# **ASX ANNOUNCEMENT**



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#### **REGISTERED OFFICE**

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# High-grade carbonatite hard rock intrusion confirmed at Santa Anna Project, Brazil

## **Highlights**

- Interpreted high-grade carbonatite hard rock intrusion validated at Power's Santa Anna REE Project, Brazil
- Carbonatite-hosted REE deposits are typically high-grade with very competitive cost structures relative to other larger, bulk tonnage REE deposits
- Santa Anna mineralisation starts from surface and has potential to be a free-digging deposit - and remains open at all areas
- Ongoing drill program is helping deliver a better understanding of high-grade pockets with grades up to 6.2% TREO
- Expansion drilling underway and set to continue with the aim to define a maiden JORC 2012 Mineral Resource Estimate (MRE)
- Drone-based magnetic and radiometric surveys to commence to more accurately map the phases of the carbonatite complex and prioritise targets for ongoing drilling
- Santa Anna is well-positioned to be a major ex-China hard-rock critical minerals player;
  - o Prime location with access to existing infrastructure
  - Strategic partnership with EDEM provides an in-country expert team to help ensure project delivery
  - EDEM is the fifth largest bauxite producer in Goiás State, which also hosts Santa Anna. This assists with securing a path to fasttrack regulatory approvals
  - Supportive state government in a proven mining jurisdiction

Power Minerals Limited (ASX: **PNN**, **Power** or the **Company**) is pleased to announce the Company has confirmed hard rock carbonatite REE potential at its Santa Anna Project in Goiás State, Brazil.

Power has integrated available geophysical, geochemical and geological information from the Santa Anna complex and confirmed that significant REE mineralisation is interpreted to continue at depth into the hard rock carbonatite portion of the intrusion. As detailed in Power's ASX announcements of 10 July and 4 August 2025, high-grade and extensive REE mineralisation was intersected well below previous drilling in the fresh carbonatite.



Visual examination of drill core has identified carbonatite with intense hydrothermal alteration to nelsonite (recognisable by containing apatite). The nelsonite is strongly magnetic and can be observed in the pit walls established by project vendor EDEM within fault zones cutting the carbonatite. Logging is continuing and the association of nelsonite and REE is not known yet, but the visual identification of this lithology provides confidence in the carbonatite hosting model of the REE, both near surface and at depth with the Santa Anna complex.

This work has further validated Power's interpretation of the presence of a high-grade carbonatite, hard rock intrusion at the Santa Anna Project.

"Hard-rock carbonatite deposits occurring in alkaline complexes can contain elevated REE concentrations, which have the potential to make them more efficient and economical to mine when compared to other deposit styles such as REE in heavy mineral sands and ionic-adsorption clays.

"We are excited about how our work at Santa Anna is progressing and the immense potential we are continuing to uncover. Our ongoing drilling campaign is enhancing our understanding of the local geology, as we move towards delivering an Exploration Target, followed by a potential maiden JORC-compliant Mineral Resource Estimate for the project."

**Power Minerals Managing Director Mena Habib** 

The Santa Anna intrusion occurs in a carbonatite alkaline complex. A considerable number of samples (1,001 individual drill samples) have reported calcium oxide (CaO) – magnesium oxide (MgO) levels in excess of 30%, evidence that the complex includes carbonatite material. As Power controls the entire Santa Anna intrusion, it could initially focus on the development of the complex's secondary concentrations in the overlying clayrich weathered zone.

The project consists of two granted permits that encompass the entire complex, with excess space around the interpreted margin. It is possible that late-stage dykes may penetrate outside the main circular intrusion, and the large permit area would cover this possibility and allow for exploration in this area. The enlarged area also provides set-back space for any potential large open-pit depth and processing facilities.

The table below compares significant selected, known western-world carbonatite-hosted REE deposits. Most have been known for more than 30 years. The Santa Anna intrusion was only discovered in 2021.



Company	Power Minerals	St George Mining	Lynas Rare Earths	MP Materials	Arafura Rare Earths
Stock exchange and market cap <sup>1</sup>	ASX: PNN ~A\$19M	ASX: SGQ ~A\$350M	ASX: LYC ~A\$14.5B	NYSE: MP ~US\$13B	ASX: ARU ~A\$505M
Project	Santa Anna, Brazil	Araxá, Brazil	Mt Weld, Australia	Mountain Pass, USA	Nolans, Australia
Deposit style	Hard-rock	Hard-rock	Hard-rock	Hard-rock	Hard-rock
Discovery year	2021	2012	1988	1949	1995
Stage	Exploration	Development studies	Producing	Producing	Development studies; funding
REE Mineralisation	Oxide	Oxide	Oxide	Oxide	Oxide
Mineral resource for TREO <sup>2</sup> (Mt)	In progress, PNN holds entire intrusion	Measured:1.9 Indicated: 7.37 Inferred: 31.37 Total: 40.64	Measured: 20 Indicated: 15.5 Inferred: 71.1 Total: 106.6	Measured: 0.1 Indicated: 31.5 Inferred: 9.1 Total: 40.36	Measured: 4.9 Indicated: 30 Inferred: 21 Total: 56
TREO grade <sup>2</sup> (%)	No resource, but grades of up to 6.20% <sup>3</sup>	Measured:5.44% Indicated: 4.76% Inferred: 3.9% Total: 4.13%	Measured:7.2% Indicated: 4.3% Inferred: 3.2% Total: 4.1%	Measured:9.5% Indicated: 6.2% Inferred: 5.1% Total: 5.69%	Measured:3.2% Indicated: 2.7% Inferred:2.3% Total: 2.36%
NdPr grade (%)	No resource, but grades of up to 1.08% <sup>4</sup>	<b>Total</b> : 0.78%	<b>Total</b> : 0.61%	<b>Total</b> : 0.93%	<b>Total</b> : 0.69%
Contained NdPr (Mt)	To be determined	0.32	0.65	0.38	0.38

<sup>&</sup>lt;sup>1</sup> Market capitalisation values are based on closing prices as at 29 September 2025 on the ASX for Lynas, Arafura and St George; and on the NYSE for MP Materials.

