

ASX: VMM MARKET ANNOUNCEMENT

# **Step-Out Drilling Continues Making High-Grade Discoveries**

Highest Ever Grade up to 27,087ppm TREO Intercepted at Tamoyo Discovery

ASX Release: 10 April 2024

# **Highlights**

- Maiden RC and diamond drilling at Centro Sul ('CNT') and Tamoyo ('TM') has made two separate discoveries North and South of the alkaline complex ('Complex'). Tamoyo has uncovered the highest grade reported to date at the Complex:
  - TM-DDH-005: 15m @ 6,153ppm TREO<sup>A</sup> from surface, including 8m @ 9,765ppm TREO [38% MREO<sup>B</sup>]
    - Including peak grades reaching 1m at 27,087ppm TREO and 423ppm Dy-Tb Oxide
  - TM-RC-077: 20m @ 4,052ppm TREO from 4m, including 7m @ 8,355ppm TREO [40% MREO]
  - TM-RC-081: 23m @ 2,639ppm TREO from surface, including 10m @ 3,525ppm TREO [30% MREO]
  - TM-RC-0075: 21m @ 2,283ppm TREO [23% MREO] from surface
  - CNT-DDH-003: 22m @ 2,848ppm TREO from 5m, including 10.5m @ 3,929ppm TREO [31% MREO]
  - CNT-DDH-005: 27m @ 2,273ppm TREO [18% MREO] from 6m

TM-DDH-005 has now intercepted the highest individual grade reported within the Complex of 27,087ppm TREO, which exemplifies that Colossus continues to uncover its highest grades within each subsequential batch of results as it systematically explores through its large land holdings.

- Infill RC and diamond drilling at Cupim South has returned the thickest intercept to date and consistent high grades of mineralisation, which will significantly improve the resource model for this asset:
  - CS-RC-095: 81m @ 2,236ppm TREO from surface, including 30m @ 3,105ppm TREO [30% MREO]
  - CS-RC-096: 15m @ 4,700ppm TREO from surface, including 9m @ 5,826ppm TREO [42% MREO]
  - CS-DDH-010: 16.5m @ 3,205ppm TREO from surface, including 8.5m @ 4,363ppm TREO [33% MREO]
  - CS-RC-097: 23m @ 2,753ppm TREO [30% MREO] from 2m
- Fazenda auger drilling continues to uncover a new extremely high-grade area with significantly elevated levels of Dy-Tb mineralisation, which outlines the strategic importance of this Mining License to produce both light and heavy rare earths:
  - FZ-AG-160: 8m @ 6,180ppm TREO from 4m, ending in mineralisation of 16,144ppm TREO Ending last 3m @ 10,913ppm TREO and 111ppm Dy-Tb Oxide
  - FZ-AG-144: 6m @ 6,605ppm TREO from 3m, ending in mineralisation of 2,589ppm TREO Including 3m @ 9,768ppm TREO and 135ppm Dy-Tb Oxide
  - FZ-AG-143: 4m @ 7,624ppm TREO from 3m, ending in mineralisation of 7,229ppm TREO
     Ending last 3m @ 9,610ppm TREO and 140ppm Dy-Tb Oxide
  - FZ-AG-136: 6m @ 3,026ppm TREO from 2m, ending in mineralisation of 8,867ppm TREO
     Ending last 1m @ 8,867ppm TREO and 110ppm Dy-Tb Oxide
  - FZ-AG-154: 5m @ 4,176ppm TREO from surface, ending in mineralisation of 8,082ppm TREO

<sup>&</sup>lt;sup>A</sup>Total Rare Earth Oxides ('TREO'): La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3+ Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3

<sup>&</sup>lt;sup>B</sup> Magnetic Rare Earth Oxides ('MREO): Dy2O3, Gd2O3, Ho2O3, Nd2O3, Pr6O11, Sm2O3, Tb4O7

- Sixth batch of assays will be included into the resource model for both Fazenda and Cupim South. The results released to date lay the foundation for Colossus to become the premier development lonic Adsorption Clay ('IAC') Project in the Poços De Caldas Alkaline Complex due to its ability to fast-track through approvals given its strategic location outside of the Pedra Branca Sanctuary (see Figure 1).
- ► This batch of assays continues to uncover the heavy rare earth potential held at the Fazenda Mining License situated within an extremely high-grade zone. This exemplifies the strategic importance of Colossus, as Fazenda is uniquely positioned:
  - The only area in the complex which has reported near-surface high grade valuable Dy-Tb Oxides (>500ppm Dy-Tb Oxide found at 1m depth¹) and is situated on a granted mining license which can be fast-tracked to development.
  - Viridis is the only company in the complex that has executed a Memorandum of Understanding ('MoU') with both state and local governing bodies, which is critical to gaining fast-tracked approvals for Colossus development<sup>2</sup>.
- ▶ Viridis has made two fresh discoveries at separate areas of the Complex in this assay batch, with the highest grades returned to date at Colossus. Tamoyo East has the ability to be fast-tracked due to its granted Mining License and outstanding grades. A portion of the Centro Sul discovery sits within the Pedra Branca Environmental Buffer Zone (adjoining to the Soberbo Deposit of 92Mt @2,948ppm TREO³) and Viridis will move its exploration efforts to the northern portion of Centro Sul, which sits outside the Pedra Branca Sanctuary.
- In addition, three out of four licenses as part of the São Domingos Minerdom acquisition (Cupim South Expansion) have now been progressed into good standing. Land access has been granted and RC drilling has commenced, which has potential to become a transformational exploration program for the size and scale of the expanded Cupim South.

#### Chief Executive Officer, Rafael Moreno commented:

"I'm extremely pleased, considering we've made two new greenfield discoveries at opposite ends of the Complex, reaffirming the homogenous nature of the mineralisation, whilst the infill drilling at Cupim South has returned the thickest intercept to date and auger drilling at Fazenda continues to unlock its remarkable near-surface and high-grade heavy rare earth potential.

Fazenda is proving itself to be an incredibly critical part of the Colossus Project, being the only known location in the Complex which hosts surface level high-grade heavy rare earths within a granted mining license and bodes well for the output from our initial Scoping study.

Our consistent investment into greenfield exploration is also paying off, as for each of the last three batches we've discovered record breaking grades - this time within a Mining License from maiden RC and diamond drilling, returning an impressive 15m @ 6,153ppm TREO.

The results we've released to date and strategic location of Colossus gives the team incredible confidence that we are well placed to be the leading Ionic Adsorption Clay resource in the Alkaline Complex, with the MoU's signed by the state and local municipality providing a de-risked pathway for our approvals and recent JV with Ionic Rare Earths (ASX:IXR) providing a de-risked pathway to the qualification of the downstream technology.

We look forward to building the resource for Colossus and updating our shareholders with further exploration and metallurgical results into the near future."



#### Map of Exploration Data Highlights on Colossus Project

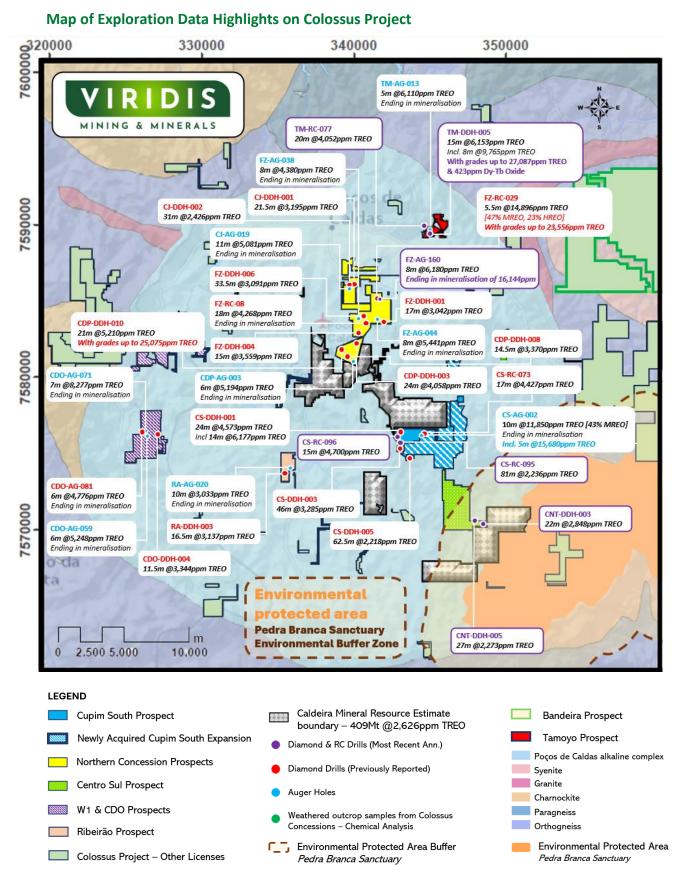


Figure 1: Map of exploration highlights near Caldeira IAC Resource1. Grab and Auger samples were within the superficial layer. Selected Diamond, RC and auger drill highlights reported in this announcement are outlined in purple.



