

# **Brazil Exploration Update**

# **Highlights**

## **Campo Grande Rare Earths Project:**

- 64 Drill Holes Completed to Date with drilling ongoing:
  - 26 Reserve Circulation (RC) drill holes across the Rio Negro, Central Block, and Northern Block.
  - o 38 Auger Drill (AD) drill holes focused on the Central Block and Northern Block.
- Rio Negro Prospect:
  - o 14 RC drill holes completed, targeting highly anomalous areas identified during the initial scout drilling campaign with assays pending and expected in late December.
- Central Block:
  - 27 AD drill holes and 3 RC drill holes completed, targeting high-priority zones based on surface geochemical anomalies and geophysical mapping with assays expected between late December 2024 and early January 2025.
- Northern Block:
  - 20 drill holes completed (9 RC, 11 AD), with drilling ongoing in key high-priority zones.
     Assays to be sent to laboratories before the holiday period, with results anticipated in late January to early February 2025.

#### **Mata da Corda Titanium Project:**

- Targeted Exploration: Diamond (DD) and Auger (AD) drilling programs at the Patos and Pindaibas prospects cover only 1.4% of the 980 km² Mata da Corda Project.
- Drilling Progress: An additional 45 diamond drill holes and 104 auger drill holes have been completed to date, with assay results expected between late December 2024 and early January 2025.
- Maiden Mineral Resource Estimate (MRE): Efforts remain on track to deliver a MRE by H1 CY2025, supported by drill data and metallurgical test work.
- Metallurgical Test Work: Comprehensive studies are underway to characterize the heavy mineral sands, optimize extraction processes for titanium minerals, and develop a conceptual flowsheet for a potential processing plant, with results anticipated by late January 2025.

**Equinox Resources Limited (ASX: EQN) ("Equinox Resources" or the "Company")** is pleased to provide an update on its exploration and drilling activities in Brazil. The Company continues to advance drilling across the **Campo Grande Rare Earths Project**, located in Bahia, Brazil, which encompasses a landholding of approximately 1,800 km², and the **Mata da Corda Titanium Project**, located in Minas Gerais, Brazil, covering approximately 980 km². Both projects continue to demonstrate significant potential for multi-commodity mineralisation.



# **Campo Grande Rare Earths Project Update**

To date, Equinox Resources has successfully completed 64 drill holes, with drilling ongoing across its key blocks identified by an independent geological assessment of the region. This includes 26 Reverse Circulation (RC) drill holes across the Rio Negro, Central Block, and Northern Block, and 38 Auger Drill (AD) holes focused on the Central and Northern Blocks. At the Rio Negro Prospect, 14 RC drill holes have been completed, targeting highly anomalous areas identified during the initial scout drilling campaign, with assays pending and expected in late December 2024. In the Central Block, 27 AD drill holes and 3 RC drill holes have been completed, targeting high-priority zones identified through surface geochemical anomalies and geophysical mapping, with assay results expected between late December 2024 and early January 2025. At the Northern Block, 20 drill holes have been completed (9 RC, 11 AD), with drilling ongoing in key high-priority zones. Assays from this block will be sent to laboratories before 25 December 2024, with results anticipated between late January and early February 2025.

