Multiple New Discoveries at Colossus

Scout Drilling Continues to Uncover Heavy Rare Earth Potential

ASX Release: 8 May 2024

Highlights

- **Numerous discoveries have been made across 8 new concessions previously unexplored at Colossus through scout auger drilling, establishing numerous new prospects for follow-up deeper drilling (FC – Fazenda Cocal, MO – Moinhos, SR – Sao Roque). Maiden auger drilling at the recently acquired Cupim South Extension has also returned remarkable grades; these new discoveries are highlighted below:**
  - FC-AG-002: **13m @ 7,632ppm TREO**[A] from surface, ending in mineralisation of **7,906ppm TREO**
    Ending last 5m @ 10,689ppm TREO and 82ppm Dy-Tb Oxide
  - FC-AG-010: **7m @ 4,905ppm TREO** from 1m, ending in mineralisation of **4,666ppm TREO**
  - FC-AG-008: **7m @ 3,703ppm TREO** from surface, ending in mineralisation of **2,854ppm TREO**
  - FC-AG-005: **10m @ 3,393ppm TREO** from 5m, ending in mineralisation of **3,430ppm TREO**
  - FC-AG-003: **7m @ 3,080ppm TREO** from 2m, ending in mineralisation of **3,649ppm TREO**
  - MO-AG-008: **6m @ 4,852ppm TREO** from 2m, ending in mineralisation of **6,419ppm TREO**
    Ending last 3m @ 5,553ppm TREO and 131ppm Dy-Tb Oxide
  - MO-AG-016: **5m @ 3,496ppm TREO** from 6m, ending in mineralisation of **5,042ppm TREO**
  - MO-AG-015: **11m @ 3,738ppm TREO** from surface, ending in mineralisation of **4,827ppm TREO**
  - CS-AG-302: **12m @ 8,221ppm TREO** from 6m, ending in mineralisation of **9,643ppm TREO**
    Ending last 4m @ 10,111ppm TREO and 157ppm Dy-Tb Oxide
  - CS-AG-157: **8m @ 5,510ppm TREO** from surface, ending in mineralisation of **4,359ppm TREO**
  - CS-AG-303: **7m @ 5,192ppm TREO** from 2m, ending in mineralisation of **4,781ppm TREO**
    Ending last 4m @ 5,268ppm TREO and 111ppm Dy-Tb Oxide
  - CS-AG-206: **12m @ 3,784ppm TREO** from surface, ending in mineralisation of **4,407ppm TREO**
  - CS-AG-270: **7m @ 3,433ppm TREO** from surface, ending in mineralisation of **3,505ppm TREO**
  - CS-AG-268: **19m @ 3,156ppm TREO** from surface, ending in mineralisation of **2,857ppm TREO**
  - SR-AG-092: **11m @ 2,199ppm TREO** from surface, ending in mineralisation of **1,287ppm TREO**
    Including 4m @ 2,413ppm and 141ppm Dy-Tb Oxide

- **Second set of results from infill auger, RC and diamond drilling ('DD') continues to encounter higher grades at Ribeirao which is expected to strengthen and bolster confidence in the Maiden Resource Estimate model for this concession.**
  - RA-RC-124: **21m @ 4,198ppm TREO** [30% MREO[B]] from 3m
  - RA-RC-125: **13m @ 4,284ppm TREO** [32% MREO] from 3m
  - RA-RC-128: **7m @ 4,031ppm TREO** [30% MREO] from 6m
  - RA-DDH-005: **20.5m @ 3,123ppm TREO** from 5.5m, including **9.5m @ 4,325ppm TREO** [34% MREO]

[A] Total Rare Earth Oxides ('TREO'): La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3+ Ho2O3 + Er2O3 + Tm2O3 + Yb2O3 + Lu2O3 + Y2O3
[B] Magnetic Rare Earth Oxides ('MREO'): Dy2O3, Gd2O3, Ho2O3, Nd2O3, Pr6O11, Sm2O3, Tb4O7

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- **The seventh batch of assays was primarily focused on scout drilling with auger holes across untested licenses at Colossus as an inexpensive and effective method of making discoveries to follow up in a targeted manner with RC/DD drilling campaigns. This was an incredibly successful exercise which has made significant discoveries in 8 previously untested concessions while Viridis continues mineral resource work and metallurgical drilling. These results exemplify the untapped growth potential still remaining at Colossus.**

- **Most importantly, maiden drilling on the recently acquired São Domingos Mining Licenses, forming the Cupim South Extension, has confirmed high-grades of REE Mineralisation and is the first instance we've seen shallow elevated Dy-Tb mineralisation (>150ppm) on a Mining License outside of the Northern Concessions.**

- **The mineralised footprint at Cupim South has now subsequently doubled from the maiden auger drilling results on the extended Cupim South Mining Licenses and highlights the further potential for discovering high-grade deposits at Cupim South.**

- **This batch of assays continues to uncover the heavy rare earth potential within the Colossus mining Licenses simply from preliminary auger drilling, exemplifying the strategic importance and growth potential of the Colossus Project.**

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Chief Executive Officer, Rafael Moreno commented:

"The extent of consistent and high-grade results across these new concessions is remarkable and showcases the homogenous nature of the mineralisation across all the Colossus landholdings. Crucially, our maiden drilling at the São Domingos Mining Licenses has confirmed high grades of REE mineralisation, highlighting the significant resource in our southern tenements.

Our exploration drilling has focused on better understanding not only the high-grade zones across our vast landholdings but also uncovering valuable heavy magnetic rare earths such as Terbium and Dysprosium, which substantially increases the value of our basket.

With these additional stellar results and our development strategy focused on maximising earnings in the early years of production, there is a clear opportunity to focus our exploration efforts on various existing heavy rare earth discoveries and make this a priority when finalising our mine plan for the project.

Other project development activities are in full flight, with our maiden resource estimate on track for June 2024, the Scoping Study to be completed in Q3 2024, and various metallurgical test work with ANSTO being executed in parallel as we look to finalise our flowsheet design."

Viridis Mining and Minerals Limited ('Viridis' or 'Company') is pleased to report that the seventh set of assays has been received within the Colossus ionic adsorption clay ('IAC') rare earth elements ('REE') Project. These assays have confirmed high-grade REE mineralisation across 8 previously unexplored concessions.

The scout drilling program aimed to discover high-grade zones across Colossus and specifically act as confirmatory drilling on the Cupim South Extension to validate the fact that the mineralised body continues towards the newly acquired concessions. The work completed on the Cupim South Extension has been exceptional to date; it was led by Dr Jose Braga and his team, which in the space of 2 months, has finalised the agreement at a low, upfront cost, worked to place all licenses in good standing, gained land access, and completed maiden auger drilling/assays. The assay information from auger drilling will allow Viridis to complete a systematic and targeted RC and Diamond Drilling program to multi-fold the current mineralised footprint of Cupim South.