Viridis Mining and Minerals Limited ('Viridis' or 'Company') is pleased to report that the sixth set of assays has been received within the Colossus IAC REE Project.

Over the last 6 months Viridis has completed 6.5 kilometres of drilling across Colossus, of which the assays will lay the foundation for a potential globally significant resource. This latest batch of assays reported will be integrated into the resource model for Cupim South and will provide valuable data to strengthen the maiden resource estimate.

Infill drilling results have been received from Cupim South, which has reported the thickest intercept within the Colossus project to date of **81m @ 2,236ppm TREO.** Furthermore, this batch of assays has illustrated two fresh discoveries at separate prospects on either end of the Alkaline Complex, demonstrating the homogenous nature of mineralisation across the Complex and the unprecedented geological endowment this region possesses.

Within one of two new discoveries in this batch, the Tamoyo Prospect has shown the highest individual peak grade at Colossus to date. This is the third consecutive time within three results announcements that Viridis has discovered a new record-breaking grade of mineralisation from its drilling: 1m @ 27,087ppm TREO and 423ppm Dy-Tb Oxide. That's a remarkable 2.7% TREO within an Ionic Clay Project. This exemplifies the enormous exploration potential remaining at Colossus, and its ability to continue making discoveries of new higher grade and thicker zones of mineralisation.

Fazenda in the meanwhile continues delivering on its heavy rare earth potential and outlining its strategic importance as the only Mining License in the entire Complex which has consistently shown surface levels of Dy-Th mineralisation.

# **Cupim South**

The sixth batch of assays received from the lab includes RC and Diamond infill drilling at Cupim South, which was aimed at improving the confidence and strengthening the resource model for the maiden resource estimate.

CS-RC-095, which has intercepted 81m @2,236ppm TREO including 30m @3,105ppm, provides further confirmation that deeper weathering is present towards the southern border of Cupim. This deeper weathering has led to far thicker intercepts of ionic clays which will support an extensive resource, as seen by current and previous results:

- CS-RC-095: 81m @ 2,236ppm TREO from surface, including 30m @ 3,105ppm TREO [30% MREO]
- CS-DDH-003: 65m @ 2,799ppm TREO from surface, including 46m @3,285ppm TREO [27% MREO]
- CS-DDH-005: 62.5m @ 2,218ppm TREO from surface, including 27m @2,903ppm TREO [27% MREO]<sup>1</sup>

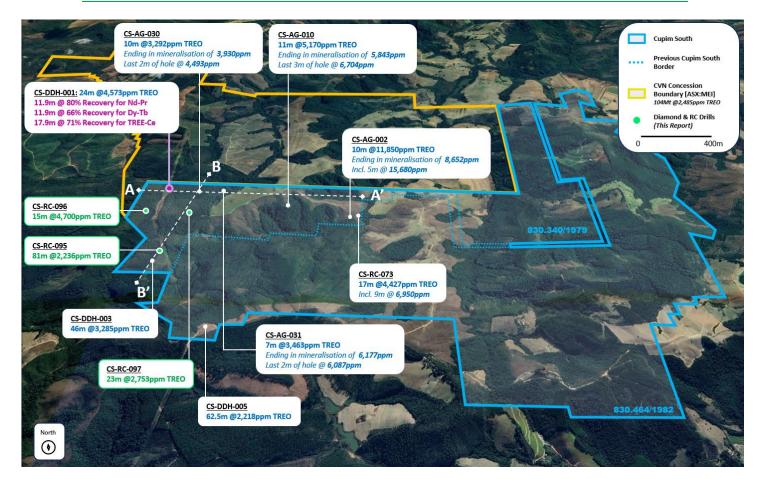
This thick profile of Ionic Clays also extends onto the recently acquired Mining License and Mining License Application.

To compliment the exceptionally thick profiles, Cupim South more importantly hosts significantly high grade mineralisation, with elevated MREO levels, at surface. This has been confirmed further with hole CS-RC-096 in this batch. The high-grade zones discovered so far are from only exploring ~14% of Cupim South to date:

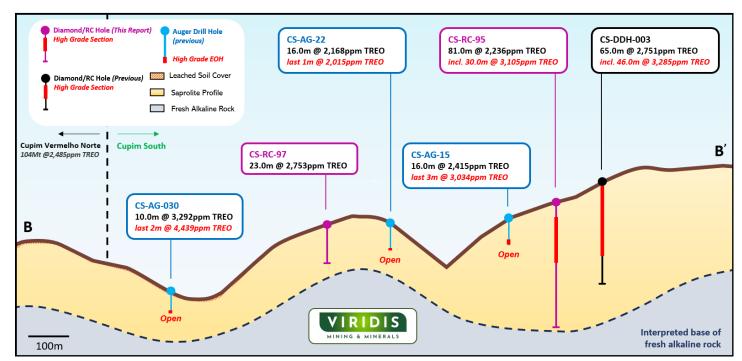
- CS-RC-096: 15m @ 4,700ppm TREO from surface, including 9m @ 5,826ppm TREO [42% MREO]
- CS-RC-073: 17m @ 4,427ppm TREO from surface, including 9m @ 6,950ppm TREO [40% MREO]<sup>1</sup>
- CS-DDH-001: 24m @ 4,573ppm TREO from surface, including 14m @ 6,177ppm TREO [40% MREO]<sup>4</sup>
- CS-AG-010: 11m @ 5,170ppm TREO, from 2m, ending in mineralisation of 5,843ppm TREO<sup>1</sup>
   Including last 3m @ 6,704ppm TREO [42% MREO]<sup>1</sup>
- CS-AG-002: 10m @ 11,580ppm TREO from 3m, ending in mineralisation of 8,652ppm TREO<sup>1</sup>
  Including 5m @ 15,860ppm TREO [45% MREO]<sup>1</sup>

Furthermore, Viridis is pleased to provide an update on the transformational expansion to Cupim South it had earlier announced on 6 March 2024 – three of four tenements have now been progressing into good standing with land access granted and exploration RC rigs on site to commence drilling. The Company looks forward to announcing results from this exploration program, which has potential to multiply the current scale of Cupim South.





**Figure 2:** Selected auger (Denoted by AG) and RC (Denoted by RC) holes from drill highlights superimposed onto a satellite map of Cupim South. CS-RC-095, 96, 97 shown here have been received as part of the latest batch of assays. The previous border of Cupim South was within a dotted boundary before the recent acquisition agreement with São Domingos Minerdom, which has expanded the Cupim South prospect significantly.<sup>14</sup>



**Figure 3:** Cross section BB' (looking East) at Cupim South from Figure 2 with significant intercepts previously reported. X and Y axis are at different scales. Please note scale in Figure 3 is different to scale in Figure 4<sup>4 6</sup>.



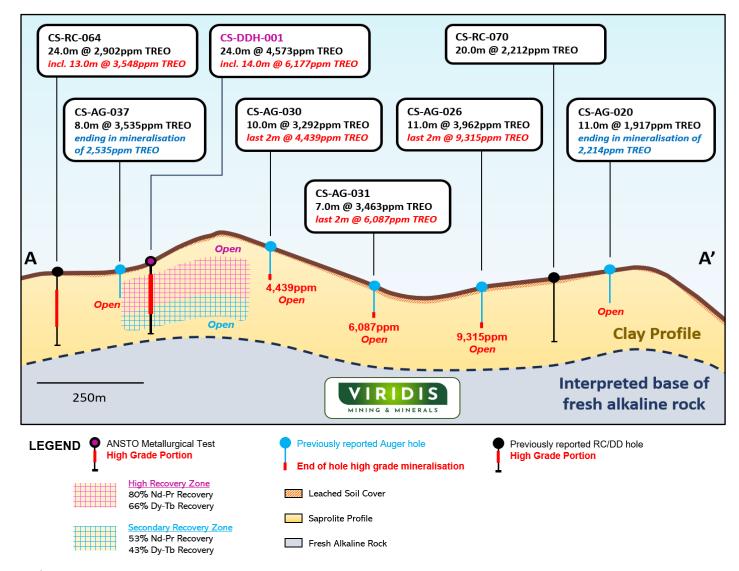


Figure 4: Cross section AA' (looking North) at Cupim South from Figure 2 with significant intercepts previously reported. X and Y axis are at different scales<sup>5</sup>.

