

ASX: VMM MARKET ANNOUNCEMENT

Major Ionic Clay Rare Earth Discoveries at Colossus: 46.0m @ 3,285ppm TREO from surface

ASX Release: 20 November 2023

Highlights

- ▶ **First set of assays for auger and diamond drilling received, confirming a world class Ionic Adsorption Clay (“IAC”) discovery. Initial diamond drilling revealed an IAC body ranging from 10 to 20 metres thick with a remarkable weighted average grade of 2,938 ppm Total Rare Earth Oxide (“TREO”) at the Fazenda prospect and an even more impressive IAC body was discovered, 15 to 45 metres thick, with a remarkable weighted average grade of 3,460 ppm at Cupim South Prospect. These TREO^A grades position Colossus to potentially become the highest-grade deposit globally for Ionic Clay Rare Earths.**

- ▶ **Assays from the first three diamond holes at Cupim South returned outstanding rare earth element (“REE”)-rich clay intercepts, all reported from surface:**
 - CS-DDH-001: **24.0m @ 4,573ppm TREO [38% MREO]^B incl. 14m @ 6,177ppm TREO [40% MREO]** from 3m.
 - CS-DDH-002: **15.0m @ 2,214ppm TREO [29% MREO]**.
 - CS-DDH-003: **46.0m @ 3,285ppm TREO [27% MREO]** within broader section of **65.0m @ 2,799ppm TREO [28% MREO]**.

- ▶ **Assays from first two diamond holes at Fazenda returned outstanding REE-rich clay intercepts, all reported from surface:**
 - FZ-DDH-001: **40.0m @ 2,162ppm TREO incl. 17.0m @ 3,042ppm TREO [34% MREO]** from 7m.
 - FZ-DDH-002: **21.0m @ 2,132ppm TREO incl. 10.0m @ 2,760ppm TREO [32% MREO]** from 11m.

- ▶ **The first set of assay highlights from auger drilling confirms widespread and high-grade IAC REE mineralisation across numerous concessions in the Colossus Project:**
 - FZ-AG-044: **8.0m @ 5,441ppm TREO (ending in mineralisation)** from 6m, ending in **8,291ppm TREO**.
 - FZ-AG-096: **15.0m @ 2,521ppm TREO (ending in mineralisation)** from 0m, ending in **2,196ppm TREO**.
 - FZ-AG-031: **3.0m @ 3,910ppm TREO (ending in mineralisation)** from 3m, ending in **5,968ppm TREO**.
 - FZ-AG-103: **10.9m @ 2,207ppm TREO (ending in mineralisation)** from 0m, ending in **3,261ppm TREO**.
 - CS-AG-036: **4.5m @ 6,067ppm TREO (ending in mineralisation)** from 5m, ending in **6,034ppm TREO**.
 - CS-AG-022: **20.0m @ 2,119ppm TREO (ending in mineralisation)** from 0m, ending in **2,071ppm TREO**.
 - CS-AG-037: **8.0m @ 3,535ppm TREO (ending in mineralisation)** from 2m, ending in **2,535ppm TREO**.
 - CS-AG-029: **8.0m @ 3,584ppm TREO (ending in mineralisation)** from 3m, ending in **3,552ppm TREO**.
 - CT-AG-002: **7.5m @ 2,924ppm TREO (ending in mineralisation)** from 3m, ending in **2,353ppm TREO**.
 - CJ-AG-025: **10.0m @ 2,441ppm TREO (ending in mineralisation)** from 0m, ending in **2,785ppm TREO**.

^A TREO: La₂O₃ + CeO₂ + Pr₆O₁₁ + Nd₂O₃ + Sm₂O₃ + Eu₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃ + Ho₂O₃ + Er₂O₃ + Tm₂O₃ + Yb₂O₃ + Lu₂O₃ + Y₂O₃

^B MREO (Magnet Rare Earth Oxides): Pr₆O₁₁ + Nd₂O₃ + Sm₂O₃ + Ho₂O₃ + Gd₂O₃ + Tb₄O₇ + Dy₂O₃

- ▶ **First-batch of results represent only a tiny portion of the overall exploration program completed to date, and has already demonstrated homogenous high-grade REE mineralisation across multiple Colossus tenements. From the first set of diamond assays, Viridis has achieved an average thickness of 26 metres of the IAC body at Colossus with a remarkable weighted average grade of 3,086ppm.**

 - ▶ **Over 95% of holes intersected >1,000ppm TREO, with all 66 auger holes ending in REE mineralisation and grades increasing at depth. Auger holes which have been shown to intersect through the leached layer into the main IAC body (>20% MREO) have returned an average grade of 2,892ppm TREO.**

