



Mineral Resource Estimate and Metallurgical Testing to Commence Caladão Project

HIGHLIGHTS:

- SRK Consulting has been engaged to commence JORC 2012 Inferred Mineral Resource Estimate (**MRE**) for both rare earth elements (**REE**) and gallium at the flagship Caladão Project
- Australian Nuclear Science and Technology Organisation (**ANSTO**) to commence metallurgical testing for both REE and gallium, aimed at optimising leach recoveries, impurity removal and precipitation testing
- Caladão will potentially be one of the only REE + gallium resources in the world
- China's recent ban on gallium exports has made it a high value critical metal of global strategic importance, currently over \$250,000 per tonne
- The MRE at Caladão will initially cover 35km² high grade mineralised drilled section of Area A and will follow on with the 25km² mineralised zone at Area B
- Only 15% of total Caladão Project area (400km²) has been drilled and is mineralised and the MRE will support optimal high grade step out and infill drilling zones for further resource confidence and scale expansion

Axel REE Limited (**ASX: AXL**, “Axel” or “the Company”) is pleased to announce that it has engaged globally recognised SRK Consulting (**SRK**) and ANSTO to commence its maiden Mineral Resource Estimate and metallurgical testing respectively, for both rare earth elements and gallium, at the high grade Caladão REE + Gallium Project in the State of Minas Gerais.

Managing Director, Dr Fernando Tallarico, said:

“We are very pleased to see this important next step in the Caladão Project’s development underway. We have so far achieved outstanding REE and gallium results across a potentially district scale system over 60km² and we are delighted to have globally recognised experts SRK and ANSTO on board to complete the maiden Mineral Resource Estimate and metallurgical testing.”

SRK will develop supporting documentation that will allow the Company to define its Maiden Mineral Resource Estimate (**MRE**) in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserve, The JORC Code 2012 Edition (**JORC**).

The strategy is designed to guide the next stages in the Caladão Project’s development and will outline the path for infill drilling to increase resource confidence or step-out drilling to explore adjacent areas for potential extensions.

The initial MRE will focus on Area A, with an area of over 35km² of high grade mineralised REE and gallium zones, with the option to extend the MRE into Area B to cover an additional 25km² of mineralised zones.

ANSTO has also been engaged to conduct comprehensive testing aimed at evaluating the extraction potential of ionically adsorbed REEs and gallium from our samples. The scope of work includes:

Desorption Response Diagnostic Testing (pH 4):

Desorption response diagnostic tests under classic ionic clay conditions (pH 4) to confirm the extractability of REE and gallium. These tests will be conducted on pulverized samples at a high liquid-to-solid (L/S) ratio to eliminate effects such as adsorption and co-precipitation, thereby indicating the maximum extraction achievable under these conditions. Additionally, concentrations of gangue elements like aluminium and iron will be measured, which must be addressed in a subsequent impurity removal step.

Sample Selection:

Recognising that REE extractability in ionic adsorption clay deposits varies with depth and spatial location, initial tests will assess variability across different depths from multiple drill holes.

Next Steps:

Should the diagnostic tests confirm the presence of ionically adsorbed REE and gallium, the next phase will involve preparing 3m composite samples from the favourable zones to develop and confirm a processing flowsheet. This will include determining optimal conditions for desorption, impurity removal, and mixed rare earth carbonate (**MREC**) precipitation. Solid/liquid separation characteristics, particularly of the clay material, will also be assessed.

About SRK Consulting

SRK Consulting is a global leader in mining and environmental consulting, offering expertise in mineral resource estimation across various commodities and deposit types. Their experienced geologists develop and review geological models and resource estimates, guiding projects from initial exploration through feasibility studies to production. By leveraging strengths in structural and ore deposit geology, geostatistical theory, and operational mining, SRK tailors its approach to each project. Services include mining and exploration data management, mineral analytical assay quality assurance and quality control (QA/QC), 3D geological and domain modeling, mineral statistical and geostatistical analysis, mineral grade estimation, and conditional simulation for resource estimation. Many of SRK's consultants are recognized as Competent or Qualified Persons under international reporting codes, ensuring adherence to global standards.

About ANSTO

ANSTO has extensive experience in rare earth process development with several rare earth experts in their team having ~30 years of experience, dating back to early work on the Mt Weld deposit (monazite mineralogy) in the early 1990s. Over the last 10 to 15 years, they have worked on numerous rare earth projects both in terms of process development, piloting (Peak Resources, Arafura Resources, ASM, Northern Minerals, Hastings Rare Metals, Mkango Resources, Iluka Resources, VHM) and providing expert advice.

ANSTO has experience in the processing of monazite (beach sand and weathered), bastnaesite, xenotime, apatite, parasite and synchysite, as well as from less frequently exploited rare earth sources such as ionic clays, clay-hosted rare earths, phosphogypsum and complex ores containing zirconium / niobium silicates. Process development work has been undertaken for projects in Australia and across the globe.

Their work has included all facets of rare earth process flowsheets, including acid leaching, sulfation baking, caustic conversion, alkaline roasting, selective precipitation, impurity removal, solvent extraction, ion exchange, process water treatment (softening) and chemical concentrate production. ANSTO are experts in the department and the management of radioactivity in rare earth process flowsheets.

Over the last 5 years, ANSTO expertise has been applied to an increasing number of ionic adsorption and clay-hosted REE projects, including the more advanced projects of Aclara (Chile), Serra Verde (Brazil), Ionic Rare Earths (Uganda), Australian Rare Earths (South Australia) and Meteoric Resources and Viridis Mining and Milling (Brazil). Work on these projects has included leaching/desorption, solid/liquid separation, impurity removal and rare earth precipitation, mineralogy, radionuclide department and removal, process modelling and mini-plant circuit operations. Although U and Th concentrations in clay deposits are perceived to be low, radioactivity (in the form of U and Th decay chain progeny) reporting to specific intermediate streams and the REE product is often an issue, which ANSTO has specifically addressed on a number of projects.

ANSTO has produced a range of separated light rare earth oxide (La, Ce, Nd, Nd/Pr) and mixed middle and heavy rare earth concentrates using solvent extraction. Product purities ranging from 99% (2N) to 99.9% (3N) have been achieved for several projects. A comprehensive modelling capability for these circuits, something which is unique in the industry, has also been developed. This knowledge has been applied to several scoping and higher level engineering studies, including SX circuit design (number of stages, circuit configurations, reagent consumptions), and techno-economic evaluation of processing options.

This announcement was authorised by the Board of Directors.

For enquiries regarding this release please contact:

Fernando Tallarico
Managing Director
fernando@axelreelimited.com.au

Investor & Media Relations
Andrew Willis
awillis@nwrcommunications.com.au

About Axel REE

Axel REE is a critical minerals exploration company which is primarily focused on exploring the Caladão, Caldas, Itiquira, and Corrente rare earth elements (**REE**) projects in Brazil. Together, the project portfolio covers over 1,105km² of exploration tenure in Brazil, the third largest country globally in terms of REE Reserves.

The Company's mission is to explore and develop REE and other critical minerals in vastly underexplored Brazil. These minerals are crucial for the advancement of modern technology and the transition towards a more sustainable global economy. Axel's strategy includes extensive exploration plans to fully realize the potential of its current projects and seek new opportunities.

Competent Persons Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves is based on information compiled by Dr. Fernando Tallarico, who is a member of the Association of Professional Geoscientists of Ontario. Dr Tallarico is a full-time employee of the Company. Dr. Tallarico 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. Dr. Tallarico consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Forward Looking Statement

This announcement contains projections and forward-looking information that involve various risks and uncertainties regarding future events. Such forward-looking information can include without limitation statements based on current expectations involving a number of risks and uncertainties and are not guarantees of future performance of the Company. These risks and uncertainties could cause actual results and the Company's plans and objectives to differ materially from those expressed in the forward-looking information. Actual results and future events could differ materially from anticipated in such information. These and all subsequent written and oral forward-looking information are based on estimates and opinions of management on the dates they are made and expressly qualified in their entirety by this notice. The Company assumes no obligation to update forward-looking information should circumstances or management's estimates or opinions change.

Reference to Previous Announcements

The Company confirms that it is not aware of any new information or data that materially affects the information contained in these announcements and, in the case of estimates of mineral resources, that all material assumptions and technical parameters underpinning the estimates in the announcements continue to apply and have not materially changed.