#### **Northern Concessions**

Infill auger drilling at Fazenda Mining License continues to uncover tremendous potential of a high grade, shallow heavy rare earth deposit. This is further demonstrated by hole FZ-RC-029: **18.5m @ 6,253ppm TREO, including 5.5m @ 14,896ppm TREO and 386ppm Dy-Tb,** which this batch has confirmed is not an isolated intercept but part of a broader heavy rare earth mineral system.

This batch of auger drilling has confirmed presence of an intensely high graded zonation within the Fazenda prospect, with exceptional Dy-Tb grades at EOH mineralisation:

- FZ-AG-160: 8m @ 6,180ppm TREO from 4m, ending in mineralisation of 16,144ppm TREO Ending last 3m @ 10,913ppm TREO and 111ppm Dy-Tb Oxide
- FZ-AG-144: 6m @ 6,605ppm TREO from 3m, ending in mineralisation of 2,589ppm TREO Including 3m @ 9,768ppm TREO and 135ppm Dy-Tb Oxide
- FZ-AG-143: 4m @ 7,624ppm TREO from 3m, ending in mineralisation of 7,229ppm TREO Ending last 3m @ 9,610ppm TREO and 140ppm Dy-Tb Oxide
- FZ-AG-136: 6m @ 3,026ppm TREO from 2m, ending in mineralisation of 8,867ppm TREO
   Ending last 1m @ 8,867ppm TREO and 110ppm Dy-Tb Oxide



The results seen at Fazenda lay the foundation for Colossus to become the premier IAC project within the Alkaline Complex due to being uniquely and significantly advantageous in multiple facets:

- Northern Concessions is the only Mining Licenses in the entire Alkaline Complex which has garnered both state AND more importantly local municipal support for REE development, as seen by the MoUs signed (announcement 4 March 2024). Having both regulatory and development support from local municipality is required and imperative prior to gaining state level regulatory or environmental approvals, and Viridis is uniquely derisked and advantageous in this aspect.
- The key areas of Colossus which are expected to form its maiden resource all sit outside the
  environmentally sensitive Pedra Branca Sanctuary. This positions Viridis with a de-risked pathway in
  gaining the crucial environmental approvals, placing Colossus at the forefront of REE projects in the
  Complex which is derisked from Environmental Protection Zones and the premier IAC project for
  development.
- Fazenda is the only granted mining license within the entire Complex which has shown heavy rare earth
  mineralisation (>100ppm Dy-Tb) consistently at shallow depths, with up to 537ppm Dy-Tb present at
  1m depth. This places Fazenda as the only mining license within the Complex which has potential for
  near-term production of heavy rare earths.
- The Fazenda and Caminho Das Pedras Mining Licenses have had a long and rich multi-decade mining operation for both clays and bauxite with immense community support and a social license from the Poços De Caldas township. Viridis also benefits from the successful operation of the nearby Alcoa mine and processing plant, which puts Colossus in a favourable position to leverage the outstanding local infrastructure, low-cost services, access roads and local mining talent. The location of Fazenda and Caminho Das Pedras Mining Licenses is in fact further from the town than both the Alcoa operation and the Don Maria I deposit. Hence, from a development standpoint, Northern Concessions are in fact in the prime location of the Complex, sitting at appropriate distance from town, hence requiring no residential relocation and therefore reduced regulatory risk, all while still benefiting from the strategic location proximal to brownfield infrastructure and repute of Alcoa's long standing successful operation.

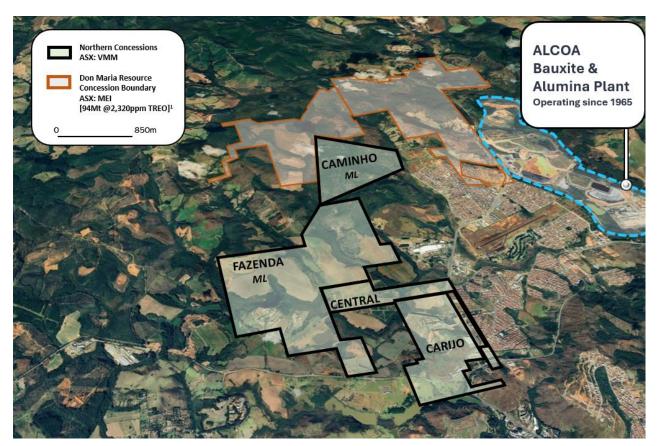


Figure 5: Satellite Plan View of Northern Concessions. Alcoa's operation and Don Maria I deposit which sits adjacent and into the town respectively.



## New Discoveries – Tamoyo and Centro Sul

#### **Tamoyo Mining License**

The Tamoyo Mining License is located towards the Northern Border of the Alkaline Complex where no company has previously explored for rare earths, this was acquired as a low-cost greenfield exploration opportunity with scope to expand landholdings in the area. Maiden RC/DD drill assays have now confirmed significant mineralisation system and regional discovery to compliment previous shallow auger drilling:

- TM-DDH-005: 15m @ 6,153ppm TREO from surface, including 8m @ 9,765ppm TREO [38% MREO]
  - Including peak grades reaching 1m at 27,087ppm TREO and 423ppm Dy-Tb Oxide
- TM-RC-077: 20m @ 4,052ppm TREO from 4m, including 7m @ 8,355ppm TREO [40% MREO]
- TM-AG-013: 5.0m @ 6,110ppm TREO, ending in mineralisation, from 9m, ending in 3,450ppm TREO.
   Including last 3m @ 7,624ppm TREO [15% MREO]
- TM-AG-031: 6.0m @ **3,404ppm TREO**, ending in mineralisation, from 8m, ending in **6,158ppm TREO**.

  Including last 3m @ **5,330ppm TREO** [31% MREO]

Maiden deep drilling at Tamoyo has uncovered the highest peak grade publicly reported by any company within the entire Complex of **27,087ppm TREO**, which outlines the incredible exploration potential remaining within Colossus as the Company continues its systematic exploration.

#### **Centro Sul Prospect**

A total of three diamond holes at Centro Sul were received from this batch of assays. These holes were completed within the southern portion of Centro Sul Prospect which have intercepted thick profiles of REE-rich lonic Clays:

- CNT-DDH-003: 22m @ 2,848ppm TREO from 5m, including 10.5m @ 3,929ppm TREO [31% MREO]
- CNT-DDH-005: 27m @ 2,273ppm TREO [18% MREO] from 6m

The Centro Sul prospect adjoins the JORC-Compliant Soberbo Resource (92Mt @ 2,948ppm TREO²) and maiden assays received from this prospect mark another discovery which warrants further systematic exploration across the prospect. Both CNT-DDH-003 and CNT-DDH-005 were drilled within the southern portion of the Centro Sul Prospect (which adjoins Soberbo) and sits within the Environmental Buffer Zone (see Figure 1). Viridis intends for future exploration efforts at Centro Sul to be focused on the northern portion of this concession which sits outside of the Pedra Branca Environmental Sanctuary.

Part of the licenses comprising the Centro Sul Prospect are currently under Research Application and are to be converted to Exploration Licenses. Viridis has negotiated an option agreement with the vendors of the Research Applications under which it has the right, upon completion of successful due diligence and grant of the Exploration Licenses, to acquire the license (see ASX announcement dated 10 November 2023).

#### **Future Work**

The current focus of development work will be on Northern Concessions, with metallurgical drilling and environmental permitting progressing. Step-out drilling progressing across Cupim South (São Domingo Mining Licenses) to expand the scale of mineralisation. In parallel, Viridis is progressing with all key development activities including imminent metallurgical work, resource modelling and permitting.

Approved for release by the Board of Viridis Mining and Minerals Ltd.

#### **Contacts**

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#### **About Viridis Mining and Minerals**

Viridis Mining and Minerals Limited is a resource exploration and development company with assets in Brazil, Canada and Australia. The Company's Projects comprise:

- The Colossus Project, which the Company considers to be prospective for Rare Earth Elements;
- The South Kitikmeot Project, which the Company considers to be prospective for gold;
- The Boddington West Project, which the Company considers to be prospective for gold;
- The Bindoon Project, which the Company considers to be prospective for nickel, copper and platinum group elements; and
- The Poochera and Smoky Projects, which the Company considers to be prospective for kaolinhalloysite; and
- The Ytterby and Star Lake Projects, which the Company considers prospective for Rare Earth Elements.

#### **Competent Person Statement**

Dr. José Marques Braga Júnior, the in-country Executive Director of Viridis' Brazilian subsidiary (Viridis Mineração Ltda), compiled and evaluated the technical information in this release and is a member of the Australian Institute of Geoscientists (AIG) (MAusIMM, 2024, 336416), accepted to report in accordance with ASX listing rules. Dr Braga 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. Dr Braga consents to including of 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 – viridismining.com.au.