 - ▶ **Further, assays from multiple thick diamond clay intercepts are pending, which have already significantly extended far beyond the current auger depths across Colossus:**
 - CT-DDH-001: **~53m of saprolitic clay** at Central prospect (previously known as CETEN prospect).
 - CJ-DDH-001: **~50m of saprolitic clay** at Carijo prospect.
 - FZ-DDH-004: **~60m of saprolitic clay** at Fazenda prospect.
 - CSE-DDH-004: **~70m of saprolitic clay** at Cupim South extension.
- Each of these holes are the thickest recorded intercepts of clay within the entire northern half of the Poços de Caldas Alkaline Complex. Over 170 holes still pending assay results to be received from the lab.**
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- ▶ **These results mark a major Ionic Adsorption Clay discovery for the Company within the Poços de Caldas Alkaline Complex, with the intention to underpin a world class IAC REE maiden resource estimate. Viridis intends to commence in-depth metallurgical studies in the near-term in parallel to the ongoing exploration program.**

Executive Chairman Agha Shahzad Pervez commented:

“These are simply world class Ionic Adsorption Clay Rare Earths ‘IAC REE’ results and affirms the confidence the management team has in the Colossus Project. As we advance with our exploration program, we are encountering widespread thick saprolite clay profiles, exemplifying the potential for Colossus to host a world-class resource in terms of size and grade.

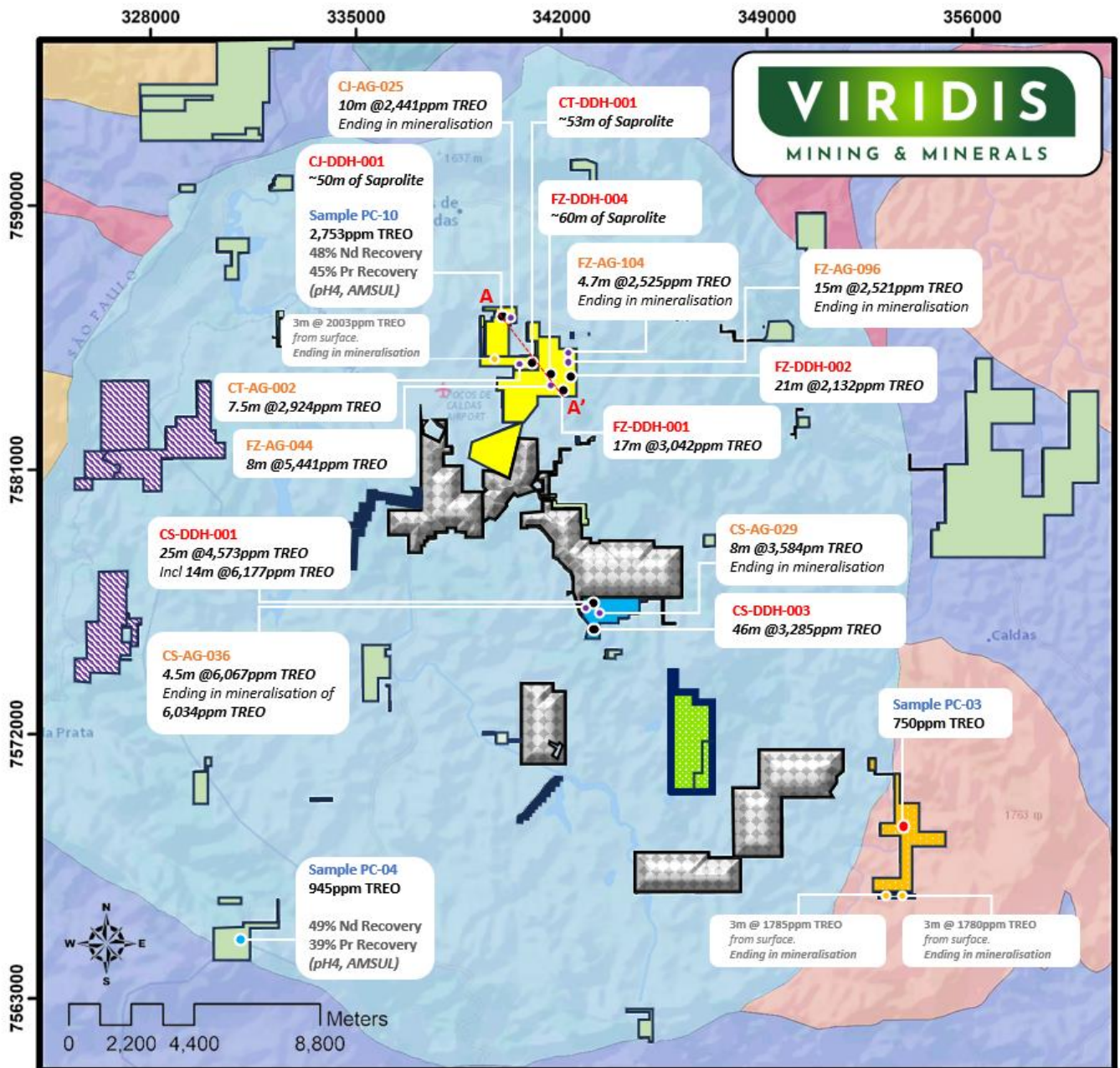
Undertaking deeper RC/diamond holes in parallel with auger drilling will allow Viridis to model the true depths of REE enriched saprolitic clay, identify the parameters of the ‘REE Accumulation Zone’, and result in the inclusion of these deeper intercepts in the Company’s maiden resource estimate. Auger drills are limited in the depths they can achieve, terminating upon hitting a boulder or the water table, but remains a very cost-efficient method to progressively build up a resource and identify high-grade zones. Over 90% of our auger holes to date end in clay, indicating the need for deeper drilling across Colossus.

Diamond Hole CS-DDH-003 is already the third best intercept reported in this entire complex in terms of grade and thickness. This is exceptional given it’s only the third diamond hole assay Viridis has received and indicates significant potential of the Cupim South Prospect.

Within our Northern Concessions, we continue to intercept incredibly thick profiles of saprolite up to 60 metres in diamond drilling. Auger drilling has already confirmed high-grade and widespread Ionic REE mineralisation hosted in the intermediate saprolite horizon, confirming the potential for these concessions to host a high-tonnage REE-rich resource.

I’m extremely pleased with the dedicated work of our in-country team to achieve the incredible results to date, and we look forward to updating the market with additional assays in the near-term”.

Map of Exploration Data Highlights on Colossus Project



LEGEND

- Newly Optioned Centro Sul Prospect
- Northern Concession Prospects
- Cupim South Prospect
- W1 & W2 Prospects
- Sien Prospect
- Colossus Project - Other Licenses
- Caldeira Mineral Resource Estimate boundary – 409Mt @2,626ppm TREO
- Location of Diamond Drills
- Location of Auger Holes
- Weathered outcrop samples from Colossus Concessions – Chemical Analysis
- Saprolite samples from Colossus Concessions – Chemical & Metallurgical Analysis (Ammonia Sulfate)
- Previous areas of historic auger drilling up to 3meters depth
- Cross Section AA'
- Poços de Caldas alkaline complex
- Syenite
- Granite
- Charnockite
- Paragneiss
- Orthogneiss

Figure 1: Map of diamond and auger drill highlights, surface grab sample in 'leached layer' including recoveries of samples washed with ammonia sulfate and historic hand-held auger highlights on Colossus concessions. Image superimposes newly optioned Centro Sul Prospect and proximity of Caldeira Ionic Clay Resource². Auger holes have all ended in mineralisation.

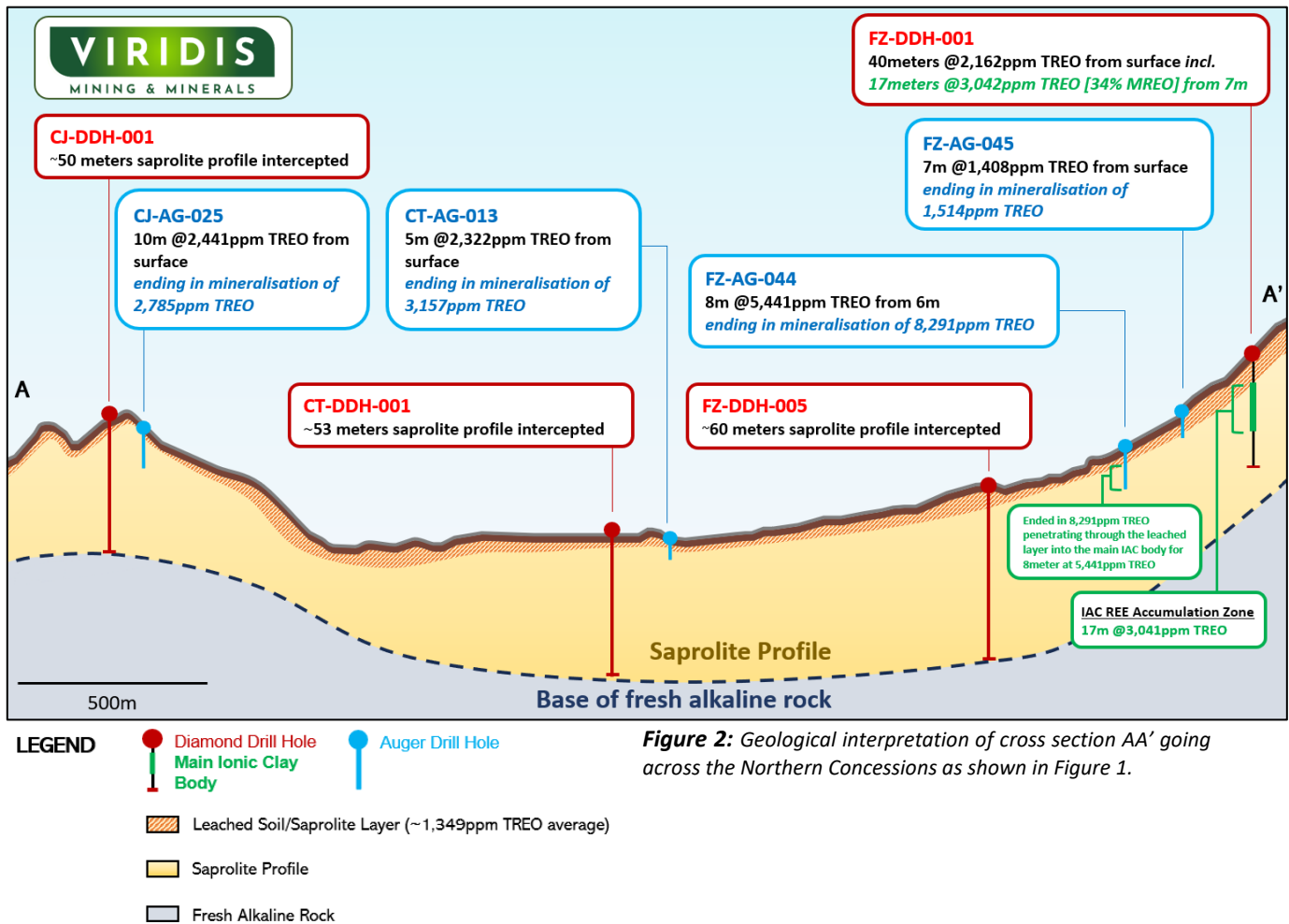


Figure 2: Geological interpretation of cross section AA' going across the Northern Concessions as shown in Figure 1.

Viridis Mining and Minerals Limited (“Viridis” or “Company”) is pleased to report the first set of assays it has received from Phase I & II maiden exploration programs. A total of 66 auger hole assays have been received from SGS GEOSOL and 5 diamond hole assays have been received from ALS Laboratories from the Cupim South and Fazenda Prospects. The first set of assays has already delivered incredible results from a minimal sample size, with over 162 auger holes still awaiting assays from the SGS GEOSOL and 11 diamond drill holes awaiting assays from the ALS labs.

Diamond assays from the first two holes at Fazenda Prospect confirms an Ionic Adsorption Clay (“IAC”) hosting body ranging from **10 to 20m thickness and weighted average grade of 2,938ppm TREO across the holes**. Diamond assays from the first three holes within the Cupim South Prospect confirmed an IAC hosting body that is about 15m thick on the northern border **increasing to about 45m thickness on southern border with weighted average grade of 3,460ppm TREO across the holes**.

Drilling across Colossus illustrates high-grade mineralisation across an area of approximately 4km² intersecting consistent mineralisation of ~2,500-3,200ppm TREO within the ‘REE Accumulation Zone’, which sits below leached cover and soils. All auger holes reported end in mineralisation, which leaves the IAC body completely open with grades expected to improve at depth. **Auger holes which have penetrated through the leached layer (illustrated by a filter of >20% MREO content) into the main IAC zone has shown an average grade of 2,892ppm TREO**.

These initial assays are confirming that the Colossus project is homogenous in high-grade REE mineralisation across numerous concessions and presents world-class results for an Ionic Adsorption Clay REE project. Furthermore, the assays have confirmed that Colossus follows a typical IAC deposition model (Li & Zhou, 2020)⁶, with leached soils covering between 0 and 12m, followed by a distinct doubling of TREO contents and approximately six times more MREO in the intermediate layer below, hosted within a thick ‘REE Accumulation Zone’.

Viridis has also commenced drilling on the W1 and Corrego da Anta (CA) prospect, which presents an exciting greenfield opportunity that covers an underexplored large area of the western edge of the Alkaline complex.

Northern Concessions

Fazenda Mining License

The maiden exploration results at Fazenda confirm that grades intercepted within historic hand-held auger drills (to 3 metres depth) within the 'leached layer' represent the lowest grades of mineralisation², with grades doubling beyond the leached layer as shown by diamond drilling. **The depth and grade of the clay ore body is far more substantial than initially understood.**

109 holes at ~200-metre spacing have been completed to date across the Fazenda Mining License with assays received for only the first 37 holes from SGS GEOSOL. The auger drilling along with diamond drilling has shown Fazenda follows a typical IAC deposition model with a thin layer of ~2-8m leached saprolite followed by a thick IAC body 'REE Accumulation Zone' which shows an immediate doubling the TREO grade and approximately six times more MREO contents. **Most importantly, all these auger holes end in mineralisation which illustrates the resource body remains completely open at depth.** The results also indicate that grades continue to increase with depth by penetrating the intermediate layer which has a higher affinity towards ionically bonding the critical magnet rare earth elements.

- FZ-AG-044: 8.0m @ **5,441ppm TREO (ending in mineralisation)** from 6m, ending in **8,291ppm TREO**.
- FZ-AG-096: 15.0m @ **2,521ppm TREO (ending in mineralisation)** from 0m, ending in 2,196ppm TREO.
- FZ-AG-031: 3.0m @ **3,910ppm TREO (ending in mineralisation)** from 3m, ending in **5,968ppm TREO**.
- FZ-AG-103: 10.9m @ **2,207ppm TREO (ending in mineralisation)** from 0m, ending in **3,261ppm TREO**.

Deeper diamond drilling completed so far has **confirmed the saprolite mineralisation reaches depths up to 60 metres across Fazenda**, which demonstrates the 'true depth' of the potential clays which host IAC REE mineralisation within this area. The initial two diamond holes at Fazenda have **confirmed a weathered clay hosting ionic body of 10-20m thick with weighted average grade of 2,938ppm TREO across the holes** and a high content of critical and valuable MREO.

- FZ-DDH-001: **40.0m @ 2,162ppm TREO incl. 17.0m @ 3,042ppm TREO [34% MREO]** from 7m.
- FZ-DDH-002: **21.0m @ 2,132ppm TREO incl. 10.0m @ 2,760ppm TREO [32% MREO]** from 11m.

Similar to auger holes on the eastern side of the Fazenda Prospect, FZ-DDH-001 has shown a saprolite body homogeneously mineralised in high-grade REEs, however split into three distinct layers which follows a typical IAC deposition model^{4,5,6}.

Leached Layer

This layer generally consists of soils, transported sediments, and heavily leached zones. The first 7 metres of FZ-DDH-001 shows formation of a leached clay layer where the average grade was 1,441ppm TREO, and 9% MREO which is indicative of heavier ions (MREO) being remobilised lower from weathering while the leached layer retains predominantly CeO₂.

Intermediate Layer

The leached layer at FZ-DDH-001 was followed by the main IAC body in the thick intermediate layer which showed a drastic increase in grade and MREO content, resulting in the **next 21 metres which averaged 2,810ppm with 32% MREO content**. The thick intermediate layer comprises of predominantly heavily weathered clays, in which liberated heavier ions remobilised from the leached layer tend to ionically bond onto.

Below the main IAC body, there is a transitional zone consisting of less weathered saprolite and then fresh rock, where the concentrations of TREO are reduced compared to the intermediate accumulation layer. The proportion of MREO also decreases from approximately 34% to 25%, but still remains high.

This stratification phenomenon occurs due to the intense weathering process, as described in numerous articles (A. Borst, M. Smith et al., 2020, M. Li, M. Zhou, 2020, A. Yaraghi, K. Ariffin, N. Baharun, 2020 – please refer to the references). In this process, Rare Earth elements present in primary minerals are released from their crystalline structure into an ion form, these REE ions are remobilised from the upper layers to the lower layers due to the weathering process, where they accumulate and ionically bond preferentially in the intermediate layer (accumulation zone) – shown by a distinct rise in grade and MREO content. These ions can then be desorbed from clays into an REE carbonate through using Ammonia Sulfate (AMSUL) or a weak salt solution.

The TREO and MREO distribution shown on FZ-DDH-001 and FZ-DDH-002 shares striking similarities with illustrations provided within the journal publications of M. Li and M. Zhou for IAC deposition models, as seen in the figures below.

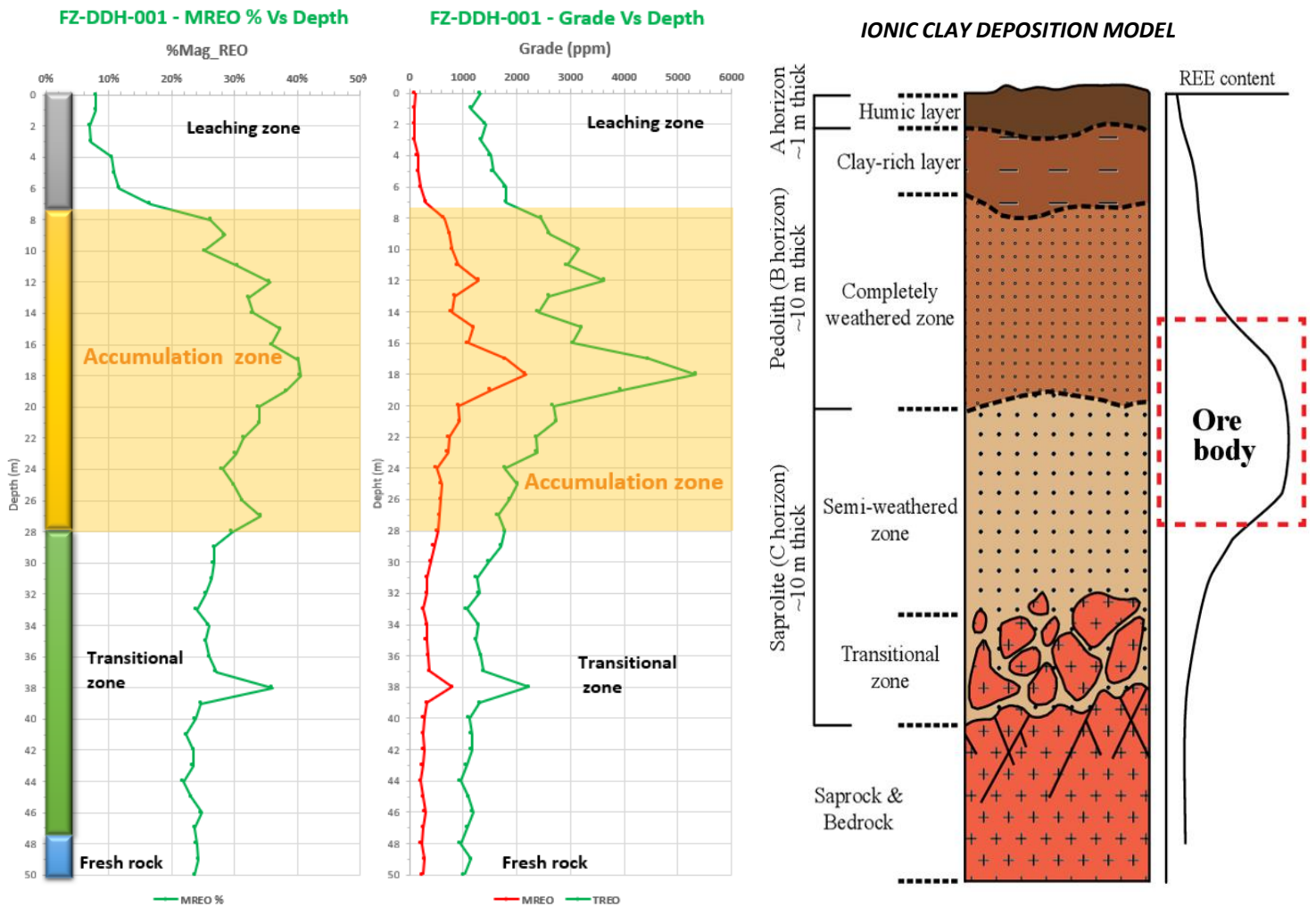


Figure 3: Comparison between FZ-DDH-001 and IAC deposition model⁶. Left and middle charts show distinct jump in the TREO grades and MREO % after 7-m leached zone. This confirms the leached layer was followed by an intermediate clay hosting layer of ~ 21 metres which resulted in the following: **17m @ 3,041ppm TREO** right after the leached zone.

This phenomenon is also observed in auger drillings which have penetrated through leached layers and scratched the surface of a high-grade IAC body (as seen in Figure 4 below), where high-quality REE mineralisation is located, indicating significant potential for both grade and thickness improvements with deeper drilling. An example of this is CT-AG-13, which returned 5 metres at 2,322 ppm from the surface.

ID	Zone	From (m)	TREO	MREO	MREO %
CT-AG-13	LEACHED CLAYS	0	1718.47	190.10	11%
		1	1576.34	197.23	13%
		2	1389.04	211.98	15%
	ACCUMULATION REE CLAYS [IAC BODY]	3	3770.59	1246.97	33%
		4	3157.38	1025.39	32%

OPEN AT DEPTH




Figure 4: Metre by metre assay of CT-AG-13

The first three metres of CT-AG-13 was drilled into the leached zone, followed by an additional 2 metres within the IAC body. CT-AG-13 exhibited a distinct doubling of TREO grade and MREO percentage upon intersecting the IAC body, resulting in mineralisation of 3,157 ppm TREO [32% MREO] in the final metre, with the IAC body remaining open. In various areas across the Colossus project, the leached layer persists within the 0-3 metre range (in some cases, no leached layer or soil is present, as evidenced by CT-AG-14 intercepting 5,678 ppm with 42% MREO in its initial metre of clay from the surface), confirming that the high-quality IAC body begins at or near the surface.

In conjunction to auger assays, initial diamond assays to date has confirmed a thick (up to 65m at Cupim South) and high-grade IAC body sitting right under the leached layer. In parallel, Viridis has also commenced RC drilling across Northern Concessions to better grasp the true depth, size, and grade of the REE clay hosting mineral body.

Carijo and Central Prospects

The Carijo and Central (previously known as CETEN) prospects are an extension to the Fazenda Mining License which forms part of the Colossus Northern Concessions.

A total of 39 auger holes at ~200 metre spacing have been completed across the Carijo and Central prospects, with assays received for the first 17 holes from SGS GEOSOL. The first and only auger assay received on the Carijo saprolite hill (880m long x 400m wide) within the Carijo Prospect has confirmed presence of high-grade REE mineralisation:

- CJ-AG-025: 10.0m @ **2,441ppm TREO (ending in mineralisation)** from surface, **2,785ppm TREO EOH**.

Two diamond holes have been drilled on the Carijo saprolite hill, **CJ-DDH-001 was drilled ~350m South-East of the Viridis surface grab sample PC-10 which returned 2,753ppm TREO and has confirmed Ionic Clay recovery through an Ammonium sulfate desorption test, pH4 leaching⁷.**

These first two diamond drill holes have confirmed Viridis' understanding that the Carijo prospect comprises similar depths of REE hosting saprolite mineralisation as the Fazenda prospect, which go far beyond current auger drilling. Hole CJ-DDH-001 intercepted ~50m saprolite profile and was drilled 50m south of CJ-AG-025 which intercepted **10.0m @ 2,441ppm TREO (ending in mineralisation)**.

Within the Central prospect, high grade REE mineralisation has also been confirmed, with significant potential for grades to increase at depth:

- CT-AG-002: 7.5m @ **2,924ppm TREO (ending in mineralisation)** from 3m, ending in **2,353ppm TREO**.
- CT-AG-013: 5.0m @ **2,322ppm TREO (ending in mineralisation)** from 0m, ending in **3,157ppm TREO**.
- CT-AG-011: 7.0m @ **2,059ppm TREO (ending in mineralisation)** from 0m, ending in **2,196ppm TREO**.

Southern Concessions

Cupim South Prospect

The Cupim South prospect is the southern extension and shares analogous weathering profile, saprolite hills and geology of the Cupim Vermelho Norte deposit (104Mt @ 2,485ppm TREO)¹.

The Cupim South prospect was a greenfield exploration opportunity within the Colossus project, which has now **confirmed an extremely thick 15m to 45m IAC body with weighted average grade of 3,460ppm TREO across drill holes, and a ~1.25km strike length** from just the first three diamond hole assays received:

- CS-DDH-001: **24.0m @ 4,573ppm TREO** [38% MREO] from 0m, incl. **14m @ 6,177ppm TREO** [40% MREO] from 3m.
- CS-DDH-002: **15.0m @ 2,214ppm TREO** [29% MREO] from 0m.
- CS-DDH-003: **46.0m @ 3,285ppm TREO** [27% MREO] from 0m within broader section of **65.0m @ 2,751ppm TREO** [28% MREO].

Diamond assays have shown homogenous high-grade REE mineralisation of 2,751ppm TREO across 65m of saprolitic clay in CS-DDH-003, **with a higher-grade portion of 46m at 3,285ppm TREO starting from surface, and grades reaching up to 10,125ppm TREO** within weathered zones.

