

27<sup>th</sup> September 2021

## Astro Secures 100% Ownership of High-value Jack Track Mineral Sands Deposit

### Key Highlights

- > **Astro has increased its ownership in the Jack Track deposit to 100% by acquiring the 80% share held by Iluka Resources Limited (“Iluka”) (subject to Ministerial consent)**
- > **The Acquisition significantly increases the Governor Broome Project (100% by Astro) total JORC Resource to 77Mt at 4.6% Heavy Minerals (HM) (Indicated and Inferred), with further upside apparent**
- > **Jack Track Acquisition improves the viability of the Governor Broome Project for Astro and will assist in moving the asset towards commercial production**
- > **The HM assemblage of the Jack Track deposit mineralisation is of high value, containing 75% ilmenite, 10.8% zircon, 2.4% rutile, and 6.8% leucoxene**
- > **Attractive Acquisition terms: \$0.7 million in cash, a 1% royalty and a last right of refusal in favour of Iluka over product produced from the Jack Track deposit**
- > **A Mine Scoping Study will now commence and run in parallel with drilling to upgrade the current JORC Resource to Indicated status**
- > **Funding of the Acquisition, the work program to upgrade the JORC Resource and the Scoping Study are covered by Astro’s existing cash reserves**
- > **New tenement granted to Astro plus an application for another tenement along the strike of Jack Track deposit to further increase Governor Broome Project foot-print**

Astro Resources NL (ASX:ARO) (“**ARO**”, “**Astro**” or “the **Company**”) is pleased to announce that it has acquired, subject to Ministerial consent, the 80% interest held in the Jack Track tenement by Iluka Resources Limited (“**Iluka**”) (the “**Acquisition**”). Upon completion of the Acquisition, Astro will hold a 100% interest in the Jack Track tenement.

**Astro's Chairman, Jacob Khouri commented:** *"I am thrilled that Astro has successfully acquired the remainder of the high-grade Jack Track deposit, bringing the project back to 100% Astro ownership.*

*"The addition of the Jack Track deposit to our Governor Broome Project is a significant upgrade for the Project, not only because of the additional tonnage of mineralisation, but because of the relatively higher percentage of high-value heavy minerals contained within the mineralisation.*

*"We believe that the Acquisition of the remaining 80% of Jack Track significantly enhances the economic viability of the Governor Broome Project as a whole, which we will assess with a Mine Scoping Study to commence this year. The Astro Board is confident that Astro can progress the Governor Broome Project to commercialisation and the Board is committed to moving the enlarged Project quickly forward to production."*

## Overview

Astro has been in a joint venture with Iluka over the Jack Track tenement (R 70/58) since 2014, with Iluka holding an 80% interest in the joint venture. The Jack Track tenement directly adjoins to Astro's wholly owned Governor Broome tenement (R 70/53) containing the Governor Broome HM deposits (Figure 1).

Since 2014, Iluka has conducted extensive exploration work, discovering the Jack Track deposit and defining a JORC Resource of 18.8Mt at 4.7% HM. Astro has now concluded negotiations for the purchase of Iluka's 80% interest in the Jack Track tenement as well as its adjacent tenement EL 70/5200, located to the north of Jack Track (Figure 1). The addition of the Jack Track deposit significantly increases Astro's wholly owned resource for the Governor Broome Project to 77Mt at 4.6% HM (Table 1).

In addition, Astro has been granted a new Exploration Licence, EL70/5826, and has applied for another Exploration Licence, E70/5872, which together cover potential strike extensions of the known mineralisation from Jack Track.

Following the Acquisition from the ASX listed entity and the granting of E70/5826, the wider Governor Broome Project will cover 110km<sup>2</sup>, which will increase to 171km<sup>2</sup> upon the grant of E70/5872.

