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Power commences Metallurgical and Mineralogical Studies for Morro do Ferro REE Project

Highlights

- **Metallurgical and mineralogical studies are underway to characterise rare earth host minerals and assess potential processing pathways at Morro do Ferro, Brazil.**
- **The work program is drawing on established processing technologies and standard commercial experience with bastnäsite mineralisation to guide flowsheet development for Morro do Ferro.**
- **100kg of drill samples have been sent for mineralogical assessment and metallurgical testing.**
- **Program is progressing and aims to;**
  - **establish mineral composition, associations;**
  - **and variability between drill holes and at different depths.**
- **Test work aims to develop a metallurgical flowsheet for a rare earth concentrate by the end of 2026.**
- **Test work will assess the potential to produce a concentrate enriched in higher-value magnet rare earths through selective recovery and rejection of cerium-rich material and gangue.**
- **Next steps: PQ-diameter drilling planned at MDF to provide additional samples for a larger metallurgical test program which is planned for 2027.**
- **In parallel, Power's drilling program at MDF is ongoing and aims to define a maiden Mineral Resource Estimate for the project.**

Power Minerals Limited (ASX: PNN | OTCQB: PEIMF) (hereafter referred to as "Power" or "the Company") is pleased to announce the commencement of metallurgical and mineralogical studies at its Morro do Ferro Rare Earth Project (MDF) in Minas Gerais, Brazil.

More than 100kg of drill samples have been selected for mineralogical assessment and metallurgical testing, in what represents another core workstream for the MDF Project.

Mineralogical examinations undertaken by Power to date have used scanning electron microscopy (SEM), field-emission SEM and electron probe microanalysis (EPMA) to investigate mineral composition and associations.

Preliminary examinations of samples from multiple depths have identified bastnäsite-group minerals and a cerium-bearing phase requiring further characterisation. These observations are

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broadly consistent with the mineral groups reported in limited historical work of near-surface material, which also reported minor amounts of rare earth phosphate minerals.

Further work is underway to establish individual mineral species, their relative abundances and their distribution between drill holes and at depth. The program is designed to characterise the minerals hosting the rare earth elements (REE) and guide metallurgical testing to assess recovery and potential processing pathways.

Power Minerals Chief Executive Officer Alistair Stephens said:

"Commencing this program is an important step in establishing the processing potential of Morro do Ferro. Our initial mineralogical observations provide a foundation to investigate the selective recovery of higher-value rare earths and opportunities to reject cerium-rich material and gangue.

"We are drawing on established rare earth processing technologies, with test work directed at understanding their suitability for Morro do Ferro's mineralogy. Our priority is to establish a sound technical basis for flowsheet selection, including recovery, concentrate quality and impurity management. This disciplined approach will guide the next stage of metallurgical testing and the project's broader development studies. We look forward to sharing details of material progress of the program."

Commentary

The identification of bastnäsite-group minerals provides a basis for evaluating established rare earth processing technologies. Bastnäsite has a long history of commercial processing, including at the major Mountain Pass Rare Earth Project in the United States, where the flowsheet incorporates flotation and leaching.

Power's approach is to assess the applicability of established processing methods to MDF, with the objective of developing a flowsheet using conventional equipment and reagents. The current test program will help determine the appropriate processing stages and operating conditions for the project's mineralogy, including mineral liberation, rare earth recovery, reagent requirements and impurity management.

Preliminary mineralogical observations indicate that rare earths at MDF occur within bastnäsite-group minerals and a separate cerium-rich phase, as cerianite. This distribution provides a basis to investigate opportunities for preferential recovery of minerals hosting higher-value rare earths while rejecting cerium-rich material and gangue.

Metallurgical testing will assess whether selective beneficiation can produce a concentrate enriched in the four critical REE's, neodymium and praseodymium, dysprosium and terbium, both in grade and as a proportion of total rare earth oxides (TREO). This approach aims to improve the composition of material entering downstream processing, with achievable enrichment and recoveries subject to mineralogical confirmation and metallurgical testing.

In the samples examined to date, rare earth mineralisation occurs within soft clay-rich material and is associated with magnetite. Variations in the elemental composition of the rare earth-bearing phases are being investigated to assess their significance for mineralogical variability and metallurgical response.

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These preliminary mineralogical observations will inform the selection and design of subsequent metallurgical tests.

Next Steps

Power will now undertake a PQ-diameter drilling program to obtain additional samples for a larger metallurgical test program, with this testwork planned for 2027. The Company intends to use its core handling facility near the MDF Project in the Poços de Caldas district, Brazil to support initial sample assessment and associated test work activities.

Authorised for release by the Board of Power Minerals Limited.

ENDS

For further information, please contact:

Power Minerals Limited
E: admin@powerminerals.com.au
T: +61 6385 2299

Additional information is available at www.powerminerals.com.au

About Power Minerals Limited

Power Minerals Limited (ASX: PNN) is an exploration and development company focused on advancing strategic critical minerals projects in South America. The Company's core assets include the Morro do Ferro Rare Earths Project in Brazil and the Salta Lithium Project in Argentina, supported by a broader portfolio of exploration and development assets.

Power Minerals is focused on systematically advancing these projects through exploration, resource definition, metallurgical testwork and development studies, with the objective of establishing commercially viable sources of critical minerals for global supply chains.