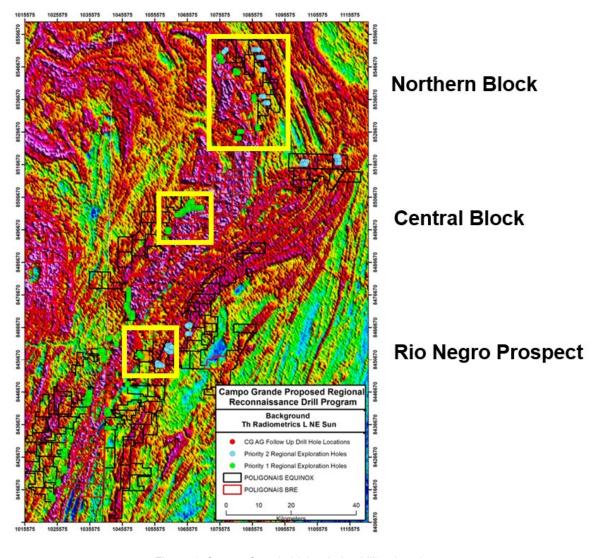


Figure 1: Campo Grande high priority drilling locations



## Campo Grande - Rio Negro Update

Equinox Resources has successfully completed an additional 14 RC drill holes at the Rio Negro prospect following the initial scout drilling campaign, which uncovered ionic rare earth elements. A first-pass, single-step ammonium sulphate (AMSUL) wash at pH 4, conducted on the scout drilling assays, has confirmed the presence of rare earth ionic adsorption clays (IAC). The AMSUL leach tests, performed at ambient conditions for 30 minutes, delivered impressive recovery results, with Total Rare Earth Oxide (TREO¹) concentrations reaching up to 80%. Furthermore, exceptional magnetic rare earth oxide (MREO²) recoveries were achieved, with recovery rates of up to 88% for Neodymium (Nd), 88% for Praseodymium (Pr), 88% for Dysprosium (Dy), and 91% for Terbium (Tb).

All associated assays from the Rio Negro prospect are pending imminent laboratory release, with results expected in late December. These findings underscore the significant potential of the prospect to host high-value rare earth elements, providing strong support for ongoing exploration efforts.

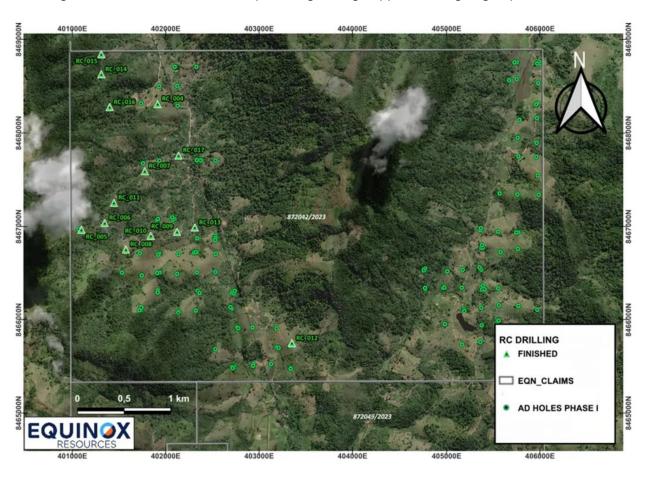


Figure 2: Rio Nego Prospect completed RC drill hole locations



## Campo Grande – Central Block Update

Equinox Resources has successfully completed 27 AD drill holes and 3 RC drill holes across the central block. The drilling program focused on high-priority zones identified through surface geochemical anomalies and geophysical mapping, with drill holes strategically positioned to test mineralised trends across the central and eastern areas of the tenement. This tenement is located north of Brazilian Rare Earths' (ASX: BRE) Pele Project. All associated assays from the completed drill holes have been submitted to the laboratory for analysis, with results expected between late December and early January, supporting future exploration planning.