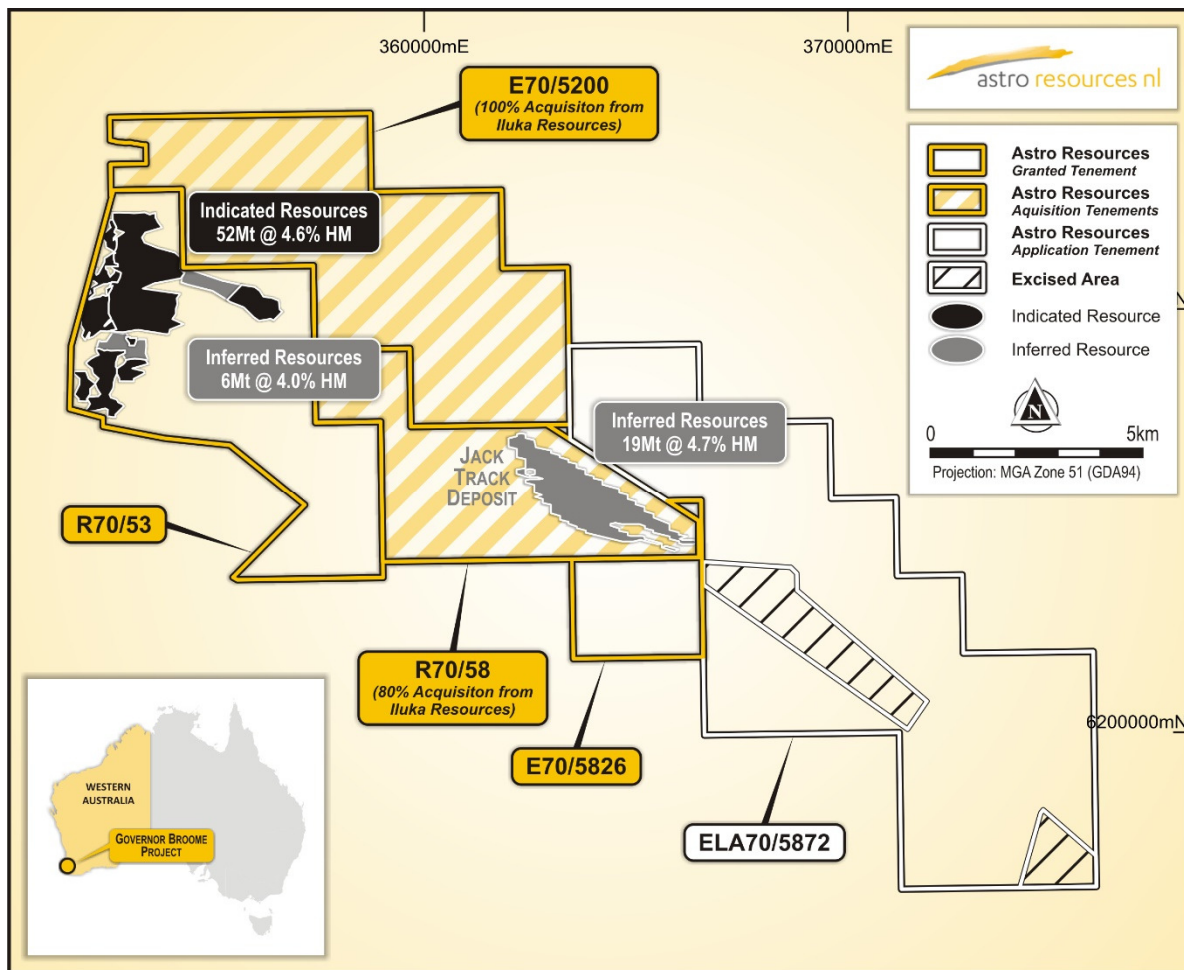


Figure 1. Governor Broome Project – tenements and JORC Resources

## Governor Broome Project Resources

Table 1; 100% owned Governor Broome Project (including Jack Track) Resources

Deposit	Category	Tonnage (Mt)	HM (%)	HM Adj <sup>1</sup> (%)	Slimes (%)	Oversize (%)	Ilmenite % (53% TiO <sub>2</sub> )	Secondary Ilmenite % (63% TiO <sub>2</sub> )	Leucoxene % (85% TiO <sub>2</sub> )	Rutile %	Zircon %
West	Indicated	8	5	4.2	13	7.5	n/a	n/a	n/a	n/a	n/a
	Inferred	3	3	3	14	3	n/a	n/a	n/a	n/a	n/a
East	Indicated	3.5	4.2	4.2	12	3.7	n/a	n/a	n/a	n/a	n/a
	Inferred	3	3	3	14	3	n/a	n/a	n/a	n/a	n/a
South	Indicated	11	5.6	4.4	15	11	44.2	2.5	2.2	1.2	4.4
	Inferred	2.5	6	4.5	16	9					
North	Indicated	30	4.9	4.9	12	8.1	51.8	5.4	5	1.6	4.7
Jack Track	Indicated	-	-	-	-		n/a	n/a	n/a	n/a	n/a
	Inferred	18.8	4.7	4.7	7.7	n/a	75	-	6.8	2.4	10.8
<b>Total</b>	<b>Indicated</b>	<b>52</b>	<b>5</b>	<b>4.6</b>	<b>13</b>	<b>8.5</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>
<b>Total</b>	<b>Inferred</b>	<b>25</b>	<b>4.5</b>	<b>4.5</b>	<b>15</b>	<b>6</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>	<b>n/a</b>

As noted from Table 1 above, inclusive of the Jack Track tenements, Astro's wholly owned Governor Broome Project's HM deposits total 52Mt of Indicated Resources at 4.6% HM and 25Mt of Inferred Resources at 4.5% HM.

Importantly, the HM assemblage of the Jack Track deposit mineralisation is of high value, containing 75% ilmenite, 10.8% zircon, 2.4% rutile, and 6.8% leucoxene. The ilmenite contains 59.4% TiO<sub>2</sub> (Astro ASX announcement 26<sup>th</sup> April 2016 –“**Announcement**”) and as such, is classified as chloride ilmenite which sells at a premium to sulphate ilmenite. The Company confirms that subsequent to the Announcement that it is not aware of any new information or data that materially affects the information included in the this announcement and that the estimates of the mineral resources and all material assumptions and technical parameters underpinning the estimates in the Announcement continue to apply and have not materially changed.

The Governor Broome Project HM deposits were estimated at a cut-off grade of 2% HM (Astro ASX announcement 26<sup>th</sup> April 2021), whereas those for the Jack Track deposit were estimated at a cut-off grade of 3% HM.

Astro intends to re-estimate the Jack Track deposit's Inferred Resources to that advised in the Announcement at the lower cut-off grade of 2% HM, which TZ Minerals International Pty Ltd (“**TZMI**”) has indicated is potentially an economic cut-off grade for the Governor Broome Project's North Resource (Astro ASX announcement 16<sup>th</sup> October 2019).

Astro intends to carry-out an infill drilling program as soon as possible to upgrade the Jack Track deposit's Resource to the Indicated category. This drilling is expected to occur early in 2022. In the meantime, preparations will be made to secure the necessary landowner consents and other regulatory approvals.

Drilling is also planned to test lightly drilled areas to the west and south of the Jack Track deposit within R70/58.

ARO estimates that current heavy mineral prices are in the order of US\$1,350/t for zircon, US\$1,200/t for rutile, and \$300/t for sulphate ilmenite.

## Scoping Study

A Scoping Study will now be completed incorporating both the Governor Broome Project's and Jack Track's deposits. The study will update the previous analysis of the Project which was based upon the 30Mt at 4.9% HM of Indicated Resources, against the present total of 52Mt at 4.6% HM. The new study will also be based upon the encouraging metallurgical results recently received from test-work on a bulk-sample of mineralisation from the Governor Broome Project.

The Acquisition is expected to positively impact the potential development of the Governor Broome Project which will be reflected in the Scoping Study, due to the following:

1. significantly increased Resources will enable longer mine-life and/or increased mining rate;
2. high-value Jack Track mineralisation will enable a reduced capital payback time; and
3. increased Resources will result in lower capital expenditure and overheads per tonne mined.

## Exploration Upside

Within the tenements acquired from Iluka, there is potential to discover additional mineralisation to support a potential mine. This potential includes:

- the Jack Track deposit, where drilling to date has not closed off the mineralisation to both the northwest along the trend of the mineralised strands and to the south;
- E70/5200, the southern portion of which is along strike from the Jack Track deposit and the Governor Broome Project's East deposit within R70/53. This area has not been fully explored by drilling;
- E70/5826, the northern portion of which is along strike from the Jack Track deposit. This area has not been drill-tested other than along the two bounding road-sides; and
- ELA70/5872, which has had minimal drill-testing, but which is along a strike from known mineralisation.

As soon as the necessary approvals have been granted, Astro intends to air-core drill test these areas.

## Terms of the Acquisition from Iluka

Set out below are the key terms of the Acquisition:

- consideration for the ASX's listed entity's interest in the Jack Track tenement (R70/58) and adjacent tenement EL70/5200:
  - cash payment of \$700,010; and
  - 1% royalty on gross revenue with the only deduction for Goods and Services Tax for any Heavy Mineral Concentrate or saleable product;
- a Last Right of Refusal (LROR) in favour of Iluka's former interest:
  - applies only to product produced from R70/58 and EL70/5200;
  - the former joint venture partner (Iluka) and now owner of the royalty as ten business days in which to accept or reject Astro's offer;
- sale and purchase agreement is subject to customary terms and conditions;
- completion is to occur upon Ministerial consent and this is expected to take place within the next 1 to 3 months. The contract permits Astro to liaise with key stakeholders and to prepare and submit a Programme of Works with the Department of Mines during the period prior to completion.

The royalty agreement is also subject to customary terms and conditions, including rights in favour of Iluka to request information and audit and dispute resolution clauses.

## Funding

Funding of the Acquisition and the work outlined above will be covered by Astro's existing cash reserves. Specifically, the Company advised the market on 22 February 2021 that it would invest \$1.3 million on the pre-feasibility study as part of the program for the Governor Broome Project. The Company will use those funds to effect the Acquisition, undertake drilling for the Resource upgrade and exploration work and progress the mine scoping study for the Project.

## BOARD APPROVAL

This announcement has been approved by the Board of Astro.

**ENDS**

## More Information

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The information in this report as it relates to Mineral Resources and Exploration Results for the Governor Broome Project is based on information compiled by John Doepel, a Director of Continental Resource Management Pty Ltd (CRM), who is a member of the Australasian Institute of Mining and Metallurgy. Mr Doepel has sufficient experience in mineral resource estimation relevant to the style of mineralisation and type of deposit under consideration 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 Doepel consents to the inclusion in this announcement of the information in the form and context in which it appears.