Additionally, in conjunction with the Northern Concessions, the São Domingo Mining Licenses signify an important expansion of the mining license portfolio for the Colossus project. The program has discovered shallow, heavy rare earth mineralisation, as seen by CS-AG-302: 12m @ 8,221ppm TREO, **ending the last 4m with 157ppm Dy-Tb.**

Cupim South

The seventh batch of assays consisted of step-out auger drilling at the Cupim South Extension, aimed at confirming the mineral body extension onto the adjoining mining license. The highlights have confirmed widespread, high-grade, and homogenous mineralisation on greenfield and previously unexplored concessions recently acquired by Viridis:

- CS-AG-302: **12m @ 8,221ppm TREO** from 6m, ending in mineralisation of **9,643ppm TREO**
  Ending last 4m @ 10,111ppm TREO and 157ppm Dy-Tb Oxide
- CS-AG-157: **8m @ 5,510ppm TREO** from surface, ending in mineralisation of **4,359ppm TREO**
- CS-AG-303: **7m @ 5,192ppm TREO** from 2m, ending in mineralisation of **4,781ppm TREO**
  Ending last 4m @ 5,268ppm TREO and 111ppm Dy-Tb Oxide
- CS-AG-206: **12m @ 3,784ppm TREO** from surface, ending in mineralisation of **4,407ppm TREO**
- CS-AG-270: **7m @ 3,433ppm TREO** from surface, ending in mineralisation of **3,505ppm TREO**
- CS-AG-268: **19m @ 3,156ppm TREO** from surface, ending in mineralisation of **2,857ppm TREO**

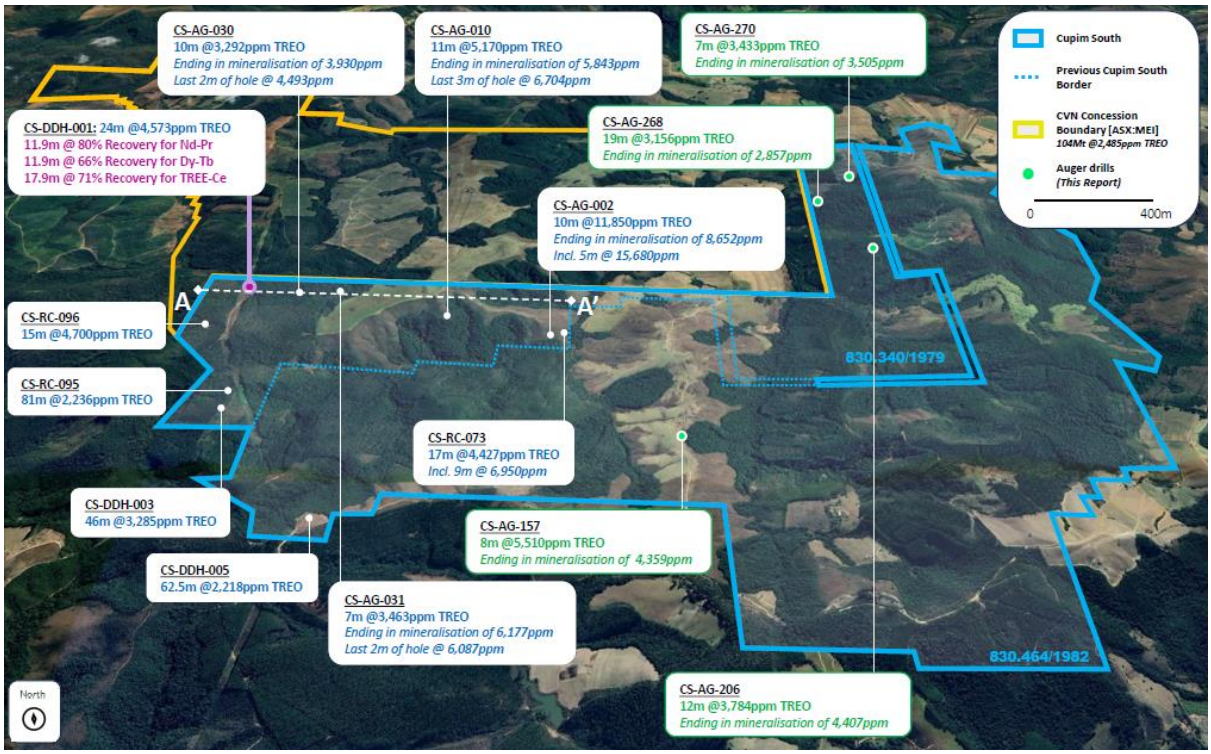

Figure 1: ***Location map of highlighted drill holes in the Cupim South prospect.*** [1]

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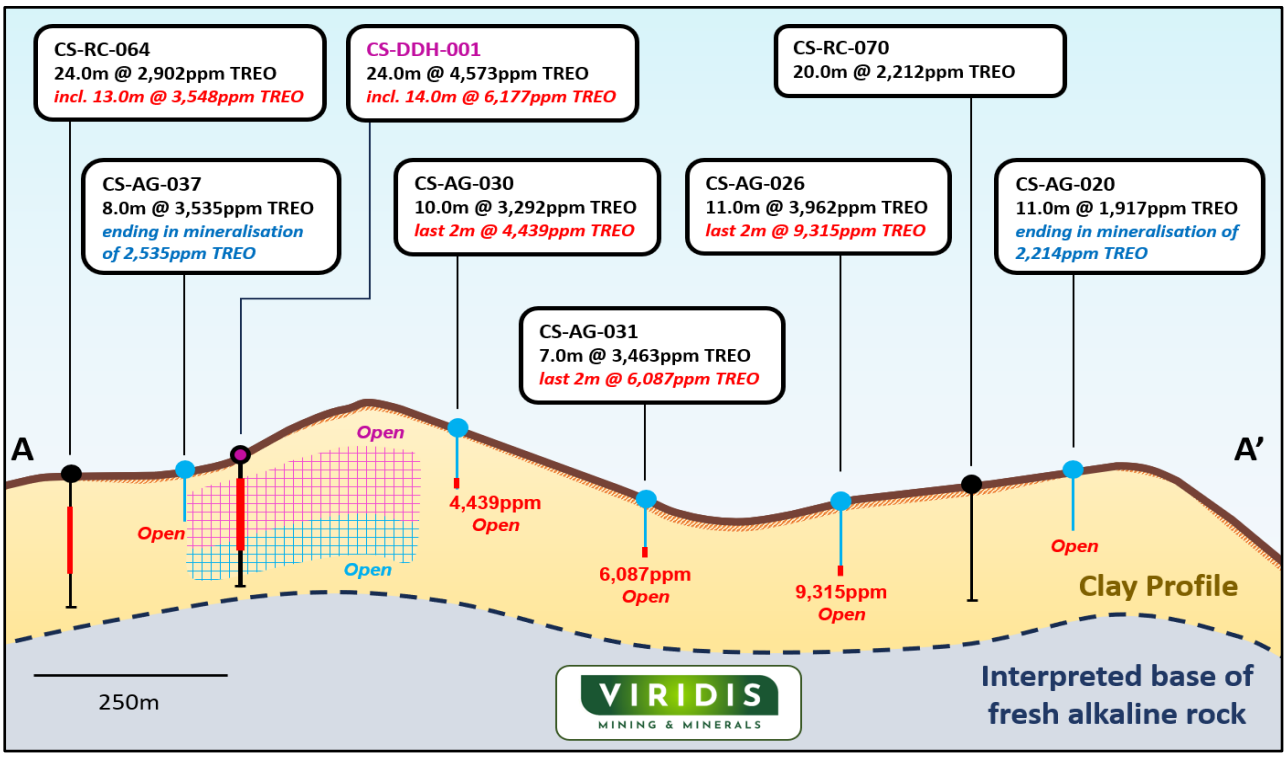
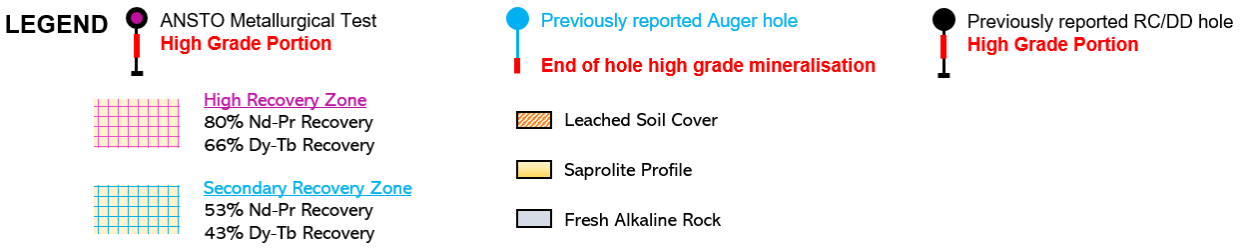