### **Forward-Looking Statements**

This announcement contains 'forward-looking information' based on the Company's expectations, estimates and projections as of the date the statements were made. This forward-looking information includes, among other things, statements concerning the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions and that the Company's results or performance may differ materially. Forward-looking information is subject to known and unknown risks, uncertainties, and other factors that may cause the Company's actual results, level of activity, performance or achievements to materially differ from those expressed or implied by such forward-looking information.

### References

- 1. VMM announcement dated 12 March 2024 'Step-Out Drilling Intercepts up to 24,894ppm TREO'
- 2. VMM announcement dated 4 March 2024 'Key MOUs Signed With State and Local Governments'
- 3. Meteoric Resources NL (ASX: MEI) announcement dated 1 May 2023 'Caldeira REE Project Maiden Mineral Resource'
- 4. VMM announcement dated 20 November 2023 'Major Ionic Clay Rare Earth Discoveries at Colossus'
- 5. VMM announcement dated 20 March 2024 '80% Average Ionic Recoveries from First Colossus Hole'
- 6. VMM announcement dated 6 February 2024 'Spectacular Shallow Intercepts up to 23,556ppm TREO-Amended'



# **APPENDIX A: DRILL LOCATIONS**

# Auger, RC and Diamond Hole coordinates of assays reported within this announcement:

All holes were drilled vertically.

D.:III ID	F = + (+++)	No otlo (co)	Total Lander (m)	DUT	B
Drill ID	East (m)	North (m)	Total Lenght (m)	DH Type	Prospect
CNT-DDH-0001	347730	7569958	34	DDH	Centro Sul
CNT-DDH-0005	348095	7570485	43	DDH	Centro Sul
CNT-DDH-0003	348738	7570252	32.5	DDH	Centro Sul
CS-DDH-0010	344898	7576568	20.5	DDH	CS
CS-DDH-0009	343532	7576107	51	DDH	CS
TM-DDH-0005	345057	7589461	15	DDH	Tamoyos
TM-DDH-0001	345694	7589928	44	DDH	Tamoyos
TM-AG-005	345611	7590456	7	Auger	Tamoyos
FZ-AG-0189	341693	7585059	7	Auger	Fazenda
FZ-AG-0188	341643	7585009	6	Auger	Fazenda
FZ-AG-0187	341671	7585005	8	Auger	Fazenda
FZ-AG-0184	341744	7585009	12	Auger	Fazenda
FZ-AG-0183	341768	7585009	13	Auger	Fazenda
FZ-AG-0182	341615	7585031	11	Auger	Fazenda
FZ-AG-0181	341639	7585025	8	Auger	Fazenda
FZ-AG-0180	341668	7585034	8	Auger	Fazenda
FZ-AG-0179	341694	7585034	11	Auger	Fazenda
FZ-AG-0177	341743	7585034	11	Auger	Fazenda
FZ-AG-0176	341768	7585034	13	Auger	Fazenda
FZ-AG-0172	341669	7585059	8	Auger	Fazenda
FZ-AG-0170	341718	7585063	6	Auger	Fazenda
FZ-AG-0169	341743	7585059	11	Auger	Fazenda
FZ-AG-0168	341768	7585059	11	Auger	Fazenda
FZ-AG-0163	341693	7585084	5	Auger	Fazenda
FZ-AG-0159	341793	7585084	11	Auger	Fazenda
FZ-AG-0155	341694	7585109	5	Auger	Fazenda
FZ-AG-0154	341718	7585109	5	Auger	Fazenda
FZ-AG-0153	341740	7585103	6	Auger	Fazenda
FZ-AG-0151	341794	7585109	8	Auger	Fazenda
FZ-AG-0145	341743	7585134	6	Auger	Fazenda
FZ-AG-0143	341793	7585134	7	Auger	Fazenda
FZ-AG-0137	341746	7585159	5.5	Auger	Fazenda
FZ-AG-0136	341769	7585159	8	Auger	Fazenda
FZ-AG-0128	341794	7585184	5	Auger	Fazenda
FZ-AG-0122	341768	7585209	5	Auger	Fazenda
TM-RC-0084	345966	7589719	30	RC	Tamoyos
FZ-RC-0135	341723	7585126	25	RC	Fazenda
TM-RC-0085	345781	7590611	21	RC	Tamoyos
TM-RC-0082	345528	7590171	45	RC	Tamoyos
TM-RC-0081	345441	7589676	30	RC	Tamoyos
FZ-RC-0129	341718	7585084	40	RC	Fazenda



Drill ID	East (m)	North (m)	Total Lenght (m)	DH Type	Prospect
TM-RC-0087	346132	7590047	40	RC	Tamoyos
TM-RC-0086	345983	7590218	60	RC	Tamoyos
TM-RC-0079	345222	7589905	40	RC	Tamoyos
TM-RC-0075	344709	7589483	97	RC	Tamoyos
TM-RC-0076	344738	7589240	24	RC	Tamoyos
CS-RC-0069	343853	7575853	70	RC	Cupim Sul
CS-RC-0097	343230	7576096	35	RC	Cupim Sul
CS-RC-0096	342785	7576097	27	RC	Cupim Sul
CS-RC-0095	343089	7575543	82	RC	Cupim Sul
TM-RC-0078	344950	7589682	28	RC	Tamoyos
TM-RC-0077	344702	7589885	25	RC	Tamoyos
TM-DDH-003	345321	7590574	30	DDH	Tamoyos
CDO-RC-0111	326628	7575850	15	RC	Capão da Onça
CDO-RC-0110	326872	7576076	25	RC	Capão da Onça
CDO-RC-0108	327180	7576448	27	RC	Capão da Onça
CDO-RC-0107	326609	7576465	23	RC	Capão da Onça
CDO-RC-0105	326934	7576704	20	RC	Capão da Onça
CDO-RC-0103	327197	7577033	30	RC	Capão da Onça
CDO-RC-0102	326649	7577005	29	RC	Capão da Onça
CDO-RC-0101	326909	7577297	69	RC	Capão da Onça
CDO-RC-0099	327192	7577539	16	RC	Capão da Onça
CDO-RC-0098	326716	7577553	30	RC	Capão da Onça
FZ-RC-0134	341718	7585009	56	RC	Fazenda
FZ-RC-0133	341733	7585048	49	RC	Fazenda
FZ-RC-0132	341768	7585109	30	RC	Fazenda
SI-AG-0071	353821	7566706	4	Auger	Sien
SI-AG-0070	353821	7566988	7	Auger	Sien
SI-AG-0069	353679	7566847	6	Auger	Sien
SI-AG-0068	353538	7566706	8	Auger	Sien
SI-AG-0067	354945	7568432		Auger	Sien
SI-AG-0066	354804	7568291	16		Sien
SI-AG-0063	353538	7566988	5	_	Sien
SI-AG-0062	353396	7566847	18	Auger	Sien
SI-AG-0061	353255	7566706	5	Auger	Sien
SI-AG-0059	354663	7568432	5	Auger	Sien
SI-AG-0058	354521	7568291	18	Auger	Sien
SI-AG-0055	353255	7566988	11.5	Auger	Sien
SI-AG-0054	353114	7566847	6	Auger	Sien
SI-AG-0053	352972	7566706	13	Auger	Sien
SI-AG-0052	354506	7568564	8	_	Sien
SI-AG-0050	354238	7568291	10	Auger	Sien
SI-AG-0047	352972	7566988	7	Auger	Sien
SI-AG-0044	354241	7568520	6	Auger	Sien
SI-AG-0039	352689	7566988	7	Auger	Sien
SI-AG-0038	354082	7568713	6	Auger	Sien



Drill ID	East (m)	North (m)	Total Lenght (m)	DH Type	Prospect
SI-AG-0036	353815	7568437	16	Auger	Sien
SI-AG-0035	353659	7568299	4	Auger	Sien
SI-AG-0034	354084	7569001	5	Auger	Sien
SI-AG-0031	353674	7568578	9	Auger	Sien
SI-AG-0030	354046	7569306	9	Auger	Sien
SI-AG-0029	353948	7569149	9	Auger	Sien
SI-AG-0028	353809	7568999	2.5	Auger	Sien
SI-AG-0026	353528	7568736	2	Auger	Sien
SI-AG-0025	353390	7568595	7	Auger	Sien
SI-AG-0024	354110	7569546	13	Auger	Sien
SI-AG-0023	353981	7569377	11	Auger	Sien
SI-AG-0022	353814	7569281	20	Auger	Sien
SI-AG-0021	353673	7569140	7	Auger	Sien
SI-AG-0016	353812	7569559	7	Auger	Sien
SI-AG-0015	353652	7569413	5	Auger	Sien
SI-AG-0012	353107	7568878	13	Auger	Sien
FZ-AG-0161	341743	7585084	8	Auger	Fazenda
FZ-AG-0160	341769	7585084	12	Auger	Fazenda
FZ-AG-0144	341771	7585129	9	Auger	Fazenda
FZ-AG-0135	341793	7585159	6	Auger	Fazenda

**Table 1:** Drill log table. All holes were drilled vertically from topsoil, depths have been rounded to the nearest 0.5m and include soils, clays and penetration into hard-rock (for RC/DDH)



# **APPENDIX B: ASSAY RESULTS COMPILED**

Auger Drilling: All holes were drilled vertically.

