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Mineralogical study confirms niobium-rich pyrochlore at Santa Anna Project

Highlights

- Mineralogical study confirms high niobium content at the Santa Anna Niobium and Rare Earths Project, Brazil
 - The study returned pyrochlore mineral compositions of up to 73.9% Nb₂O₅ at Santa Anna, placing the analysed mineral toward the upper end of reported Nb₂O₅ compositions from selected major carbonatite-hosted niobium deposits globally
- Niobium at Santa Anna is hosted in Pyrochlore, a primary mineral source of niobium
- These mineralogical results are highly significant and will be used in planned metallurgical testwork programs
- The mineralogical study comprised 38 drill core samples from various Santa Anna drillholes and provided 118 analyses
- Additional geophysical surveys are now planned to better understand the distribution of the deposit's niobium mineralisation

Power Minerals Limited (ASX: PNN | OTCQB: PEIMF) ("Power" or "the Company") is pleased to announce that a petrographic and mineralogical study of drill core from the Santa Anna Niobium Project in Goiás State, Brazil, has confirmed that niobium is hosted in niobium-rich pyrochlore.

The Santa Anna intrusion is one of the most recent Alkaline Carbonatite Complex discoveries in Brazil, only identified in 2021 by regional geophysics. The circular complex is approximately 2.5km across and covered by thin soil. Since 2025 Power Minerals has been progressively exploring the large area, but some areas have little to no drilling.

Previous niobium results at Santa Anna included (see ASX announcements dated 16 and 22 April, 10 July, 4 and 18 August, 10 and 24 November, 4 December 2025, 19 January, 9 and 16 February 2026):

- 4m at 0.98% Nb₂O₅ from 18m, including 1m at 3.36% Nb₂O₅ from 19m in drillhole MN-RC-0002
- 51m at 0.30% Nb₂O₅ from surface to EOH, including 10m at 1.02% Nb₂O₅ from 2m, including 2m at 2.04% Nb₂O₅ from 5m in drillhole MN-RC-0004
- 14m at 0.76% Nb₂O₅ from 6m, including 5m at 1.30% Nb₂O₅ from 14m in drillhole MN-AC-0031
- 4m at 1.00% Nb₂O₅ from 5m to EOH, including 2m at 1.34% Nb₂O₅ from 6m in drillhole MN-TM-03
- 12m at 0.23% Nb₂O₅ from surface to EOH, including 1m at 1.47% Nb₂O₅ from 12m to EOH in drillhole MN-TM-02
- 76m at 0.34% Nb₂O₅ from 24m to EOH, including 26m at 0.53% Nb₂O₅ from 24m and 5m at 0.68% Nb₂O₅ from 41m in drillhole MN-RC-045
- 87m at 0.21% Nb₂O₅ from 24m, including 3m at 1.01% Nb₂O₅ from 24m in drillhole MN-RC-028
- 32m at 0.33% Nb₂O₅ from 5m, including 1m at 1.13% Nb₂O₅ from 10m in drillhole MN-RC-052

Power completed a comprehensive petrographic and mineralogical characterisation study of 38 drill core samples from various drillholes at the Santa Anna Project, designed to identify the main niobium-bearing phases within the Santa Anna mineralisation.

Electron probe microanalysis using wavelength-dispersive spectroscopy (EPMA-WDS) produced 118 analyses of Santa Anna pyrochlore. The analyses yielded an average composition of 68.8% Nb₂O₅ (niobium pentoxide), with a maximum of 73.9% Nb₂O₅. These results place the analysed Santa Anna pyrochlore toward the upper end of published pyrochlore compositions from selected major carbonatite-hosted niobium deposits globally.

In comparison to selected prominent niobium operations, the compositions of Santa Anna pyrochlore fall within the higher end of the reported Nb₂O₅ range.