Figure 2: *Cross section AA' (looking North) at Cupim South from Figure 1 with significant intercepts previously reported. X and Y axes are at different scales, with the Y axes vertically exaggerated.*[2]



Ribeirão

RC and DD drilling on a regular grid of 400m x 400m at Ribeirao was conducted to strengthen the resource model for the anticipated maiden resource estimate at the concession. This drilling has intercepted significantly higher grades than previously encountered, which occurred at the borders of the concession. These results will be integrated into the maiden resource model and include the best intercepts for this prospect, as seen below:

- RA-RC-124: **21m @ 4,198ppm TREO** [30% MREO] from 3m
- RA-RC-125: **13m @ 4,284ppm TREO** [32% MREO] from 3m
- RA-RC-128: **7m @ 4,031ppm TREO** [30% MREO] from 6m
- RA-DDH-005: **20.5m @ 3,123ppm TREO** from 5.5m, including **9.5m @ 4,325ppm TREO** [34% MREO]

Viridis has conducted this drilling densification to provide resource geologists with further confidence in their understanding of the geological and grade distribution. However, the grades that have shown up at Ribeirao are significantly higher than previously anticipated.

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Figure 3: *Location map of highlighted drill holes in the Ribeirao prospect.* [3]

Fazenda Cocal

The Fazenda Cocal prospect extends over an area of 5.44km^2, where maiden drilling has made significant discoveries of high-grade mineralisation with the majority of the prospect remaining unexplored. Given the incredibly encouraging initial results, Viridis will look to commence drilling across this entire prospect to develop Fazenda Cocal into another potential high-grade resource. Maiden auger assays have returned exceptional results of:

- FC-AG-002: **13m @ 7,632ppm TREO** from surface, ending in mineralisation of **7,906ppm TREO**
  Ending last 5m @ 10,689ppm TREO and 82ppm Dy-Tb Oxide
- FC-AG-010: **7m @ 4,905ppm TREO** from 1m, ending in mineralisation of **4,666ppm TREO**
- FC-AG-008: **7m @ 3,703ppm TREO** from surface, ending in mineralisation of **2,854ppm TREO**
- FC-AG-005: **10m @ 3,393ppm TREO** from 5m**,** ending in mineralisation of **3,430ppm TREO**
- FC-AG-003: **7m @ 3,080ppm TREO** from 2m**,** ending in mineralisation of **3,649ppm TREO**

Moinhos is a smaller license sitting southwest of Northern Mining Licenses held at Colossus. This prospect was scout drilled to evaluate potential of the area and enhances understanding of the Northern portion of the Complex which can also be incorporated into the future mine plans for Colossus. Maiden auger drilling has returned exceptional grades with high levels of both Nd-Pr and critical heavy rare earths:

- MO-AG-008: **6m @ 4,852ppm TREO** from 2m, ending in mineralisation of **6,419ppm TREO**
  Ending last 3m @ 5,553ppm TREO and 131ppm Dy-Tb Oxide
- MO-AG-016: **5m @ 3,496ppm TREO** from 6m, ending in mineralisation of **5,042ppm TREO**
- MO-AG-015: **11m @ 3,738ppm TREO** from surface, ending in mineralisation of **4,827ppm TREO**

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These results speak more so contextually about the Northen portion of the complex, with results continuing to show elevated Dy-Tb mineralisation consistently occurring at surface within the Northern portion, which has been strongly confirmed by previous reported drilling at Northern Concessions:

- 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-RC-29: **5.5m @ 14,896ppm TREO [47% MREO]** within broader section of **18.5m @ 6,253ppm TREO [36% MREO]** from 1m depth
  - *FZ-RC-29 grades at 1 to 2m depth reaching: 23,556ppm TREO which includes 7,407ppm Neodymium, 1,753ppm Praseodymium, **441ppm Dysprosium and 96ppm Terbium Oxides***
  - *The high-grade portion itself has an impressive **5.5m @ 6,154ppm HREO**[C]*

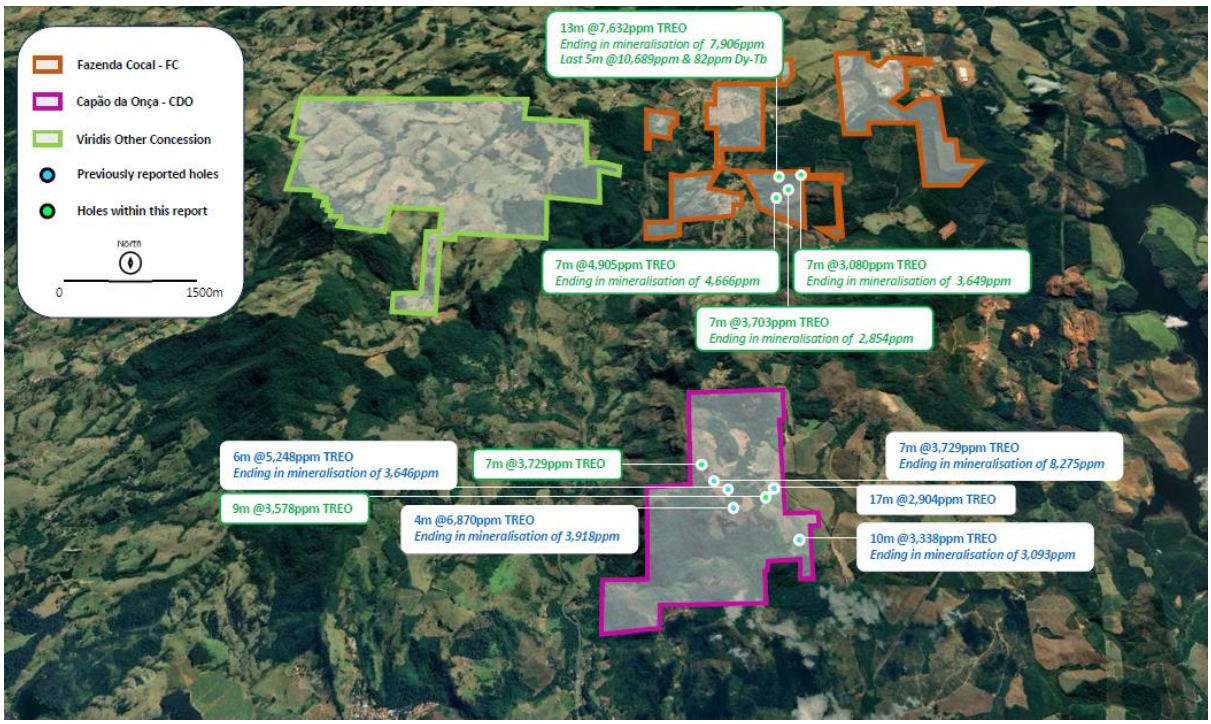

Figure 4: *Location map of highlighted drill holes in the western portion of the complex.* [4]

Future Work

The current focus of development work is infill drilling and metallurgical testing for mine plan development and completion of scoping study engineering. Greenfield exploration remains an important activity as Viridis looks to maximise revenue in the early years of production with a higher-value basket of rare earth elements. In parallel, Viridis looks forward to issuing its initial maiden resource estimate in June 2024 and continuing its critical permitting activities.