Prospect	Name	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd + Pr (ppm)	Dy +Tb (ppm)	EOH Mineralisation
	FZ-AG-0189	0.0	1.0	1.0	1,043	11%	77	13	1,043
	FZ-AG-0188	0.0	6.0	6.0	2,076	12%	196	16	1,495
	FZ-AG-0187	2.0	8.0	6.0	2,392	14%	270	16	2,406
	FZ-AG-0184	0.0	12.0	12.0	2,108	13%	234	14	2,243
	FZ-AG-0183	0.0	8.0	8.0	1,426	8%	77	14	1,438
	FZ-AG-0182	1.0	11.0	10.0	2,002	15%	248	12	2,584
	FZ-AG-0181	0.0	8.0	8.0	2,438	16%	335	17	2,930
	FZ-AG-0180	5.0	8.0	3.0	2,391	16%	325	18	2,411
	FZ-AG-0179	1.0	11.0	10.0	2,125	16%	260	18	2,441
	FZ-AG-0177	0.0	11.0	11.0	2,137	13%	227	14	2,277
	FZ-AG-0176	4.0	13.0	9.0	1,407	15%	164	15	1,056
	FZ-AG-0172	4.0	8.0	4.0	1,614	17%	215	15	1,457
	FZ-AG-0170	0.0	6.0	6.0	2,019	9%	139	15	2,482
	FZ-AG-0169	2.0	11.0	9.0	2,460	16%	324	19	3,039
	FZ-AG-0168	8.0	11.0	3.0	1,227	15%	145	13	1,177
FAZENDA	FZ-AG-0163	0.0	5.0	5.0	1,764	9%	125	15	2,072
	FZ-AG-0159	6.0	11.0	5.0	2,532	22%	460	28	3,323
	FZ-AG-0155	0.0	5.0	5.0	2,056	11%	172	16	2,530
	FZ-AG-0154	0.0	5.0	5.0	4,176	20%	865	28	8,082
	FZ-AG-0153	0.0	6.0	6.0	2,777	16%	375	20	2,336
	FZ-AG-0151	0.0	8.0	8.0	1,813	8%	113	14	2,110
	FZ-AG-0145	0.0	6.0	6.0	1,495	13%	155	13	1,991
	FZ-AG-0143	3.0	7.0	4.0	7,624	36%	2,670	109	7,229
	FZ-AG-0137	0.0	5.5	5.5	1,297	10%	96	13	1,265
	FZ-AG-0136	2.0	8.0	6.0	3,026	18%	699	32	8,867
	FZ-AG-0128	4.0	5.0	1.0	1,046	7%	47	11	1,046
	FZ-AG-0122	0.0	1.0	1.0	1,154	12%	99	13	1,154
	FZ-AG-0161	2.0	8.0	6.0	2,675	17%	381	20	3,095
	FZ-AG-0160	4.0	12.0	8.0	6,180	28%	1,760	62	16,114
	FZ-AG-0144	3.0	9.0	6.0	6,605	35%	1,995	97	2,589
	FZ-AG-0135	3.0	6.0	3.0	1,926	12%	184	16	1,811
	SI-AG-0071	0.0	4.0	4.0	2,229	33%	580	23	1,886
	SI-AG-0070	0.0	7.0	7.0	1,696	33%	439	21	1,362
	SI-AG-0069	0.0	6.0	6.0	1,344	32%	336	19	1,604
	SI-AG-0068	0.0	8.0	8.0	1,389	31%	331	17	1,193
	SI-AG-0067	0.0	5.0	5.0	1,496	30%	346	18	1,457
	SI-AG-0066	0.0	16.0	16.0	1,538	32%	382	23	1,350
SIEN	SI-AG-0063	0.0	5.0	5.0	1,422	28%	313	16	1,516
<b>4.2.</b>	SI-AG-0062	0.0	18.0	18.0	1,828	32%	468	21	1,573
	SI-AG-0061	0.0	5.0	5.0	1,474	28%	328	15	1,450
	SI-AG-0059	0.0	5.0	5.0	1,354	31%	331	17	1,275
	SI-AG-0058	0.0	18.0	18.0	1,619	27%	346	22	1,560
	SI-AG-0055	0.0	11.5	11.5	1,590	33%	407	21	1,132
	SI-AG-0054	0.0	6.0	6.0	1,393	26%	296	13	1,359
	SI-AG-0053	0.0	13.0	13.0	1,557	32%	390	19	1,053



Prospect	Name	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd + Pr (ppm)	Dy +Tb (ppm)	EOH Mineralisation
	SI-AG-0052	0.0	8.0	8.0	1,814	33%	467	22	1,373
	SI-AG-0050	0.0	8.0	8.0	1,263	37%	360	23	1,108
	SI-AG-0047	0.0	7.0	7.0	1,875	30%	463	22	1,760
	SI-AG-0044	0.0	2.0	2.0	1,657	35%	448	28	1,369
	SI-AG-0039	0.0	7.0	7.0	2,457	24%	511	15	5,752
	SI-AG-0038	0.0	3.0	3.0	1,705	31%	411	18	1,671
	SI-AG-0036	0.0	9.0	9.0	1,726	31%	419	23	1,083
	SI-AG-0035	0.0	4.0	4.0	1,275	32%	315	18	1,121
	SI-AG-0034	0.0	5.0	5.0	1,807	32%	454	24	1,865
	SI-AG-0031	0.0	9.0	9.0	1,838	33%	479	22	1,355
	SI-AG-0030	0.0	9.0	9.0	1,890	33%	481	28	1,277
	SI-AG-0029	0.0	9.0	9.0	1,872	35%	495	29	1,574
	SI-AG-0028	0.0	2.5	2.5	1,435	32%	359	18	1,373
	SI-AG-0026	0.0	2.0	2.0	1,321	32%	328	17	1,245
	SI-AG-0025	0.0	7.0	7.0	2,187	33%	561	29	2,394
	SI-AG-0024	0.0	10.0	10.0	1,275	33%	329	19	1,030
	SI-AG-0023	0.0	11.0	11.0	1,687	33%	430	24	1,431
	SI-AG-0022	0.0	20.0	20.0	2,063	34%	530	32	1,813
	SI-AG-0021	0.0	4.0	4.0	1,202	32%	301	14	1,198
	SI-AG-0016	0.0	7.0	7.0	1,263	33%	312	19	1,026
	SI-AG-0015	0.0	5.0	5.0	1,699	32%	421	25	1,601
	SI-AG-0012	0.0	13.0	13.0	1,645	31%	391	21	1,306
TAMOYO	TM-AG-0003								

**Table 2:** REE assays from auger drilling hosted within weathered clays, 1000ppm TREO cut-off, up-to 2m dilution. DyTb and NdPr grades presented are in Oxide converted form. Figures were rounded to the nearest 0.5m for length and the nearest whole number for 'ppm'.