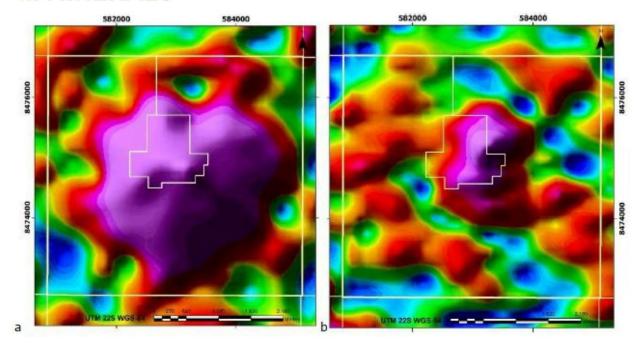
Regional aerial geophysics were used to discover the Santa Anna intrusion in 2021. Images from these surveys clearly show the carbonatitic intrusion is enriched in radiometric elements (U, Th and K) relative to the host bedrock (Figure 1). The Santa Anna intrusion is also strongly magnetic. The Santa Anna complex is enriched in potassium (average 4%  $K_2O$ ) but not enriched in Th or U (average 2% Th and 5% Th and 5% U, as evidenced from 6,293 drillhole samples). Rather, it contains significant higher concentrations than the host basement granitic gneiss (average 9% Th, 2% U and 0.4% 0.4% C from 0.4% from 0.4% The samples of the samples

<sup>&</sup>lt;sup>2</sup> Lynas, Mt Weld: Resource details are from the ASX announcement dated 5 August 2024: "2024 Mineral Resource and Reserve Update" and from the Annual Report FY2023 released to ASX on 12 October 2023. Arafura: Resource details are from ASX announcement dated 11 November 2022 "Nolans Project Update". MP Materials: Resource details are from SEC filing: "FORM 10-K" dated 28 February 2022. Measured Resource assumed to be equal to Proven Reserves. Indicated Resource assumed to equal Probable Reserves.

<sup>&</sup>lt;sup>3</sup> Sample PMB-2481, drillhole MN-AC-07 4-5m; **62,027ppm TREO** containing 7,272ppm NdPr

<sup>&</sup>lt;sup>4</sup> Sample PMB-2448, drillhole MN-TM-04 11-12m; 43,385ppm TREO containing **10.827ppm NdPr**. See Power Minerals Ltd ASX announcements 22 April and 16 September 2025 for sampling and drilling details.





**Figure 1:** Aerial radiometric images over Santa Anna. On the left (a) is Th and on the right (b) is K. The two permit boundaries are shown as thick white lines. The radiometric data is from two regional airborne geophysical projects acquired by the Governments of Mato Grosso and Goiás by SGS/CPRM. The raw databases are freely available at the SGS/CPRM website (https://geosgb.sgb.gov.br/).

#### **Next steps**

Power plans to conduct drone-based magnetic and radiometric surveys to more accurately map the phases of the carbonatite complex. This detailed mapping will then be used to prioritise the ongoing drilling program. Given the large size of the complex, any prioritisation of target areas for drilling may help accelerate definition of an Exploration Target and a JORC Mineral Resource estimate.

Given the supportive Goiás State jurisdiction and Santa Anna's location - with access to existing infrastructure - it is anticipated that key requirements in the development of the Santa Anna carbonatite complex may be delivered by Power in a time effective manner. The sealed highway GO-156 passes just 800 metres north of intrusion boundary, providing excellent road access.

In addition, Power's strategic partnership with established mining company EDEM, the project vendors, provides a team of in-country experts to help ensure project delivery. EDEM is the fifth largest producer of bauxite in Goiás, which is the same province in which Santa Anna is located. The Company anticipates that this may help assist with a path to fast-track regulatory approvals.

### Authorised for release by the Board of Power Minerals Limited.

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#### **ABOUT POWER MINERALS LIMITED**

Power Minerals Limited is an ASX-listed exploration and development company. We are focused on transforming our lithium resources in Argentina, exploring our promising rare earths, niobium and other critical mineral assets in Brazil, and maximizing value from our Australian assets.

#### **Competent Persons Statement**

The information in this announcement that relates to exploration results in respect of the Santa Anna Project 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 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 information in this announcement that are footnoted relates to exploration results that have been released previously 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. The Company confirms that the form and context in which the Competent Person's finding is presented have not been materially modified from the original market announcements.

#### **Compliance Statement**

The information in this announcement that are footnoted relates to exploration results that have been released previously 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. The Company confirms that the form and context in which the Competent Person's finding is 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 (including the Santa Anna Project), 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.