[C] Heavy Rare Earth Oxides ('HREO'): Dy_2O_3, Er_2O_3, Eu_2O_3, Gd_2O_3, Ho_2O_3, La_2O_3, Lu_2O_3, Tb_4O_7, Tm_2O_3, Y_2O_3 and Yb_2O_3

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

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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 kaolin-halloysite; 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.

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References

1. *VMM announcement dated 10 April 2024 'Step-Out Drilling Continues Making High-Grade Discoveries'*
2. *VMM announcement dated 20 March 2024 '80% Average Ionic Recoveries from First Colossus Hole'*
3. *VMM announcement dated 06 February 2024 'Spectacular Shallow Intercepts up to 23,556ppm TREO-Amended'*
4. *VMM announcement dated 18 April 2024 'Colossus Achieves Highest Overall Bulk Ionic Recoveries'*

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APPENDIX A: DRILL LOCATIONS

Auger, RC and Diamond Hole coordinates of assays reported within this announcement: ***All holes were drilled vertically.***

Hole number	Northing (m)	Easting (m)	Elevation (m)	DH Type	Prospect	Total Length (m)
BA-DDH-0004	7,589,824	359,786	1,113	DDH	Bandeira	8.0
BA-DDH-0005	7,591,011	358,686	1,072	DDH	Bandeira	41.1
SI-DDH-0001	7,570,018	353,462	1,186	DDH	Sien	30.3
SI-DDH-0003	7,568,470	353,685	1,193	DDH	Sien	12.2
CDO-DDH-0005	7,575,513	327,349	1,317	DDH	Capão da Onça	27.5
CDO-DDH-0006	7,575,266	326,938	1,240	DDH	Capão da Onça	14.1
RA-DDH-0004	7,574,735	335,611	1,273	DDH	Ribeirao	25.6
RA-DDH-0005	7,573,314	335,419	1,314	DDH	Ribeirao	31.6
TM-DDH-0004	7,589,191	345,919	1,358	DDH	Tamoyo	20.6
MO-AG-0019	7,579,739	337,177	1,303	AG	Moinhos	9.0
MO-AG-0018	7,578,120	335,275	1,313	AG	Moinhos	9.0
MO-AG-0016	7,580,016	337,166	1,317	AG	Moinhos	11.0
MO-AG-0015	7,578,392	335,254	1,306	AG	Moinhos	11.0
MO-AG-0012	7,578,674	335,281	1,279	AG	Moinhos	5.0
MO-AG-0007	7,579,293	335,520	1,268	AG	Moinhos	12.0
MO-AG-0006	7,579,130	335,230	1,296	AG	Moinhos	8.0
MO-AG-0003	7,579,721	335,744	1,265	AG	Moinhos	12.0
MO-AG-0002	7,579,950	336,149	1,254	AG	Moinhos	4.0
CS-AG-0043	7,576,574	344,754	1,247	AG	Cupim Sul	7.0
CS-AG-0039	7,576,620	345,119	1,262	AG	Cupim Sul	7.0
MO-AG-0004	7,579,544	335,555	1,275	AG	Moinhos	14.0
MO-AG-0008	7,579,111	335,426	1,271	AG	Moinhos	8.0
MO-AG-0010	7,578,843	335,134	1,302	AG	Moinhos	11.0
FC-AG-0007	7,581,233	327,128	1,219	AG	Fazenda Cocal	6.0
FC-AG-0013	7,580,966	327,400	1,241	AG	Fazenda Cocal	11.0
FC-AG-0010	7,581,108	327,276	1,239	AG	Fazenda Cocal	8.0
FC-AG-0015	7,580,884	327,371	1,220	AG	Fazenda Cocal	7.0
FC-AG-0016	7,580,829	327,581	1,230	AG	Fazenda Cocal	5.0
FC-AG-0009	7,581,272	327,678	1,298	AG	Fazenda Cocal	14.0
FC-AG-0017	7,580,690	327,716	1,233	AG	Fazenda Cocal	8.0
FC-AG-0001	7,581,549	327,237	1,243	AG	Fazenda Cocal	12.0
FC-AG-0005	7,581,407	327,291	1,264	AG	Fazenda Cocal	15.0
FC-AG-0008	7,581,253	327,428	1,279	AG	Fazenda Cocal	7.0
FC-AG-0003	7,581,518	327,685	1,263	AG	Fazenda Cocal	9.0
FC-AG-0006	7,581,435	327,564	1,262	AG	Fazenda Cocal	8.0
FC-AG-0002	7,581,554	327,426	1,258	AG	Fazenda Cocal	13.0
CS-AG-0041	7,576,325	345,451	1,275	AG	Cupim Sul	10.0
CS-AG-0042	7,576,037	345,459	1,316	AG	Cupim Sul	11.0
SR-AG-0054	7,585,665	323,053	1,355	AG	São Roque	13.0
SR-AG-0075	7,585,658	322,517	1,351	AG	São Roque	7.0

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Hole number	Northing (m)	Easting (m)	Elevation (m)	DH Type	Prospect	Total Length (m)
SR-AG-0077	7,585,395	322,767	1,397	AG	São Roque	12.0
SR-AG-0048	7,586,515	322,205	1,384	AG	São Roque	9.0
SR-AG-0040	7,586,379	322,631	1,344	AG	São Roque	4.0
SR-AG-0049	7,586,374	322,345	1,369	AG	São Roque	9.0
SR-AG-0050	7,586,240	322,482	1,377	AG	São Roque	15.0
SR-AG-0041	7,586,225	322,776	1,338	AG	São Roque	3.0
SR-AG-0089	7,584,519	323,355	1,383	AG	São Roque	6.0
SR-AG-0093	7,584,305	323,339	1,439	AG	São Roque	5.0
SR-AG-0087	7,584,821	323,052	1,423	AG	São Roque	12.0
SR-AG-0088	7,584,685	323,204	1,433	AG	São Roque	8.0
SR-AG-0092	7,584,398	323,196	1,437	AG	São Roque	11.0
SR-AG-0082	7,584,679	323,481	1,444	AG	São Roque	5.0
SR-AG-0081	7,584,815	323,340	1,435	AG	São Roque	6.0
SR-AG-0091	7,584,534	323,056	1,390	AG	São Roque	12.0
SR-AG-0090	7,584,394	323,482	1,427	AG	São Roque	7.0
SR-AG-0071	7,584,807	323,605	1,456	AG	São Roque	20.0
SR-AG-0080	7,584,956	323,203	1,423	AG	São Roque	3.0
SR-AG-0069	7,585,102	323,344	1,433	AG	São Roque	6.5
SR-AG-0070	7,584,957	323,484	1,454	AG	São Roque	18.0
SR-AG-0042	7,586,084	322,912	1,373	AG	São Roque	20.0
SR-AG-0052	7,585,959	322,766	1,376	AG	São Roque	16.0
SR-AG-0063	7,585,922	322,517	1,377	AG	São Roque	20.0
SI-AG-0040	7,568,008	353,659	1,154	AG	Sien	5.0
SI-AG-0049	7,567,867	353,802	1,181	AG	Sien	13.0
SI-AG-0048	7,567,726	353,666	1,196	AG	Sien	10.0
SI-AG-0041	7,568,140	353,801	1,138	AG	Sien	9.0
TM-AG-0035	7,589,528	345,709	1,316	AG	Tamoyo	11.0
TM-AG-0038	7,589,224	345,702	1,347	AG	Tamoyo	15.0
TM-AG-0037	7,589,369	345,851	1,345	AG	Tamoyo	16.0
TM-AG-0039	7,589,219	346,022	1,356	AG	Tamoyo	12.0
TM-AG-0036	7,589,385	345,568	1,325	AG	Tamoyo	13.0
FZ-AG-0174	7,585,061	341,621	1,285	AG	Fazenda	8.0
FZ-AG-0167	7,585,059	341,793	1,301	AG	Fazenda	11.0
FZ-AG-0186	7,585,009	341,693	1,296	AG	Fazenda	11.0
FZ-AG-0175	7,585,034	341,793	1,303	AG	Fazenda	16.0
FZ-AG-0178	7,585,034	341,718	1,296	AG	Fazenda	11.0
CS-AG-0303	7,580,831	346,239	1,305	AG	Cupim Sul	9.0
CS-AG-0302	7,580,687	346,102	1,295	AG	Cupim Sul	18.0
CS-AG-0300	7,580,408	345,834	1,280	AG	Cupim Sul	7.0
CS-AG-0296	7,580,414	346,100	1,293	AG	Cupim Sul	21.0
CS-AG-0290	7,578,299	346,212	1,297	AG	Cupim Sul	10.0
CS-AG-0270	7,577,875	346,367	1,352	AG	Cupim Sul	7.0
CS-AG-0269	7,577,734	346,225	1,349	AG	Cupim Sul	5.0
CS-AG-0268	7,577,593	346,084	1,335	AG	Cupim Sul	19.0