Published pyrochlore compositions at selected major operating niobium projects provide context for the Santa Anna results. At the Araxá niobium deposit in Brazil, bariopyrochlore is reported to contain approximately 63 to 66 wt% Nb₂O₅. At Catalão I, also in Brazil, published analyses range from approximately 52% to 73% Nb₂O₅. At the Niobec Project in Canada, reported compositions range from 65.76% to 68.60% Nb₂O₅.

The niobium-bearing pyrochlores at Santa Anna appear as euhedral crystals ranging from approximately 30 µm to 300 µm (0.03 to 0.3 millimetres). Where observed, monazite mineralisation occurs in clusters.

Power Minerals Chief Executive Officer, Alistair Stephens, said:

“Based on more than a decade of experience with niobium projects, I believe these results place the Santa Anna pyrochlore toward the upper end of reported Nb₂O₅ compositions from selected major carbonatite-hosted niobium deposits. This gives us a strong mineralogical basis for planning metallurgical testwork and evaluating pyrochlore beneficiation approaches.”

The mineralogy study used optical microscopy, scanning electron microscope energy-dispersive spectroscopy (SEM-ED), and Electron probe microanalysis wavelength-dispersive spectroscopy (EPMA-WDS).

The study identified two principal lithologies in the Santa Anna samples: phoscorites consisting of apatite, magnetite or iron silicates, and mica (tetraferriphlogopite); and predominantly calcite-dolomite carbonates containing minor ankerite.

The Santa Anna mineralogy study confirms that niobium is hosted in pyrochlore and provides information that will guide the evaluation of potential mineral-recovery processes and planned metallurgical testwork.