# Diamond and RC Drilling: All holes were drilled vertically.

Prospect	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd + Pr (ppm)	Dy +Tb (ppm)
	FZ-RC-0135	0.0	23.0	23.0	2,489	27%	579	31
	Incl.	3.0	15.0	12.0	3,134	32%	743	37
	FZ-RC-0129	0.0	25.0	25.0	2,699	25%	578	37
NORTHERN	Incl.	4.0	14.0	10.0	3,508	31%	788	50
CONCESSIONS	FZ-RC-0134	0.0	48.0	48.0	2,011	19%	320	20
	FZ-RC-0133	0.0	41.0	41.0	2,158	22%	392	23
	FZ-RC-0132	1.0	21.0	20.0	2,725	30%	701	37
	Incl.	1.0	14.0	13.0	3,160	32%	845	43
	TM-DDH-005	0.0	15.0	15.0	6,153	29%	1,927	81
	Incl.	7.0	15.0	8.0	9,765	38%	3,305	129
	TM-DDH-001				NSI			
TAMOVO	TM-RC-0084				NSI			
TAMOYO	TM-RC-0085				NSI			
	TM-RC-0082	3.0	20.0	17.0	1,420	17%	199	10
	TM-RC-0081	0.0	23.0	23.0	2,639	25%	583	28
	Incl.	3.0	13.0	10.0	3,525	30%	878	40

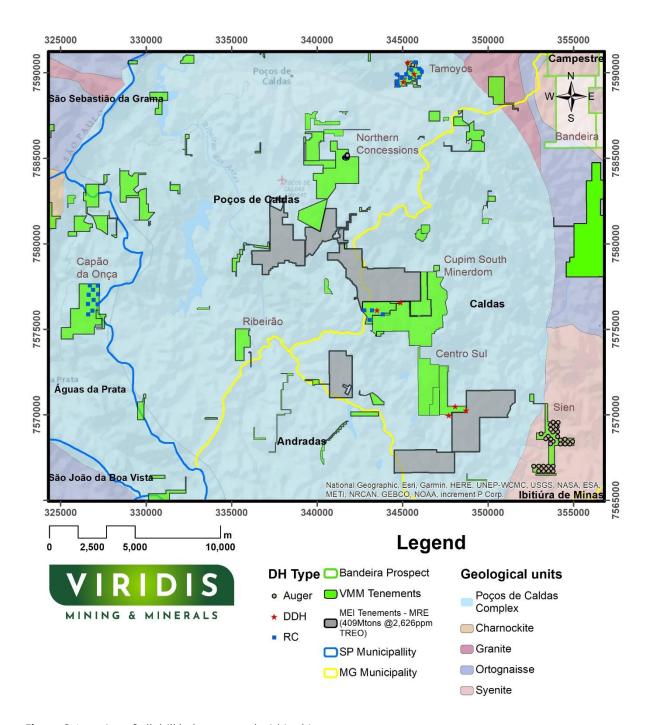


Prospect	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd + Pr (ppm)	Dy +Tb (ppm)
	TM-RC-0087	2.0	5.0	3.0	3,797	2%	37	5
	TM-RC-0086				NSI			
	TM-RC-0079	2.0	10.0	8.0	1,261	21%	207	19
	TM-RC-0075	0.0	21.0	21.0	2,283	23%	429	30
	TM-RC-0076	6.0	21.0	15.0	1,998	24%	415	25
	TM-RC-0078	0.0	5.0	5.0	3,195	21%	451	34
	TM-RC-0077	4.0	24.0	20.0	4,052	34%	1,220	70
	Incl.	9.0	16.0	7.0	8,355	40%	1,482	153
	TM-DDH-003	8.5	16.5	8.0	1,442	25%	292	18
	CNT-DDH-005	6.0	33.0	27.0	2,273	18%	361	20
051170 0111	CNT-DDH-003	5.0	27.0	22.0	2,848	29%	739	24
CENTRO SUL	Incl.	11.0	21.5	10.5	3,929	31%	1,014	30
	CNT-DDH-001	5.5	13.0	7.5	1,884	33%	504	34
	CS-DDH-010	0.0	16.5	16.5	3,205	28%	831	37
	Incl.	1.0	9.5	8.5	4,363	33%	1,164	53
	CS-DDH-009	0.0	37.5	37.5	1,711	23%	316	23
	CS-RC-0069	0.0	7.0	7.0	2,452	32%	602	60
CUPIM SOUTH	CS-RC-0097	2.0	25.0	23.0	2,753	30%	765	36
	CS-RC-0096	0.0	15.0	15.0	4,700	38%	1,617	44
	Incl.	4.0	13.0	9.0	5,826	42%	2,017	54
	CS-RC-0095	0.0	81.0	81.0	2,236	28%	514	29
	Incl.	11.0	41.0	30.0	3,105	30%	751	39
	CDO-RC-0111	0.0	12.0	12.0	2,724	20%	527	26
	CDO-RC-0110	3.0	19.0	16.0	1,950	19%	311	19
	CDO-RC-0108	7.0	10.0	3.0	1,279	28%	295	19
	CDO-RC-0107	0.0	4.0	4.0	1,185	18%	167	13
CARAO DA ONOA	CDO-RC-0105	0.0	2.0	2.0	1,173	24%	226	15
CAPAO DA ONCA	CDO-RC-0103	0.0	1.0	1.0	1,034	18%	151	10
	CDO-RC-0102				NSI			
	CDO-RC-0101				NSI			
	CDO-RC-0099				NSI			
	CDO-RC-0098				NSI			

**Table 3:** REE assays from diamond and RC drilling hosted within weathered clays, 1000ppm TREO cut-off, up to 2m dilution. RC denotes Adapted Reverse Circulation Drill Holes; DDH denotes Diamond Drill Holes. The DyTb and NdPr grades presented are in Oxide-converted form. Figures were rounded to the nearest 0.5m for length and the nearest whole number for 'ppm'.



# APPENDIX C: DRILL LOCATIONS OF HOLES REPORTED IN THIS ANNOUNCEMENT



**Figure 6:** Location of all drill holes reported within this announcement.



# Appendix D: JORC Code, 2012 Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample retrospectivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Nature of Sampling: Reverse Circulario (RC), Diamond Drill Hole (DDH) and auger drilling methods were used for sampling. Auger drilling was performed using diametres of 4", 3.5", 2.5", and 2", and to a depth of up to 20 metres. In contrast, DDH was executed using HQ and HWL diametres and RC 4 3/3 inches, continuing until contact with fresh rock was achieved.</li> <li>Method of Collection: Samples from auger and RC drilling, were retrieved directly from the auger and RC sampler and immediately preserved in identified and sealed plastic bags to prevent contamination. Diamond core drilling was employed until fresh rock was encountered, with cores housed in plastic trays, each marked to identify each stage of drilling advance and core recovery.</li> <li>Sample careful: Initial inspections of samples were carried out in the field by the assigned geologist, followed by a secondary review upon their arrival at the storage facility, which included a thorough check of the drilling reports and a physical examination of the cores and auger samples. Detailed logging of all drill and auger holes was conducted, emphasizing the collection of precise geological information and ensuring the integrity of each sample.</li> <li>Sample Weight: The sample weights varied according to the method and core diameter, with auger drilling samples ranging from 3Kg to 9Kg, diamond core drilling samples from 2Kg to 6Kg and RC ranging from 6Kg to 18Kg.</li> <li>Packaging &amp; Labeling: The samples were placed in double plastic bags post-collection, sealed to prevent contamination, and labelled with 'pc', followed by a unique identification number for traceability. Diamond drilling cores were stored in dedicated plastic boxes, labelled clearly with information including depth, sample interval, and specifics of the drilling advances and recovery.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diametre, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Type of Drill: The exploration program employed three primary drilling techniques: auger, RC and DDH. Auger drilling, using diametres of 4", 3.5", 2.5", and 2", targeted surface and nearsurface samples down to 21 metres. Diamond and RC drilling was used for continuous core samples down to the fresh rock.</li> <li>Drill Method: Auger drilling utilised a bucket drill bit, ideal for shallow depths and quick surface geological investigations. Diamond core drilling was implemented to obtain continuous rock core and providing an uninterrupted record of rock formations.</li> <li>Drill Rig: Lightweight, mechanised rigs were used for auger drilling, ensuring efficient penetration to the desired depths. More robust rigs capable of reaching fresh rock were used for diamond core drilling, ensuring high-quality core recovery.</li> <li>Drill Orientation: Drilling was exclusively vertical, with no orientation monitoring, due to the straightforward nature of the approach, which was deemed most suitable for the geological targets.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures are taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Recovery Rates: The project achieved an excellent recovery, with 96% of samples exhibiting above 80% recovery. Each drilling session was documented, assuring thorough record-keeping.</li> <li>Recovery rates were calculated by comparing actual core or chip lengths with expected run lengths, and all data was logged.</li> <li>Consistent drilling protocols, immediate secure packaging, and minimal handling were standard practices to optimise sample integrity and recovery.</li> <li>No significant bias was detected between sample recovery and grade, suggesting reliable assay data with minimal material loss or gain across varying grain sizes.</li> </ul>
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of	Geological and Geotechnical Detail: Both core and auger samples from the boreholes were geologically and geotechnically logged in



detail to support appropriate Mineral Resource
estimation, mining studies and metallurgical
studies.

- Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.
- The total length and percentage of the relevant intersections logged.

detailed accordance with the NBR 9603 standards. This level of detail is sufficient to support appropriate Mineral Resource estimation, mining studies, and metallurgical studies.

- Nature of Logging: Logging is both qualitative and quantitative in nature. Descriptive attributes like colour and consistency provide qualitative insights, while parameters like weight, diameter, and net advance offer quantitative data. Additionally, core samples were systematically photographed, ensuring a visual record of the core was available to complement the logs.
- Colour: Recording the observed colour of the sample.
- Extent of Logging: 100% of the boreholes, encompassing their entire length, were logged. This includes all relevant intersections, ensuring no significant geological features or sample attributes are omitted.