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Hole number	Northing (m)	Easting (m)	Elevation (m)	DH Type	Prospect	Total Length (m)
CS-AG-0226	7,576,603	345,659	1,263	AG	Cupim Sul	20.0
CS-AG-0206	7,577,033	346,366	1,356	AG	Cupim Sul	12.0
CS-AG-0179	7,575,896	345,518	1,305	AG	Cupim Sul	3.5
CS-AG-0165	7,576,461	346,366	1,276	AG	Cupim Sul	13.0
CS-AG-0157	7,575,334	345,190	1,364	AG	Cupim Sul	8.0
CDP-RC-0240	7,582,322	340,291	1,337	RC	Caminho das Pedras	16.0
CDP-RC-0239	7,582,288	339,937	1,341	RC	Caminho das Pedras	13.0
CDP-RC-0269	7,581,095	339,493	1,333	RC	Caminho das Pedras	18.0
CDP-RC-0266	7,581,289	339,889	1,333	RC	Caminho das Pedras	30.0
CDP-RC-0250	7,581,692	339,094	1,300	RC	Caminho das Pedras	40.0
CDP-RC-0272	7,580,892	339,896	1,343	RC	Caminho das Pedras	22.0
CDP-RC-0264	7,581,289	339,296	1,343	RC	Caminho das Pedras	23.0
CDP-RC-0263	7,581,299	339,117	1,326	RC	Caminho das Pedras	18.0
CDP-RC-0257	7,581,499	338,906	1,303	RC	Caminho das Pedras	18.0
CDP-RC-0259	7,581,505	339,493	1,306	RC	Caminho das Pedras	19.0
CDP-RC-0258	7,581,493	339,090	1,315	RC	Caminho das Pedras	22.0
RA-RC-0124	7,573,832	335,261	1,297	RC	Ribeirao	26.0
CDP-RC-0265	7,581,291	339,493	1,326	RC	Caminho das Pedras	59.0
RA-RC-0138	7,574,977	335,812	1,261	RC	Ribeirao	23.0
RA-RC-0128	7,573,188	335,707	1,326	RC	Ribeirao	16.0
RA-RC-0127	7,573,539	335,290	1,308	RC	Ribeirao	15.0
CDP-RC-0246	7,581,880	339,076	1,278	RC	Caminho das Pedras	35.0
CDP-RC-0251	7,581,700	339,291	1,285	RC	Caminho das Pedras	36.0
RA-RC-0125	7,573,981	335,990	1,264	RC	Ribeirao	20.0
RA-RC-0126	7,573,680	335,631	1,290	RC	Ribeirao	16.0
RA-RC-0121	7,574,600	335,271	1,308	RC	Ribeirao	64.0
CDO-RC-0114	7,575,346	327,223	1,311	RC	Capão da Onça	7.0
CDO-RC-0119	7,576,081	326,501	1,343	RC	Capão da Onça	13.0
CDO-RC-0115	7,575,054	326,376	1,213	RC	Capão da Onça	14.0
CDO-RC-0113	7,575,269	326,593	1,213	RC	Capão da Onça	11.0
CDO-RC-0116	7,575,048	326,787	1,214	RC	Capão da Onça	26.0
RA-RC-0137	7,574,903	335,301	1,281	RC	Ribeirao	46.0
RA-RC-0122	7,574,474	335,848	1,259	RC	Ribeirao	25.0
RA-RC-0123	7,574,203	335,529	1,279	RC	Ribeirao	30.0
CDO-RC-0120	7,575,963	326,702	1,336	RC	Capão da Onça	9.0
CDO-RC-0106	7,576,453	326,240	1,348	RC	Capão da Onça	15.0
CDO-RC-0112	7,575,811	327,060	1,326	RC	Capão da Onça	46.0
CDO-RC-0117	7,574,751	326,625	1,244	RC	Capão da Onça	20.0
CDO-RC-0118	7,576,159	327,079	1,313	RC	Capão da Onça	17.0
CDO-RC-0104	7,576,701	326,344	1,312	RC	Capão da Onça	16.0
CDO-RC-0109	7,576,191	326,422	1,342	RC	Capão da Onça	13.0
CDO-RC-0100	7,577,286	326,458	1,243	RC	Capão da Onça	47.0
CDP-RC-0244	7,582,086	340,295	1,354	RC	Caminho das Pedras	34.0
CDP-RC-0237	7,582,490	340,291	1,308	RC	Caminho das Pedras	13.0

Hole number	Northing (m)	Easting (m)	Elevation (m)	DH Type	Prospect	Total Length (m)
CDP-RC-0238	7,582,494	340,499	1,311	RC	Caminho das Pedras	49.0

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	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd + Pr (ppm)	Dy +Tb (ppm)	EOH Grade
Cupim South	CS-AG-0039	0	7	7	2,017	23%	417	21	2,606
	CS-AG-0041	0	10	10	2,108	29%	481	42	1,710
	CS-AG-0042	0	11	11	2,069	25%	440	27	1,573
	CS-AG-0043	0	7	7	2,018	25%	404	25	1,666
	CS-AG-0157	0	8	8	5,510	33%	1,533	68	4,359
	CS-AG-0165	0	13	13	2,585	27%	570	38	1,557
	CS-AG-0179	0	3.5	3.5	3,079	25%	621	49	2,838
	CS-AG-0206	0	12	12	3,784	32%	1,003	49	4,407
	CS-AG-0226	10	20	10	2,727	25%	566	37	2,535
	CS-AG-0268	0	19	19	3,156	27%	703	41	2,857
	CS-AG-0269	0	5	5	2,478	24%	501	31	1,884
	CS-AG-0270	0	7	7	3,433	27%	754	43	3,505
	CS-AG-0290	0	10	10	1,806	22%	322	21	1,509
	CS-AG-0296	6	21	15	1,954	25%	388	25	1,567
	CS-AG-0300	4	7	3	1,672	21%	285	16	1,443
	CS-AG-0302	6	18	12	8,221	40%	2,738	113	9,643
	CS-AG-0303	2	9	7	5,192	38%	1,622	87	4,781
Fazenda Cocal	FC-AG-0001	0	12	12	1,376	21%	236	16	1,301
	FC-AG-0002	0	13	13	7,632	27%	1,583	63	7,906
	FC-AG-0003	2	9	7	3,080	31%	835	30	3,649
	FC-AG-0005	5	15	10	3,393	32%	937	29	3,430
	FC-AG-0006	0	8	8	2,276	25%	471	27	1,682
	FC-AG-0007	0	6	6	2,344	17%	329	19	1,830
	FC-AG-0008	0	7	7	3,703	22%	692	24	2,854
	FC-AG-0009	0	12	12	1,345	16%	171	13	1,099
	FC-AG-0010	1	8	7	4,905	21%	872	38	4,666
	FC-AG-0013	0	11	11	2,427	17%	345	18	2,055
	FC-AG-0015	0	7	7	1,914	15%	230	16	1,561
	FC-AG-0016	0	4	4	1,918	24%	398	14	1,326
	FC-AG-0017	0	5	5	1,390	17%	188	13	1,101
Fazenda	FZ-AG-0167	0	11	11	1,704	10%	126	16	2,110
	FZ-AG-0174	2	8	6	2,616	10%	202	11	4,481
	FZ-AG-0175	0	5	5	1,667	7%	87	14	1,756