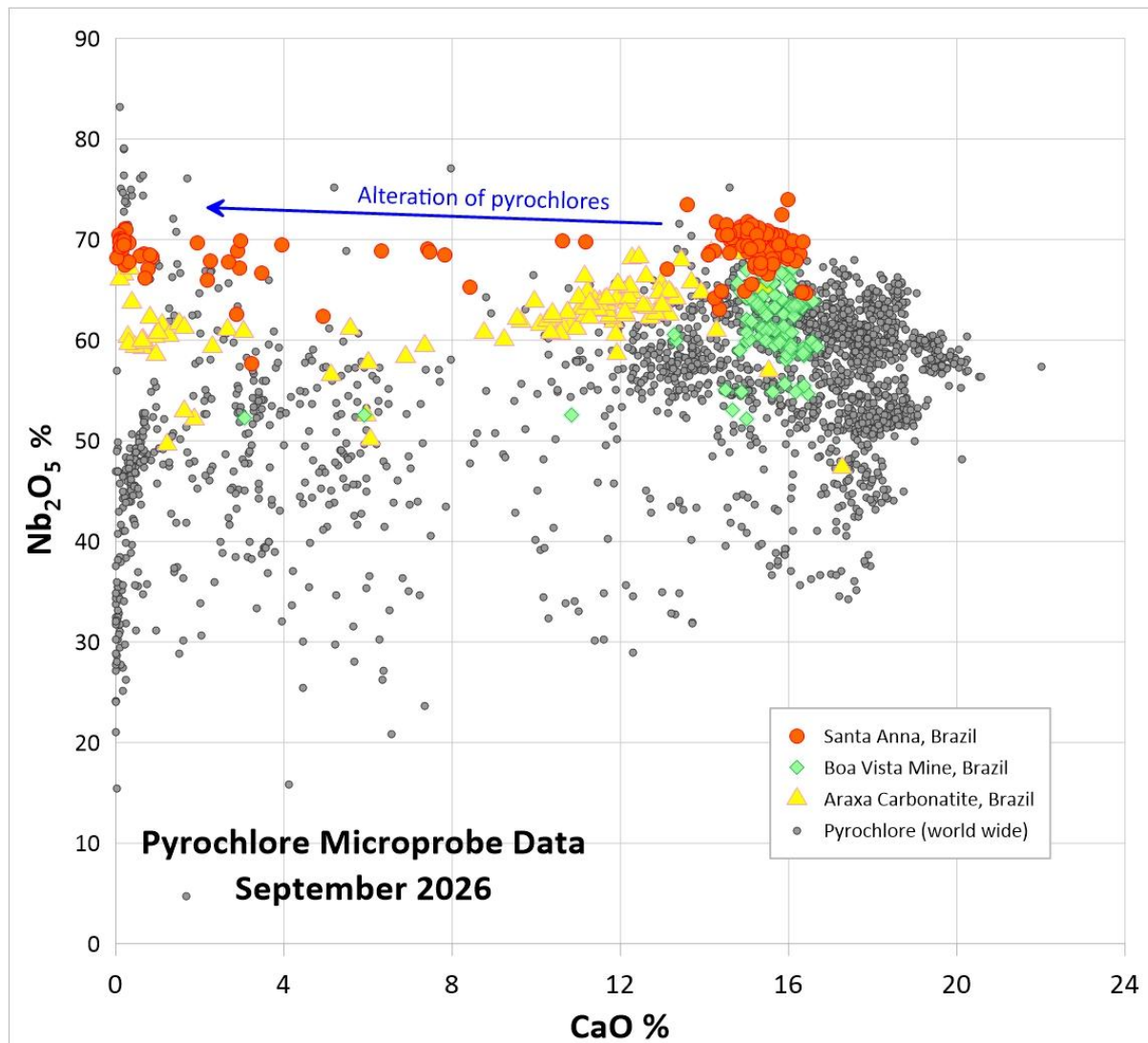


Figure 1: Comparison of the calcium and niobium content of Santa Anna pyrochlore and the same niobium mineral from other major deposits. The figure shows the common supergene alteration trend seen in many deposits. Mineral data points for Araxá (Brazil) from Biondi & Braga Jr, 2024; J. South Am. Earth Sci. 134; Lumpkin & Ewing, 1995, Am. Mineralogist, 80; and data for Boa Vista (Brazil) from Velasquez-Ruiz et al., 2024; Geochim. Cosmochim. Acta. 366. These analyses do **not** represent the niobium grade of the whole rock, only of the pyrochlore mineral grains.

Authorised for release by the Board of Power Minerals Limited.

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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 test work and development studies, to establish commercially viable sources of critical minerals for global supply chains.

Competent Persons Statement

The information in this announcement relating to exploration results in respect of the Santa Anna Niobium deposit in Brazil is based on and fairly represents information and supporting documentation prepared by Steven Cooper, FAusIMM (No 108265), FGS (No.1030687). Mr Cooper is the Global Exploration Manager and is a full-time employee of the Company. Mr Cooper 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 Cooper consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

The analysed values presented are microprobe analyses of the individual mineral grains of the mineral pyrochlore (oxide mineral group with the general chemical formula $(\text{Na}, \text{Ca})_2\text{Nb}_2\text{O}_6(\text{OH}, \text{F})$). Electron microprobe spot analysis was performed using a JEOL JXA-8530F Plus Electron Probe Microanalyser (EPMA) in the Centre for Advanced Microscopy (ANU) at an accelerating voltage of 15 kV, a beam current of 400 nA, and a beam diameter of 10 μm on each grain. Appropriate standards and corrections were applied.

The analyses do not represent the niobium grade of the whole rock, only of the pyrochlore mineral grains. Significant whole-rock drill niobium analyses for Santa Anna are available in ASX announcements dated 16 and 22 April, 10 July, 4 and 18 August, 10 and 24 November, 4 December 2025, 19 January, 9 and 16 February 2026.

This announcement contains references to exploration results that have been previously released on the ASX. Power Minerals confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed as per Listing Rule 5.23.2. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

Forward-Looking Statements

This announcement contains forward-looking statements based on current expectations and assumptions, which are subject to risks and uncertainties that may cause actual results to differ materially. These include project acquisition and divestment, joint venture, commodity price, exploration, development, operational, regulatory, environmental, title, funding and general economic risks. The Company undertakes no obligation to update these statements except as required by law.

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