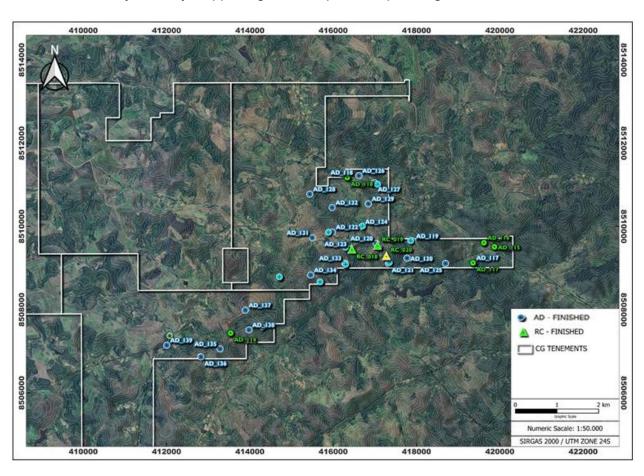


Figure 3: Drilling Completed in Central Blocks

### Campo Grande - Northern Block Drilling Update

Equinox Resources has successfully completed 20 drill holes across the Northern Block, comprising 9 RC holes and 11 AD holes to date, with drilling ongoing in this region. The drilling program has targeted high-priority zones identified through surface sampling and geophysical data, with holes strategically positioned to test mineralised trends across the northern and central areas. These results mark significant progress in advancing the Amargosa Block, which is situated north of Brazilian Rare Earths' (ASX: BRE) Monte Alto Project and forms a key part of Equinox's exploration strategy in Brazil. All associated assays from this block will be sent to laboratories before 25 December 2024, with results expected in late January to early February 2025, supporting ongoing future exploration plans.



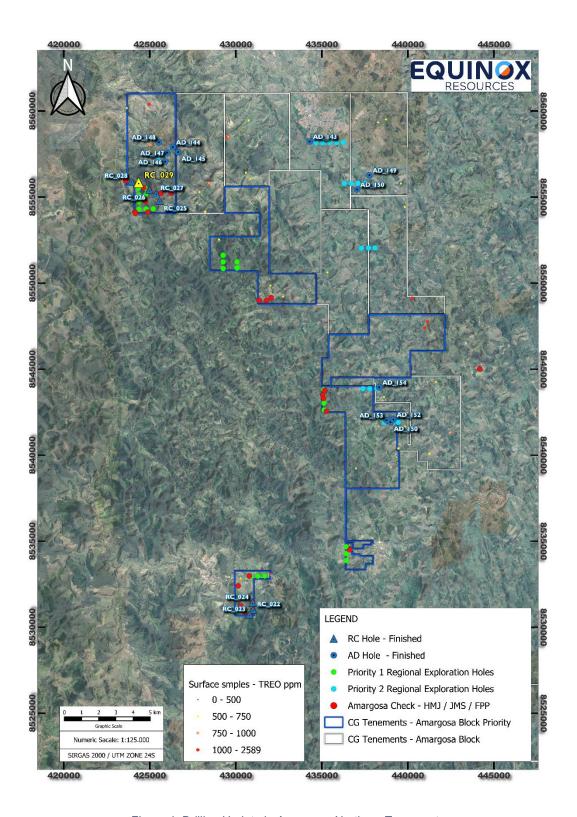


Figure 4: Drilling Update in Amargosa Northern Tenements





Figure 5: RC Drilling On going at the Northern Block

## Mata da Corda Titanium Project

Equinox Resources is advancing its diamond (DD) and auger (AD) drilling programs at the Patos and Pindaibas prospects, which together cover only 1.4% of the approximately 980 km² Mata da Corda Project area. These efforts aim to deliver a maiden Mineral Resource Estimate (MRE) by H1 CY2025.

Metallurgical test work is also underway to characterize the heavy mineral sands within the project area, with results expected by late January 2025. This comprehensive program includes optimizing extraction processes for titanium minerals and developing a conceptual flowsheet for a potential processing plant. The wider region's titanium mineralisation includes:

- Ilmenite (FeTiO<sub>3</sub>): The most common titanium mineral, valuable for TiO<sub>2</sub> pigment production.
- Rutile (TiO<sub>2</sub>): A high-grade source of titanium dioxide, often used in aerospace alloys and pigments.
- Leucoxene (Altered Ilmenite): A secondary mineral with high TiO<sub>2</sub> content, derived from ilmenite weathering.
- Titanomagnetite: A titanium-rich form of magnetite, found in layered mafic intrusions.
- Anatase and Brookite (TiO<sub>2</sub> Polymorphs): Occurring in sedimentary and metamorphic settings, these are secondary TiO<sub>2</sub> sources.
- Perovskite (CaTiO<sub>3</sub>): Found in alkaline igneous rocks and carbonatites, significant for its association with complex deposits.



The test work encompasses size distribution studies, gravity and magnetic separation, flotation, and advanced mineralogical assessments. These results will refine processing strategies, supporting resource modelling, and guiding future development plans for the Mata da Corda Project.

An additional 45 diamond drill holes and 104 AD holes have been completed, with assays for drill core samples anticipated between late December 2024 and early January 2025. These assays, combined with the metallurgical insights, will form the foundation for the MRE.



Figure 6: Diamond Drilling Progressing at Mata da Corda



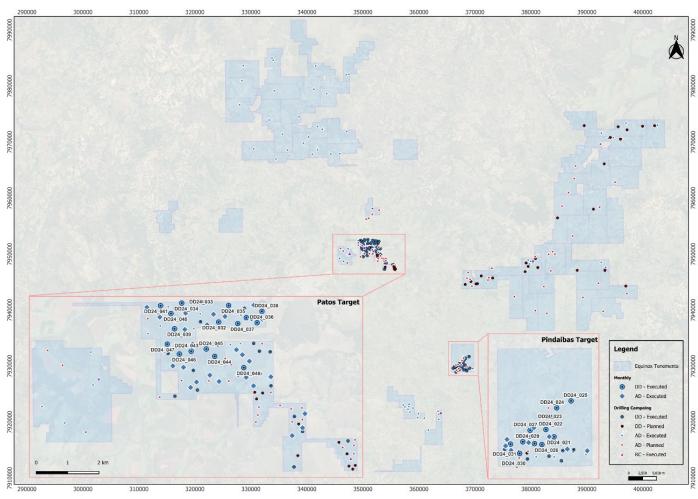


Figure 7: Mata da Corda - Patos and Pindaibas Prospects with Drilling Underway for a Mineral Resource Estimate



#### **Investor and Media Contacts**

#### **Investor Inquiries:**

Equinox Resources
Zac Komur, Managing Director
M: +61 467 775 792

E: zac.komur@eqnx.com.au

#### Media Inquiries:

Equinox Resources Kelly-Jo Fry M: +61 8 6109 6689

E: info@eanx.com.au

Authorised for release by the Board of Equinox Resources Limited.

#### **COMPETENT PERSON STATEMENT**

Sergio Luiz Martins Pereira, the in-country Exploration Manager for Equinox Resources Limited, compiled and evaluated the technical information in this release and is a member of the Australian Institute of Geoscientists (MAIG, 2019, #7341), accepted to report in accordance with ASX listing rules. Sergio Luiz Martins Pereira has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for Reporting of Regulation, Exploration Results, Mineral Resources, and Ore Reserves. Sergio Luiz Martins Pereira consents to including matters in the report based on information in the form and context in which it appears. The Company confirms that it is unaware of any new information or data that materially affects the information included in the market announcements referred to in this release and that all material assumptions and technical information referenced in the market announcement continue to apply and have not materially changed. All announcements referred to throughout can be found on the Company's website – eqnx.com.au.

This announcement contains information on the Mata da Corda Project extracted from ASX market announcements dated 13 December 2023, 1 May 2024, 11 June 2024, 25 June 2024, 11 July 2024, 30 July 2024, 9 August 2024, 9 October 2024,14 October 2024 and 25 November 2024. released by the Company and reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2012 JORC Code) and available for viewing at www.eqnx.com.au or www.asx.com.au. Equinox Resources is not aware of any new information or data that materially affects the information included in the original market announcement.

This announcement contains information on the Campo Grande Project extracted from ASX market announcements dated 28 November 2023, 27 February 2024, 5 March 2024, 2 April 2024, 9 April 2024, 18 April 2024, 20 May 2024, 11 June 2024, 14 June 2024, 4 July 2024, 17 July 2024, 26 August 2024, and 14 October 2024 released by the Company and reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2012 JORC Code) and available for viewing at www.eqnx.com.au or www.asx.com.au. EQN is not aware of any new information or data that materially affects the information included in the original market announcement

#### FORWARD LOOKING STATEMENTS

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