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Prospect	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd + Pr (ppm)	Dy +Tb (ppm)	EOH Grade
	FZ-AG-0178	6	11	5	2,193	17%	297	20	2,370
	FZ-AG-0186	1	11	10	2,322	14%	262	16	1,841
Moinhos	MO-AG-0002	0	4	4	1,937	10%	155	17	2,015
	MO-AG-0003	8	12	4	2,558	29%	652	28	3,124
	MO-AG-0004	0	14	14	1,802	11%	166	13	2,328
	MO-AG-0006	0	8	8	2,203	16%	271	20	1,607
	MO-AG-0007	0	12	12	1,915	25%	378	30	1,579
	MO-AG-0008	2	8	6	4,852	45%	1,719	105	6,419
	MO-AG-0010	2	11	9	1,994	19%	300	20	2,897
	MO-AG-0012	0	5	5	2,130	23%	420	23	2,584
	MO-AG-0015	0	11	11	3,738	28%	899	40	4,827
	MO-AG-0016	6	11	5	3,496	30%	951	37	5,042
	MO-AG-0018	0	9	9	2,812	23%	526	26	1,984
	MO-AG-0019	7	9	2	2,289	30%	581	23	2,425
Sien	SI-AG-0040	0	5	5	1,517	33%	396	21	1,814
	SI-AG-0041	0	9	9	1,361	31%	331	19	1,084
	SI-AG-0048	0	10	10	1,629	33%	421	21	1,323
	SI-AG-0049	0	13	13	1,543	35%	415	26	1,220
São Roque	SR-AG-0040	*NSI*							
	SR-AG-0041	*NSI*							
	SR-AG-0042	1	4	3	1,529	31%	361	30	1,458
	SR-AG-0048	7	9	2	1,063	27%	216	14	1,087
	SR-AG-0049	*NSI*							
	SR-AG-0050	10	13	3	1,129	20%	173	10	1,341
	SR-AG-0052	0	8	8	1,470	25%	273	21	1,032
	SR-AG-0054	4	7	3	1,065	26%	217	13	1,001
	SR-AG-0063	*NSI*							
	SR-AG-0069	*NSI*							
	SR-AG-0070	*NSI*							
	SR-AG-0071	0	5	5	1,373	29%	311	22	1,822
	SR-AG-0075	2	3	1	1,501	17%	207	10	1,501
	SR-AG-0077	*NSI*							
	SR-AG-0080	*NSI*							
	SR-AG-0081	0	4	4	1,148	26%	234	15	1,065
	SR-AG-0082	0	5	5	1,164	24%	208	17	1,012
	SR-AG-0087	0	4	4	1,185	21%	195	12	1,147
	SR-AG-0088	0	6	6	1,761	25%	365	18	1,837
	SR-AG-0089	3	4	1	1,245	26%	247	20	1,245
	SR-AG-0090	4	7	3	1,363	39%	425	22	1,246
	SR-AG-0091	7	12	5	1,048	32%	233	29	1,007
	SR-AG-0092	0	11	11	2,199	36%	519	97	1,287
	SR-AG-0093	0	5	5	1,588	36%	417	43	1,071

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Prospect	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd + Pr (ppm)	Dy +Tb (ppm)	EOH Grade
Tamoyo	TM-AG-0035	6	11	5	1,982	19%	278	19	1,291
	TM-AG-0036	7	13	6	5,754	19%	1,316	35	1,714
	TM-AG-0037	0	10	10	2,290	8%	90	18	1,785
	TM-AG-0038	4	15	11	1,679	10%	142	20	2,705
	TM-AG-0039	5	12	7	2,574	15%	305	26	2,715

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)
Bandeira	BA-DDH-0004	0	4.5	4.5	1,185	33%	304	16
	BA-DDH-0005	1	36.5	35.5	1,481	33%	384	21
Capão da Onça	CDO-DDH-0005	0	16	16	2,164	24%	488	22
	CDO-DDH-0006	0	3.5	3.5	1,469	11%	131	10
	CDO-RC-0100	*NSI*						
	CDO-RC-0104	0	4	4	1,405	22%	255	16
	CDO-RC-0106	0	7	7	3,729	23%	744	43
	CDO-RC-0109	0	3	3	1,299	22%	236	15
	CDO-RC-0112	0	39	39	1,455	21%	249	15
	CDO-RC-0113	*NSI*						
	CDO-RC-0114	0	4	4	1,487	22%	264	14
	CDO-RC-0115	0	2	2	1,543	16%	185	20
	CDO-RC-0116	0	11	11	1,442	16%	188	11
	CDO-RC-0117	0	6	6	1,398	15%	173	12
	CDO-RC-0118	2	11	9	3,578	28%	870	38
	CDO-RC-0119	0	8	8	2,570	25%	584	33
	CDO-RC-0120	0	6	6	2,991	23%	586	30
Caminho das Pedras	CDP-RC-0237	4	10	6	5,530	34%	1,822	79
	CDP-RC-0238	14	36	22	2,694	22%	498	26
	CDP-RC-0239	10	22	12	2,822	29%	692	28
	CDP-RC-0240	6	16	10	3,599	27%	905	48
	CDP-RC-0244	0	26	26	2,376	21%	462	24
	CDP-RC-0246	6	17	11	2,031	25%	408	22
	CDP-RC-0250	5	31	26	2,090	24%	399	25
	CDP-RC-0251	3	18	15	2,230	23%	427	22
	CDP-RC-0257	7	15	8	2,922	31%	785	30
	CDP-RC-0258	3	15	12	2,000	19%	325	16
	CDP-RC-0259	6	15	9	2,181	27%	493	23
	CDP-RC-0263	0	10	10	1,364	16%	178	12
	CDP-RC-0264	0	9	9	1,498	24%	287	17
	CDP-RC-0265	3	22	19	1,465	23%	282	23

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Prospect	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO %	Nd + Pr (ppm)	Dy +Tb (ppm)
	CDP-RC-0266	8	22	14	1,869	26%	403	22
	CDP-RC-0269	4	11	7	4,136	30%	1,063	48
	CDP-RC-0272	0	16	16	2,031	23%	410	22
Ribeirao	RA-DDH-0004	9.5	22	12.5	2,874	25%	804	35
	RA-DDH-0005	5.5	26	20.5	3,123	27%	809	27
	RA-RC-0121	12	31	19	1,457	22%	261	17
	RA-RC-0122	0	11	11	2,414	23%	461	28
	RA-RC-0123	4	18	14	2,950	28%	676	33
	RA-RC-0124	3	24	21	4,198	30%	1,079	50
	RA-RC-0125	3	16	13	4,284	32%	1,247	40
	RA-RC-0126	0	8	8	1,599	21%	279	18
	RA-RC-0127	0	8	8	3,180	28%	824	27
	RA-RC-0128	6	13	7	4,031	30%	1,072	31
	RA-RC-0137	3	26	23	2,084	24%	406	21
	RA-RC-0138	0	15	15	2,160	28%	527	22
Sien	SI-DDH-0001	*NSI*						
	SI-DDH-0003	0	9.5	9.5	2,129	36%	596	34
Tamoyo	TM-DDH-0004	9.5	18	8.5	2,288	28%	598	27

