

22 May 2023

GEOPHYSICAL SURVEY COMMENCES TARGETING BASE METAL POTENTIAL AT RANKEN PROJECT

Ranken is highly prospective for sediment-hosted zinc-silver-lead mineral systems

Key Highlights

- > **Geophysical Gravity and HVSr Passive Seismic surveying underway at Ranken Project.**
- > **Mapping of sediment-hosted mineral systems by Geoscience Australia sediment-hosted has highlighted the Ranken Project area as highly prospective for clastic-dominated zinc-silver-lead deposits.**
- > **Gravity and Passive Seismic surveys are designed to identify zones of density variation within prospective host rocks and establish depth of cover, to identify drill targets.**
- > **Surveys co-funded under NT Government Geophysics and Drilling Collaboration Grants.**

Astro Resources NL (ASX: ARO) ("ARO", "Astro" or "the Company") is pleased to advise that it has commenced geophysical surveying at its Ranken Project area, in the eastern part of its 80% owned Georgina IOCG Project in the Northern Territory (Greenvale Energy Ltd (ASX: GRV) owns a 20% interest in the project).

The commencement of the survey follows the recent release of Geoscience Australia's *National mineral potential for sediment hosted zinc-lead mineral systems in Australia* mapping and extended abstract, which highlights the Ranken Project area as being highly prospective for sediment-hosted base metal mineralisation¹. The two surveys will provide insight into the density (gravity) characteristics of the basement rocks at Ranken, potentially identifying drill targets, as well as estimates of depth to basement from the passive seismic lines.

Astro's Executive Chairman, Tony Leibowitz, commented: *"The experts at Geoscience Australia have indicated the highly prospective nature of the Ranken tenure through their recent mapping. This validates the systematic approach being employed by our technical team to exploration, and we look forward to advancing exploration in this exciting part of the Georgina IOCG Project."*

Ranken Project Area

The Ranken Project area is located to the east of the main part of the Georgina Project, close to the NT-Queensland border. Possessing different interpreted basement geology, the Ranken area is interpreted to cover host-rocks prospective for sediment-hosted base metal deposits such as the world-class Century and Mount Isa deposits².

¹ National mineral potential for sediment hosted zinc-lead mineral systems in Australia Version 1.0, J. Cloutier et al., Geoscience Australia, 2023

² ASX: ARO 3 April 2023 'Significant polymetallic anomalism intersected at Georgina IOCG Project, NT'

The co-funded geophysical surveying is designed to identify gravity (density) anomalies and establish depth to prospective basement rocks. The survey, which had been substantially delayed as a result of the longer than average monsoonal wet season, is due to be completed by early June.

Geoscience Australia mapping highlights Ranken as highly prospective

Mid-March saw the release of new nationwide mineral potential maps from Geoscience Australia, which assesses for the prospectivity of four types of sediment-hosted base metal mineral systems across Australia. Astro has previously highlighted the prospectivity of the Ranken Project area (EL32285 and EL32286 in Figure 1) for Century-style and Mount Isa-style sediment hosted deposits², and confirmation of this assessment by Geoscience Australia further strengthens the rationale underpinning the geophysical gravity and HVSr passive seismic surveys. The mapping, shown in Figures 1 and 2, predicts mineral potential via a 'heat map' style whereby the hotter the colour the more prospective the area.

The study assessed for potential for clastic-dominated siliciclastic carbonate, clastic-dominated siliciclastic mafic, Mississippi Valley-type and Irish type sediment hosted deposits, using a Mineral Systems approach which considers the source of metals and fluids, energy sources and fluid flow drivers, fluid flow pathways and depositional mechanisms¹. The Ranken area is most prospective for the clastic-dominated sub-type of deposits, with major deposits including Hilton-George Fisher (24.2Mt contained Zn and 12.4Mt contained Pb), Century (13.7Mt contained Zn and 2.0Mt contained Pb) and Mount Isa Zn-Pb (10.5Mt contained Zn and 9.0Mt contained Pb)¹. Each of these deposits also contain significant silver.