#### Subsampling techniques and sample preparation

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all subsampling stages to maximise representivity of samples.
- Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.
- Whether sample sizes are appropriate to the grain size of the material being sampled.

- Sample Preparation Facility: Auger and RC samples were processed at the SGS-GEOSOL laboratory, while ALS Laboratories handled DDH and some RC samples. Both facilities are in Vespasiano-MG, Brazil.
- General Sample Preparation: Samples underwent rigorous physical preparation following standard industry practices at the SGS-GEOSOL and ALS laboratories. This encompassed:
  - Homogenisation: Comprehensive mixing was performed on the samples to ensure uniform particle distribution.
  - Separation: An aliquot of 150g was reserved for ammonium sulfate leaching tests from each sample.
  - Drying: All samples were dried at a controlled temperature of up to 65°C.
  - Sub-sampling: Utilising a Jones splitter, sub-samples of approximately 250g were extracted.
  - Pulverisation: The 250g sub-sample was pulverised using a steel mill until 95% of the sample particles achieved a fineness below 150 mesh.

#### Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.

Laboratory: The SGS-GEOSOL laboratory in Brazil conducted all the assay tests for the auger and some RC samples, and the ALS laboratory in Lima, Peru, conducted all the DDH and some RC samples.

#### Assay Techniques:

a. ICP MS\_ Determination by Fusion with Lithium Metaborate - ICP MS for Major Oxides. Some elements and their detection limits include:

$AI_2O_3$	0,01 - 75 (%)	Ва	10 – 100,000 (ppm)
Fe <sub>2</sub> O <sub>3</sub>	0,01 - 75 (%)	K <sub>2</sub> O	0,01 - 25 (%)
Na <sub>2</sub> O	0,01 - 30 (%)	P <sub>2</sub> O <sub>5</sub>	0,01 - 25 (%)
TiO <sub>2</sub>	0,01 - 25 (%)	V	5 – 10,000 (ppm)
CaO	0,01 - 60 (%)	Cr <sub>2</sub> O <sub>3</sub>	0,01 - 10 (%)
MgO	0,01 - 30 (%)	MnO	0,01 - 10 (%)
SiO <sub>2</sub>	0,01 - 90 (%)	Sr	10 – 100,000 (ppm)
Zn	5 – 10,000 (ppm)	Zr	10 – 100,000 (ppm)

b. PHY01E: Loss on Ignition (LOI) was determined by calcining the sample at 1,000  $^{\circ}\text{C}.$ 

c. IMS95R: Lithium Metaborate Fusion followed by Inductively Coupled Plasma Mass Spectrometry (ICP MS) was employed to determine concentrations of Rare Earth elements. Detection limits for some elements include:

Ce	0.1 – 10,000 (ppm)	Dy	0.05 - 1,000 (ppm)
Gd	0.05 - 1,000 (ppm)	Но	0.05 – 1,000 (ppm)
Nd	0.1 – 10,000 (ppm)	Pr	0.05 – 1,000 (ppm)
Th	0.1 – 10,000 (ppm)	Tm	0.05 – 1,000 (ppm)
Yb	0.1 – 1,000 (ppm)	Eu	0.05 – 1,000 (ppm)



Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches,	The positioning of the drill has been achieved with high precision using a GPS RTK (Real-Time Kinematic) system. This sophisticated
Location -f	Accuracy and quality of comments of the second	For some samples exceeding 1000 ppm, over-limit analysis for Nd and Pr (praseodymium) was necessary).
		<ul> <li>Grades (ppm) were rounded to nearest whole figure, and lengths (m) were rounded to the nearest 0.5m.</li> </ul>
		REO assays from diamond drilling on the appendix were reported within clays with 1000ppm TREO cut-off and 2m dilution.
		within clays with 1000ppm TREO cut-off and 2m dilution.
		REO assays from auger drilling on the appendix were reported
		the following oxides: CeO <sub>2</sub> , Dy <sub>2</sub> O <sub>3</sub> , Er <sub>2</sub> O <sub>3</sub> , Eu <sub>2</sub> O <sub>3</sub> , Ga <sub>2</sub> O <sub>3</sub> , Ho <sub>2</sub> O <sub>3</sub> , La <sub>2</sub> O <sub>3</sub> , Lu <sub>2</sub> O <sub>3</sub> , Nd <sub>2</sub> O <sub>3</sub> , Pr <sub>6</sub> O <sub>11</sub> , Sm <sub>2</sub> O <sub>3</sub> , Tb <sub>4</sub> O <sub>7</sub> , Tm <sub>2</sub> O <sub>3</sub> , Y <sub>2</sub> O <sub>3</sub> , Yb <sub>2</sub> O <sub>3</sub> . For the MREO (Magnetic Rare Earth Oxides), the following oxides were considered: Dy <sub>2</sub> O <sub>3</sub> , Gd <sub>2</sub> O <sub>3</sub> , Ho <sub>2</sub> O <sub>3</sub> , Nd <sub>2</sub> O <sub>3</sub> , Pr <sub>6</sub> O <sub>11</sub> , Sm <sub>2</sub> O <sub>3</sub> , Tb <sub>4</sub> O <sub>7</sub> . And for the HREO we consider: Dy <sub>2</sub> O <sub>3</sub> , Er <sub>2</sub> O <sub>3</sub> , Eu <sub>2</sub> O <sub>3</sub> , Gd <sub>2</sub> O <sub>3</sub> , Ho <sub>2</sub> O <sub>3</sub> , La <sub>2</sub> O <sub>3</sub> , Lu <sub>2</sub> O <sub>3</sub> , Tb <sub>4</sub> O <sub>7</sub> , Tm <sub>2</sub> O <sub>3</sub> , Y <sub>2</sub> O <sub>3</sub> and Yb <sub>2</sub> O <sub>3</sub>
		<ul> <li>The TREO (Total Rare Earth Oxides) was determined by the sum of the following oxides: CeO<sub>2</sub>, Dy<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, La<sub>2</sub>O<sub>3</sub>,</li> </ul>
		Lu Lu <sub>2</sub> O <sub>3</sub> 1.1371
		Yb Yb <sub>2</sub> O <sub>3</sub> 1.1387
		Tm Tm <sub>2</sub> O <sub>3</sub> 1.1421
		Er Er <sub>2</sub> O <sub>3</sub> 1.1435
		Ho Ho <sub>2</sub> O <sub>3</sub> 1.1526
		$\begin{array}{cccccccccccccccccccccccccccccccccccc$
		Y Y <sub>2</sub> O <sub>3</sub> 1.2699 Tb Tb <sub>4</sub> O <sub>7</sub> 1.1762
		Eu Eu <sub>2</sub> O <sub>3</sub> 1.1579 Y Y <sub>2</sub> O <sub>3</sub> 1.2699
		Dy Dy <sub>2</sub> O <sub>3</sub> 1.1477
		Pr Pr <sub>6</sub> O <sub>11</sub> 1.2082
		Nd Nd <sub>2</sub> O <sub>3</sub> 1.1664
		Sm Sm <sub>2</sub> O <sub>3</sub> 1.1596
		La La <sub>2</sub> O <sub>3</sub> 1.1728
		Ce CeO <sub>2</sub> 1.2284
		elemental values into the oxide values. The conversion factors used are included in the table below.  Element Oxide Factor
	Uscuss any adjustment to assay actu.	regular backups.  • The only adjustments to the data were made- transforming the
assaying	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, and data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Primary data collection follows a structured protocol, with standardised data entry procedures in place. Data verification procedures ensure that any anomalies or discrepancies are identified and rectified. All data is stored both in physical forms, such as hard copies and electronically, in secure databases with</li> </ul>
of sampling and	either independent or alternative company personnel.	alternative company personnel yet.
Verification	The verification of significant intersections by	Significant intersections have not been independently verified by
		Comments on Assay Data and Tests: The techniques employed are well- suited for the elements and minerals of interest. These methods, combined with the reputable quality control practices of the SGS-GEOSOL and ALS laboratories, ensure the reliability of the assay data.
		Quality Control: The laboratory follows strict quality control procedures, ensuring the accuracy and precision of the assay data. Internally, the laboratory uses duplicate assays, standards, and blanks to maintain quality.
		U 0.05 – 10,000 (ppm)
		Sm 0.1 – 1,000 (ppm) Y 0.05 – 1,0000 (ppm)
		La 0.1 – 10,000 (ppm) Tb 0.05 – 1,000 (ppm)