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'.*

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APPENDIX C: DRILL LOCATIONS OF HOLES REPORTED IN THIS ANNOUNCEMENT

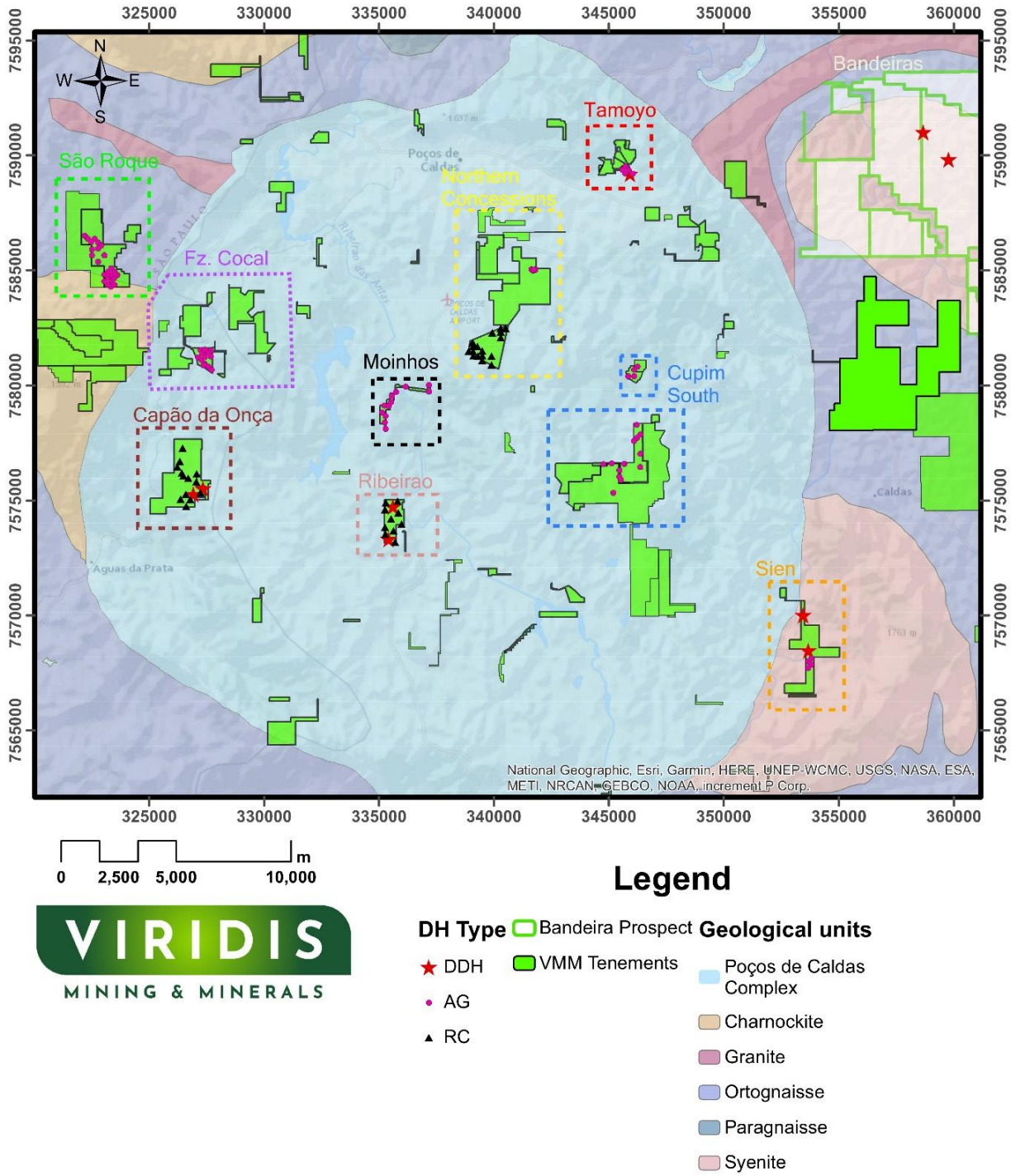

Figure 5: *Location of all drill holes reported within this announcement.*

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Appendix D: JORC Code, 2012 Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample retrospectivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *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.*	• *Nature of Sampling: Reverse Circulation (RC), Diamond Drill Hole (DDH), and auger drilling methods were used for sampling. Auger drilling was performed using diameters of 4", 3.5", 2.5", and 2" to a depth of up to 20 metres. In contrast, DDH was executed using HQ and HWL diameters and RC 4 3/3 inches, continuing until contact with fresh rock was achieved.* • *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.* • *Sample careful: The assigned geologist carried out initial inspections of samples in the field, followed by a secondary review upon their arrival at the storage facility. This 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, emphasising the collection of precise geological information and ensuring the integrity of each sample.* • *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 ranging from 2Kg to 6Kg, and RC samples ranging from 6Kg to 18Kg.* • *Packaging & Labeling: After collection, the samples were placed in double plastic bags, 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, clearly labelled with information including depth, sample interval, and specifics of the drilling advances and recovery.*
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, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• *Type of Drill: The exploration program employed three primary drilling techniques: auger, RC, and DDH. Auger drilling, using diameters of 4", 3.5", 2.5", and 2", targeted surface and near-surface samples down to 21 metres. Diamond and RC drilling were used for continuous core samples down to the fresh rock.* • *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 provide an uninterrupted record of rock formations.* • *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.* • *Drill Orientation: Drilling was exclusively vertical, with no orientation monitoring, due to the straightforward approach, which was deemed most suitable for the geological targets.*
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures are taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• *Recovery Rates: The project achieved an excellent recovery, with 97% of samples exhibiting above 80% recovery. Each drilling session was documented, assuring thorough record-keeping.* • *Recovery rates were calculated by comparing actual core or chip lengths with expected run lengths, and all data was logged.* • *Consistent drilling protocols, immediate secure packaging, and minimal handling were standard practices to optimise sample integrity and recovery.* • *No significant bias was detected between sample recovery and grade, suggesting reliable assay data with minimal material loss or gain across varying grain sizes.*
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource*	• *Geological and Geotechnical Detail: Both core and auger samples from the boreholes were geologically and geotechnically logged in detailed accordance with the NBR 9603 standards. This level of*

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	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.*	*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.*

Sub-sampling 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 sub-sampling 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:* Al_2O_3 0,01 - 75 (%) Ba 10 – 100,000 (ppm) Fe_2O_3 0,01 - 75 (%) K_2O 0,01 - 25 (%) Na_2O 0,01 - 30 (%) P_2O_5 0,01 - 25 (%) TiO_2 0,01 - 25 (%) V 5 – 10,000 (ppm) CaO 0,01 - 60 (%) Cr_2O_3 0,01 - 10 (%) MgO 0,01 - 30 (%) MnO 0,01 - 10 (%) SiO_2 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°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) Ho 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) Er 0.05 – 1,000 (ppm) Lu 0.05 – 1,000 (ppm)