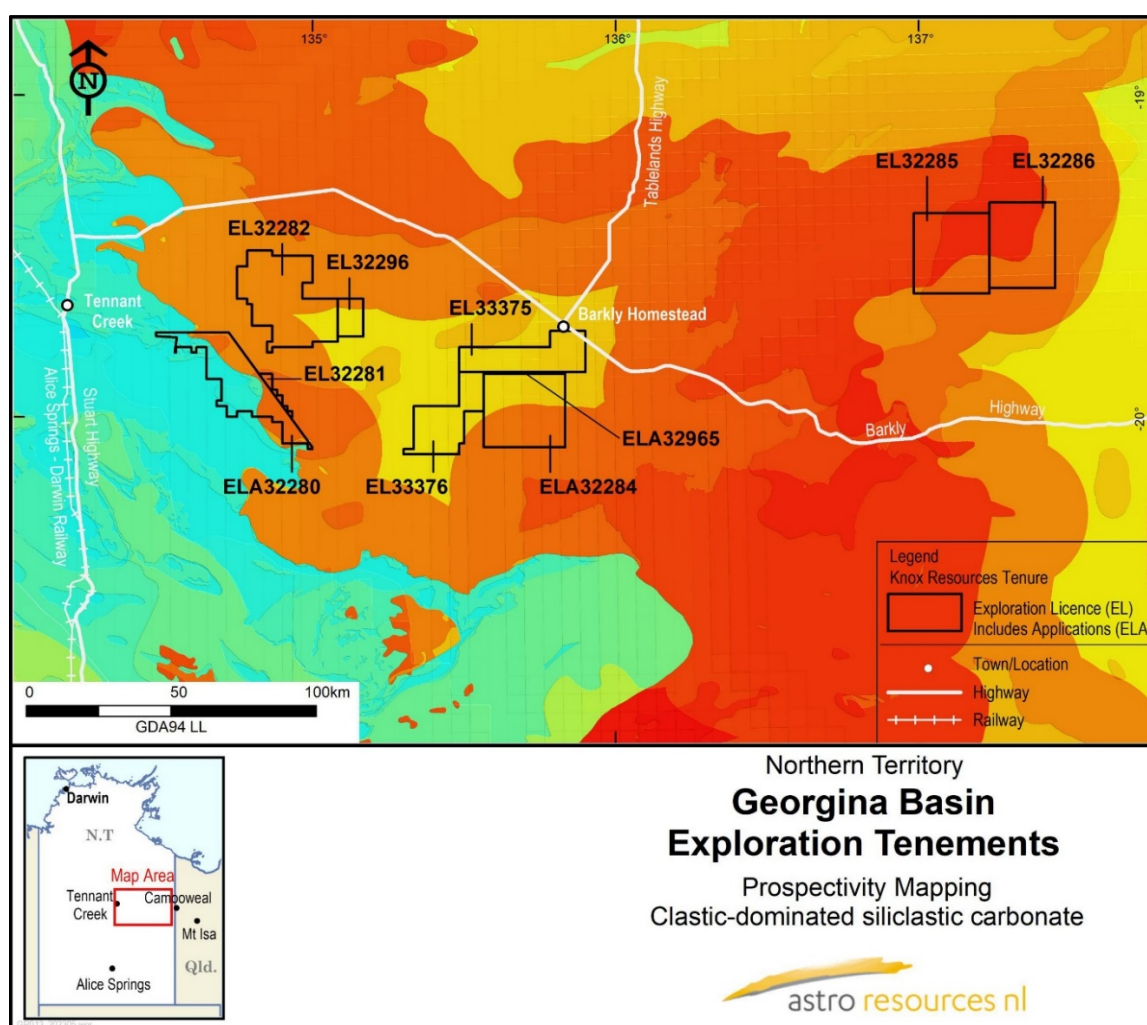


Figure 1. Georgina IOCG Project tenements and Geoscience Australia mineral potential 'heat map', with hotter colours more prospective - noting Ranken Project tenements EL32285 and EL32286 to the far east of the project.

Co-funding Grant Supports Georgina Exploration

The Ranken geophysical surveying is supported by an NT Government grant, following a successful application for grant funding under Round 15 of the Resourcing the Territory Geophysics and Drilling Collaborations Program. The Company is pleased to have secured the support of the NT Government in conducting these geophysical surveys, which will add to the geological understanding of this poorly explored, but highly prospective, part of the Northern Territory. The Company would like to acknowledge the Northern Territory Geological Survey for their continued support and their commitment to establishing the East Tennant Creek region as a Tier-1 exploration area.

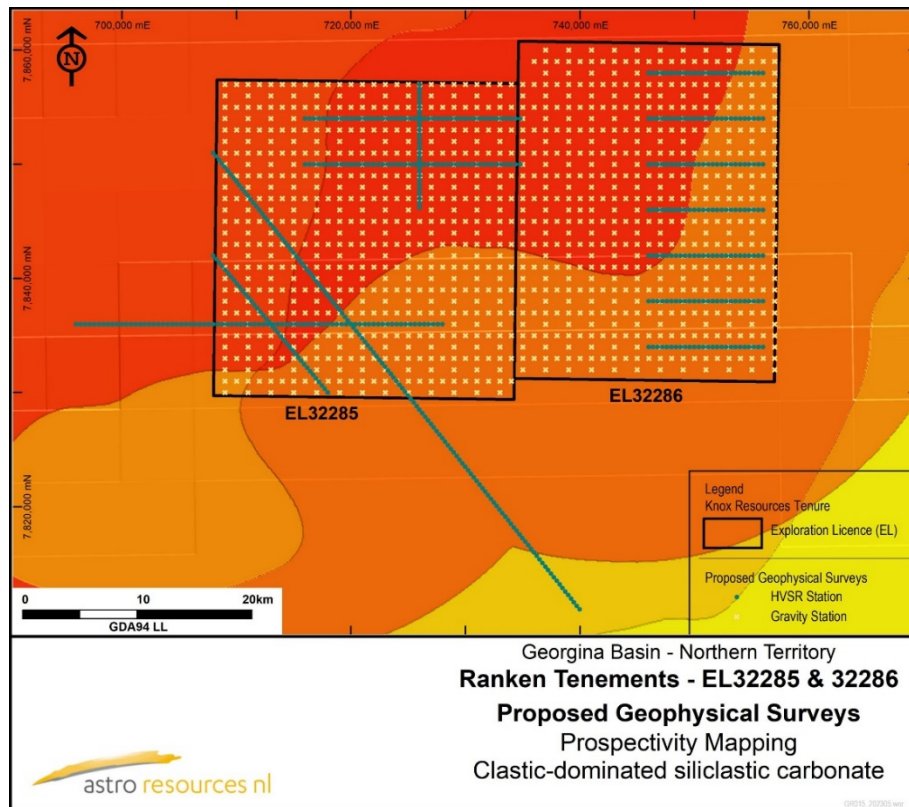


Figure 2. Ranken Project tenements, planned (yellow) gravity station and passive seismic (green) locations over Geoscience Australia mineral potential 'heat map', with hotter colours more prospective.

This announcement has been authorised for release by the Board.

More Information

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The information in this report that relates to Exploration Results associated with the NT Georgina project is based on information compiled by Mr Matthew Healy, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM Member number 303597). Mr Healy is a full-time employee of Astro Resources NL. Mr Healy 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 Healy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears