

21st December 2020

# First Stage of Bulk Testwork Provides Positive Results at Governor Broome Project

# **Key Highlights**

- 2.6 tonne bulk sample test-work commenced for the Governor Broome Heavy Minerals Project, WA
- > Entire sample processed through the feed preparation circuit with no indication of potential issues with slimes within the mineralisation
- > The test sample was readily processed using the pilot scale conventional mineral sands processing equipment as a proxy for a full-scale feed preparation plant
- > Further processing will be carried out to investigate separation performance over a gravity concentration circuit and subsequent production of final mineral products
- > Final results for the metallurgical test work are expected to be announced in February 2021
- Updated Scoping Study to be carried out in 2021 incorporating the results from the metallurgical test work

Astro Resources NL (ASX:ARO) ("ARO", "Astro" or "the Company") is pleased to provide the following update on the current bulk sample metallurgical testwork being carried out on a 2.6t bulk sample from the West Deposit of its Governor Broome Heavy Mineral Project, located in the South West of Western Australia.

Astro's Chairman, Jacob Khouri commented "The results provided from the first stage of metallurgical test work are highly encouraging and is a further step in the Company's quest to progress the Governor Broome towards project development. We wish to thank our shareholders for their support in 2020 and look forward to providing further updates on our work programs in the new year."

Of great significance, the Company notes that the entire sample was readily processed through a trommel and a desliming circuit, without incident or indication of potential processing difficulties arising from the fine clay fraction (slimes) associated with the mineralisation.

The Governor Broome testwork commenced with the processing of the 2.6t sample through a pilot scale trommel and desliming circuit at Allied Mineral Laboratories (Perth) (AML).

Preliminary results demonstrated that the material was readily processed using the pilot scale conventional mineral sands processing equipment as a proxy for a full-scale feed preparation plant. The sand fraction (-2mm +0.045mm), which contains the valuable heavy minerals, will be further processed to investigate separation performance over a gravity concentration circuit and subsequent production of final mineral products in a dry mineral separation circuit.

The planned testwork procedure consists of three stages:

- > Process development testwork on the West Deposit bulk sample
- > Sighter testwork on the second bulk sample taken from the East Deposit
- > Mineralogical characterisation of twenty separate Heavy Mineral (**HM**) concentrates obtained from the drilling of the West, East, and South Deposits

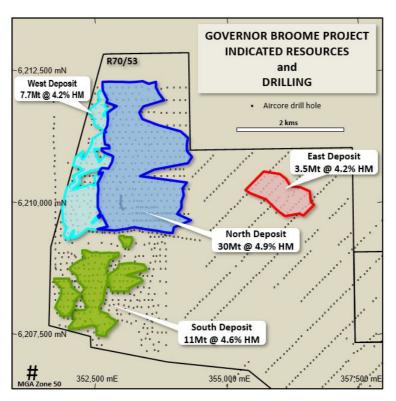


Figure 1. Governor Broome HM Deposits

The initial processing produced three products: Oversize (+2mm), Sand (-2 +0.045mm), and Slimes (-0.045mm).

The sand fraction will be subject to further testwork to enable the development of an optimised process flowsheet for a full-scale wet concentrator plant. The slimes fraction will be subject to slimes characterization test-work.



The heavy mineral concentrate recovered from the sand fraction will undergo further process testwork to enable development of an optimised process flowsheet as well as provide an indication of overall mineral recoveries and potential quality of the final products.

Astro should receive the final results from the testwork during February 2021.

Samples of the three fractions separated from the bulk sample are shown in Figures 2 to 4. The proportions of the fractions were: Oversize 2%, Sand 86%, and Slimes 12%.

The Heavy Mineral content of a <0.6mm split of the sand fraction was 5.6%.



Figure 2. Sand Fraction

Astro is pleased to report that the slimes fraction showed excellent initial settling characteristics, demonstrated clearly in Figure 4 which was photographed only an hour after a sample of the slimes was placed in a measuring cylinder.

The bulk sample was sourced from the full depth of the modelled HM mineralisation in all the air-core holes drilled by Astro into the West Deposit during early 2020 and, as such, is representative of its HM mineralisation. The hole locations are shown on Figure 5.

The test-work program is designed to enable Astro to complete an updated Scoping Study at Governor Broome as soon as possible. The updated Scoping Study (from Astro's previous 2018 and 2019 Scoping Study assessments) is required due to the Project's Indicated Resources in the North Deposit increasing from 30Mt @ 4.9% HM to 52 Mt @ 4.6% HM. At this stage it is anticipated that the Scoping Study will commence in Q1 2021.





Figures 3 and 4.

Left: Oversize Fraction

Right: Slimes Fraction after one hour, demonstrating excellent initial settling characteristics

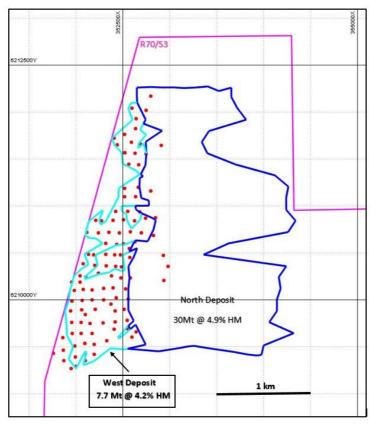


Figure 5. Bulk Sample Drill-holes (red)



#### **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 Deposit 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.

