales to 11,524 tonnes for the 12 months to 30 June 2021.

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About Astron

Astron Corporation Limited (ATR: ASX) is an ASX listed company, with extensive (30 years+) experience in mineral sands processing, technology and downstream product development, ., as well the marketing and sale of zircon and titania (titanium dioxide) products, most notably in China. The company's prime focus is upon the development of the large, long-life and attractive zircon assemblage Donald mineral sands deposit in the Murray Basin, Victoria. Donald has the ability to represent a new major source of global supply in mineral sands. Astron is also the owner of the Niafarang mineral sands project in Senegal, West Africa. Niafarang is a high-grade coastal mineral sands deposit, planned to be developed using simple dredge mining and processing methodology.

In July 2021, Astron demerged its downstream operations into a separate, unlisted, Hong Kong domiciled company. The objective was to allow the ASX-listed Astron Corporation focus on its upstream exploration, development and production opportunities, based initially on the commercialisation of the Donald deposit. The separate downstream operations include a mineral sands trading operation based in Shenyang, China and operates a zircon and titanium chemicals and metals research and development facility in Yingkou, China.

COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results and Mineral Resources for the Donald Project is based on information first reported in previous ASX announcements by the Company, as listed in this announcement. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the original announcements continuing to apply and have not materially changed. The information in this document that relates to the estimation of the 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. 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 prematurely modified from the relevant original market announcement.

The information in this document that relates to the estimation of the Ore Reserves is based on information compiled by Mr Pier Federici, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and Australian Institute of Geoscientists. Mr Federici is a full-time employee of AMC Consultants Pty Ltd and is independent of Astron. Mr Federici has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. The Company confirms that the form and context in which the Competent Persons' findings are presented have not prematurely modified from the relevant original market announcement.

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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.

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