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		La 0.1 – 10,000 (ppm) Tb 0.05 – 1,000 (ppm) Sm 0.1 – 1,000 (ppm) Y 0.05 – 1,0000 (ppm) U 0.05 – 10,000 (ppm) *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.* *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.*
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, and data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• *Significant intersections have not yet been independently verified by alternative company personnel.* • *Primary data collection follows a structured protocol with standardised data entry procedures. 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 regular backups.* • *The only adjustments to the data were made- transforming the elemental values into the oxide values. The conversion factors used are included in the table below.* Element / Oxide / Factor Ce / CeO_2 / 1.2284 La / La_2O_3 / 1.1728 Sm / Sm_2O_3 / 1.1596 Nd / Nd_2O_3 / 1.1664 Pr / Pr_6O_{11} / 1.2082 Dy / Dy_2O_3 / 1.1477 Eu / Eu_2O_3 / 1.1579 Y / Y_2O_3 / 1.2699 Tb / Tb_4O_7 / 1.1762 Gd / Gd_2O_3 / 1.1526 Ho / Ho_2O_3 / 1.1455 Er / Er_2O_3 / 1.1435 Tm / Tm_2O_3 / 1.1421 Yb / Yb_2O_3 / 1.1387 Lu / Lu_2O_3 / 1.1371 • *The TREO (Total Rare Earth Oxides) was determined by the sum of the following oxides: CeO_2, Dy_2O_3, Er_2O_3, Eu_2O_3, Gd_2O_3, Ho_2O_3, La_2O_3, Lu_2O_3, Nd_2O_3, Pr_6O_{11}, Sm_2O_3, Tb_4O_7, Tm_2O_3, Y_2O_3, Yb_2O_3. For the MREO (Magnetic Rare Earth Oxides), the following oxides were considered: Dy_2O_3, Gd_2O_3, Ho_2O_3, Nd_2O_3, Pr_6O_{11}, Sm_2O_3, Tb_4O_7. And for the HREO we consider: Dy_2O_3, Er_2O_3, Eu_2O_3, Gd_2O_3, Ho_2O_3, La_2O_3, Lu_2O_3, Tb_4O_7, Tm_2O_3, Y_2O_3 and Yb_2O_3* • *REO assays from auger drilling on the appendix were reported within clays with 1000ppm TREO cut-off and 2m dilution.* • *REO assays from diamond drilling on the appendix were reported within clays with 1000ppm TREO cut-off and 2m dilution.* • *Grades (ppm) were rounded to the nearest whole figure, and lengths (m) were rounded to the nearest 0.5m.* • *For some samples exceeding 1000 ppm, over-limit analysis for Pr was necessary.*
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.*	• *The positioning of the drill has been achieved with high precision using a GPS RTK (Real-Time Kinematic) system. This sophisticated GPS provides real-time corrections, ensuring accuracy within centimetres.*

	• *Quality and adequacy of topographic control.*	• *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.* • *Benchmark and control points were established within the project area to ensure the quality and reliability of the topographic location data.*
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• *The auger drilling is conducted on a regular grid with 200 x 200 metres spacing. This grid spacing provides 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.* • *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.* • *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.* • *No sample compositing has been applied to report the exploration results. Each sample is treated and reported individually to maintain the highest level of detail and accuracy.*
Orientation of data about geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• *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.* • *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.* • *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.*
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.*

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

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>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.
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.</td><td>All samples were acquired from tenements owned by Viridis Mining and Minerals Ltd, following an agreement with the Varginha Parties. Specifically:
<table>
<tr><th>Prospect</th><th>#Tenement</th><th>Tenement size (m²)</th></tr>
<tr><td>Moinhos</td><td>830.539/1985</td><td>536,700</td></tr>
<tr><td>Ribeirao</td><td>833.619/1996</td><td>1,311,500</td></tr>
<tr><td>Capão da onça</td><td>830419/2019</td><td>4,459,800</td></tr>
<tr><td rowspan="2">Northern Concessions</td><td>007.737/1959</td><td>1,827,100</td></tr>
<tr><td>009.031/1966</td><td>4,466,600</td></tr>
<tr><td>Tamoyos</td><td>804.675/1975; 005.460/1954 and 802.917/1978</td><td>1,306,300</td></tr>
<tr><td>Bandeira</td><td>831.207/2023</td><td>16,113,900</td></tr>
<tr><td>São Roque</td><td>821.075/1999</td><td>3,390,000</td></tr>
<tr><td>Fazenda Cocal</td><td>833.606/1996</td><td>653,000</td></tr>
<tr><td>Sien</td><td>834.738/1995</td><td>2,813,500</td></tr>
<tr><td rowspan="5">Cupim South</td><td>806.604/1973</td><td>239,000</td></tr>
<tr><td>806.605/1973</td><td>296,200</td></tr>
<tr><td>830.340/1979</td><td>1,618,600</td></tr>
<tr><td>830.464/1982</td><td>7,830,000</td></tr>
<tr><td>833.560/1996</td><td>1,542,600</td></tr>
</table></td></tr>
<tr><td>Exploration done by other parties</td><td>Acknowledgment and appraisal of exploration by other parties.</td><td>Historical exploration in the area comprises notable endeavors by various entities:
The Colossus project is geologically intertwined with the Caldeira Project, sharing the same geological context.
Varginha Mineração previously undertook regional drilling exercises, utilising a powered auger drill rig to produce open holes.
This historical data provides essential context and complements current exploration efforts in understanding the region's geological potential.</td></tr>
<tr><td>Geology</td><td>Deposit type, geological setting and style of mineralisation.</td><td>The geology of the region where the deposit is located can be summarised as follows:
Deposit Nature: The deposit under study is recognised as an Ionic Adsorption Clay Rare Earth Element (REE) deposit. Its spatial positioning is within and adjacent to the renowned Poços De Caldas Alkaline massif complex.
Poços de Caldas Complex: This geological entity stands as one of the most extensive alkaline massif intrusions globally, enveloping an area of roughly 800 km². It stretches across the Brazilian states of São Paulo and Minas Gerais. From a macro perspective, it portrays a near-circular structure with an approximate diameter of 30 km. This formation resembles a collapsed caldera. Delving deeper, the dominant rocks within the alkaline complex encompass phonolite, nepheline syenites, sodalite syenites, and many volcanic rocks. This diverse geological setting has played a crucial role in dictating mineral occurrences and potential mining prospects.
REE Mineralisation: The specific REE mineralisation highlighted in this disclosure leans towards the Ionic Clay type. Evidence pointing to this is mainly derived from its occurrence within the saprolite/clay zone of the weathering profile of the Alkaline granite basement. The enriched MREO</td></tr>
</table>

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Criteria	JORC Code explanation	Commentary
		(Medium Rare Earth Oxides) composition also attests to this classification. • *Relevant Additional Information: The Ionic Adsorption Clay Rare Earth Element deposits, particularly in regions like Poços de Caldas, have recently gained significant attention due to the global demand surge for rare earth elements. These elements, especially the heavy rare earths, have vital applications in modern technologies such as renewable energy systems, electronics, and defence apparatus. The ability of these deposits to offer relatively environmentally friendly mining prospects compared to traditional hard rock REE mines further enhances their appeal.* • *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.*
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.*	• *Auger Drilling* *Total number of holes: 80* • *Diamond Drilling* *Total number of holes: 9* • *RC Drilling:* *Total number of holes: 40* *Reported in Appendix A and B of this Report*
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	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• *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.* • *All drill holes are vertical and are appropriate for the deposit type, ensuring unbiased sampling of the mineralisation.* • *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.* • *In cases where there might be a discrepancy between*

Criteria	JORC Code explanation	Commentary
		downhole lengths and true widths, it should be noted that "downhole length, true width not known."
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 understand 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 practiced to avoid misleading reporting of Exploration Results.*	• *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 context, prior exploration work, and assay results, has been reported comprehensively. Cross-references to previous announcements have been provided where relevant 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 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	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• *Future works include carrying on the auger, diamond, and RC drilling campaign in 2024, geological mapping, geochemical and metallurgical tests, and mineralogical characterisation.*

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