	mine workings and other locations used in Mineral Resource estimation.	GPS provides real-time corrections, ensuring accuracy within centimetres.		
	Specification of the grid system used. Quality and adequacy of topographic control.	<ul> <li>The project's grid system is based on the SIRGAS 2000 UTM coordinate system. This universal grid system facilitates consistent data interpretation and integration with other geospatial datasets.</li> </ul>		
		<ul> <li>Benchmark and control points were established within the project area to ensure the quality and reliability of the topographic location data.</li> </ul>		
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution are sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> </ul>	The auger drilling is conducted on a regular grid with 200 x 200 metres spacing. This grid spacing is designed to provide a detailed exploration framework suitable for the area of interest. It aims to assist in defining our initial inferred resource, and offer a foundational understanding of the geological and grade continuity in the targeted zone.		
	Whether sample compositing has been applied.	<ul> <li>Diamond drilling, on the other hand, is not being conducted on a predefined exploration grid. Instead, exploratory boreholes are being drilled to provide insights into specific areas of interest and potential mineralisation zones. The exploratory nature of the diamond drilling further supports the overall geological understanding, although its data spacing is not predefined.</li> </ul>		
		<ul> <li>Reverse circulation (RC) drilling carried out on a structured grid with a 400 x 400 metres spacing. This grid pattern is tailored to facilitate a comprehensive exploration strategy, suitable for the designated area, with the primary goal of enhancing our understanding of the mineral distribution and geological consistency across the target zone. The broader spacing of 400 x 400 meters for the RC drilling is strategically chosen to cover a larger area efficiently while still providing valuable insights into the potential mineralisation patterns and geological features.</li> </ul>		
		<ul> <li>No sample compositing has been applied in reporting the exploration results. Each sample is treated and reported individually to maintain the highest level of detail and accuracy.</li> </ul>		
Orientation of data about geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of crucial mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>All drill holes were vertically oriented, which is deemed appropriate given the nature of the deposit. The deposit in question is a supergene deposit with a much larger areal extent than the thickness of the mineralised body. This type of deposit tends to be horizontally extensive with relatively consistent thickness.</li> <li>Given the vast area extent of the deposit and its relatively consistent thickness, vertical drilling is best suited to achieve unbiased sampling. This orientation allows for consistent intersecting of the horizontal mineralised zones and provides a representative view of the overall geology and mineralisation.</li> </ul>		
		<ul> <li>There is no indication that drilling orientation has introduced any sampling bias about the crucial mineralised structures. The drilling orientation aligns well with the deposit's known geology, ensuring accurate representation and unbiased sampling of the mineralised zones. Any potential bias due to drilling orientation is considered negligible in this context.</li> </ul>		
Sample security	The measures taken to ensure sample security.	All samples were collected by field personnel and carefully packed in labelled plastic bags. Once packaged, the samples were transported directly to the SGS-GEOSOL or ALS laboratories in Brazil. The samples were secured during transportation to ensure no tampering, contamination, or loss. Chain of custody was maintained from the field to the laboratory, with proper documentation accompanying each batch of samples to ensure transparency and traceability of the entire sampling process. Using a reputable laboratory further reinforces the sample security and integrity of the assay results.		
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	As of the current reporting date, no external audits or reviews have been conducted on the sampling techniques, assay data, or results obtained from this work. However, internal processes and checks were carried out consistently to ensure the quality and reliability of the data.		



Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section).

Criteria	JORC Code explanation	Comme	ntary		
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership, including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	All samples were acquired from tenements owned by Viridis Mining and Minerals Ltd, following an agreement with the Varginha Parties. Specifically:			
		=	Prospect	#Tenement	Tenement total size (m²)
		-	CNT	832.429/2023	203,200
			CDO	830419/2019	4,459,800
			FZ	009.031/1966	4,466,600
			ТМ	804.675/1975; 005.460/1954 and 802.917/1978	1,306,300
			SI	834.738/1995	2,813,500
			CS	833.560/1996	1,542,600
done by other parties  Geology	Deposit type, geological setting and style of mineralisation.  exploration by other parties.	• The	Caldeira Pi Varginha N exercises, u holes. This histori compleme the region	us project is geolog roject, sharing the s Mineração previous utilising a powered ical data provides e nts current explora is geological potent the region where the	rically intertwined with the same geological context. Ily undertook regional drilling auger drill rig to produce open assential context and tion efforts in understanding tial. The deposit is located can be
		•	Deposit No lonic Adsol spatial pos Poços De Cone of the enveloping the Brazilic macro personan approxi semblance dominant aphonolite, volcanic rocrucial role mining pro REE Minero highlighted type. Evide occurrence profile of the Classification Relevant A Rare Earth Poços de Codue to the These elemapplication energy sysability of the friendly mit	reture: The deposit un priton Clay Rare Eart itioning is within an aldas Alkaline mas aldas Complex: This most extensive alkar an area of roughly an states of São Paus a prective, it portrays and a collapsed cald rocks within the alkar nepheline syenites, cks. This diverse ger in dictating mineral in this disclosure lance pointing to this within the saprolit he Alkaline granite lare Earth Oxides) conditional Informatic Element deposits, aldas, have recently global demand surpents, especially the sin modern technotems, electronics, and tess deposits to offerse and the same electronics, and these deposits to offerse same electronics, and these deposits to offerse allass to offerse deposits to offerse allass within the same electronics, and these deposits to offerse deposits d	is geological entity stands as a faline massif intrusions globally, a 800 km². It stretches across also and Minas Gerais. From a is a near-circular structure with 80 km. This formation has a fera. Delving deeper, the radine complex encompass sodalite syenites, and many rological setting has played a fall occurrences and potential fic REE mineralisation ferans towards the lonic Clay is is mainly derived from its rec/clay zone of the weathering basement. The enriched MREO composition also attests to this fon: The lonic Adsorption Clay particularly in regions like by gained significant attention ge for rare earth elements. The heavy rare earths, have vital cologies such as renewable and defence apparatus. The fer relatively environmentally apared to traditional hard rock



Criteria	JORC Code explanation	Commentary
		<ul> <li>Given the strategic importance of REEs in modern industries, a thorough understanding and exploration of such geologies becomes paramount. The unique geological setting of the Poços de Caldas complex presents both opportunities and challenges, making further detailed study and research essential for sustainable exploitation.</li> </ul>
Drill hole Information	A summary of all information material to the understanding of the exploration results, including a tabulation of the following information for all Material drill holes:  Easting and northing of the drill hole collar  elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar  Dip and azimuth of the hole down hole length and interception depth hole length.  If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	<ul> <li>Auger Drilling         Total number of holes: 68</li> <li>Diamond Drilling         Total number of holes: 8</li> <li>RC Drilling:         Total number of holes: 30</li> <li>Reported in Appendix A and B of this Report</li> </ul>
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.  Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  The assumptions used for any reporting of metal equivalent values should be clearly stated.	Data collected for this project includes surface geochemical analyses, geological mapping, and auger and diamond drilling results. Data were compiled without selective exclusion. All analytical methods and aggregation were done according to industry best practices, as detailed in previous discussions.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Given the nature of the deposit, which is a supergene deposit with a much larger areal extent than its thickness, the vertical drilling orientation is suitable for accurately representing the mineralised zones.</li> <li>All drill holes are vertical and are appropriate for the deposit type, ensuring unbiased sampling of the mineralisation.</li> <li>Due to the mineralisation's geometry and the drill holes' vertical orientation, downhole lengths can be considered close representations of the true widths of the mineralised zones. However, further studies would be required for absolute precision.</li> <li>In cases where there might be a discrepancy between downhole lengths and true widths, it should be noted that "downhole length, true width not known."</li> </ul>
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	The data presented in this report helps readers better understanding of the information. Various diagrams and supplementary information are included in the document, enhancing the clarity and accessibility of the geological findings and exploration results.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be	The data presented in this report strives to provide a transparent and holistic view of the exploration activities and findings. All the information, ranging from sampling techniques, geological



Criteria	JORC Code explanation	Commentary
	practiced to avoid misleading reporting of Exploration Results.	context, prior exploration work, and assay results, has been reported comprehensively. Where relevant, cross-references to previous announcements have been provided to ensure continuity and clarity. Including diagrams, such as geological maps and tables, supports a more in-depth understanding of the data. It's noteworthy to mention that while positive results have been highlighted, the nature of the samples, particularly their origin from either saprolitic clays or bauxite, has been distinctly reported to ensure a balanced view. This report faithfully represents the exploration activities and findings without any undue bias or omission.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	There is no additional substantive exploration data to report currently.
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Future works include carrying on the auger, diamond, and RC drilling campaign in 2024, geological mapping, geochemical and metallurgical tests, and mineralogical characterisation.