This hole has become the third best reported intercept (grade x thickness) in the entire Alkaline complex for rare earths. **These results exemplify the Cupim South prospect holds potential to become a substantial high-grade and large tonnage resource** on its own. In addition, auger assays have also shown high-grade mineralisation of rare earths with predominance in critical MREOs, exemplified by:

- CS-AG-036: 5.0m @ **6,067ppm TREO** [40% MREO] (ending in mineralisation) from 5m, ending in **6,034ppm TREO**.
- CS-AG-029: 8.0m @ **3,584ppm TREO** [35% MREO] (ending in mineralisation) from 3m, ending in **3,552ppm TREO**.

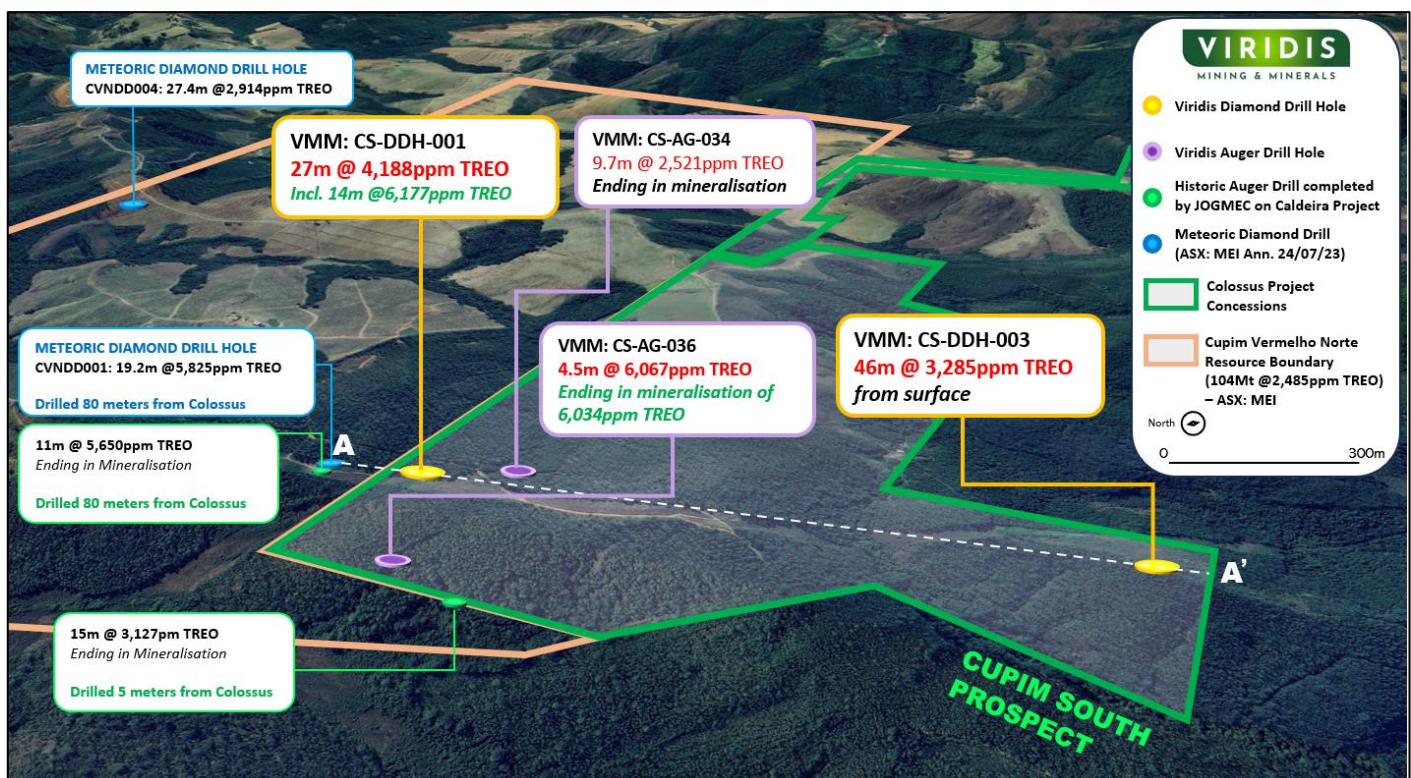


Figure 5: Satellite view with highlighted diamond and auger holes, plus Cross-section AA' of Cupim South Prospect¹.

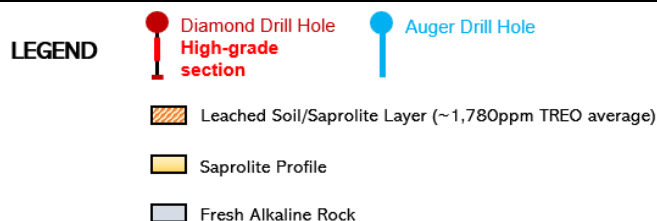
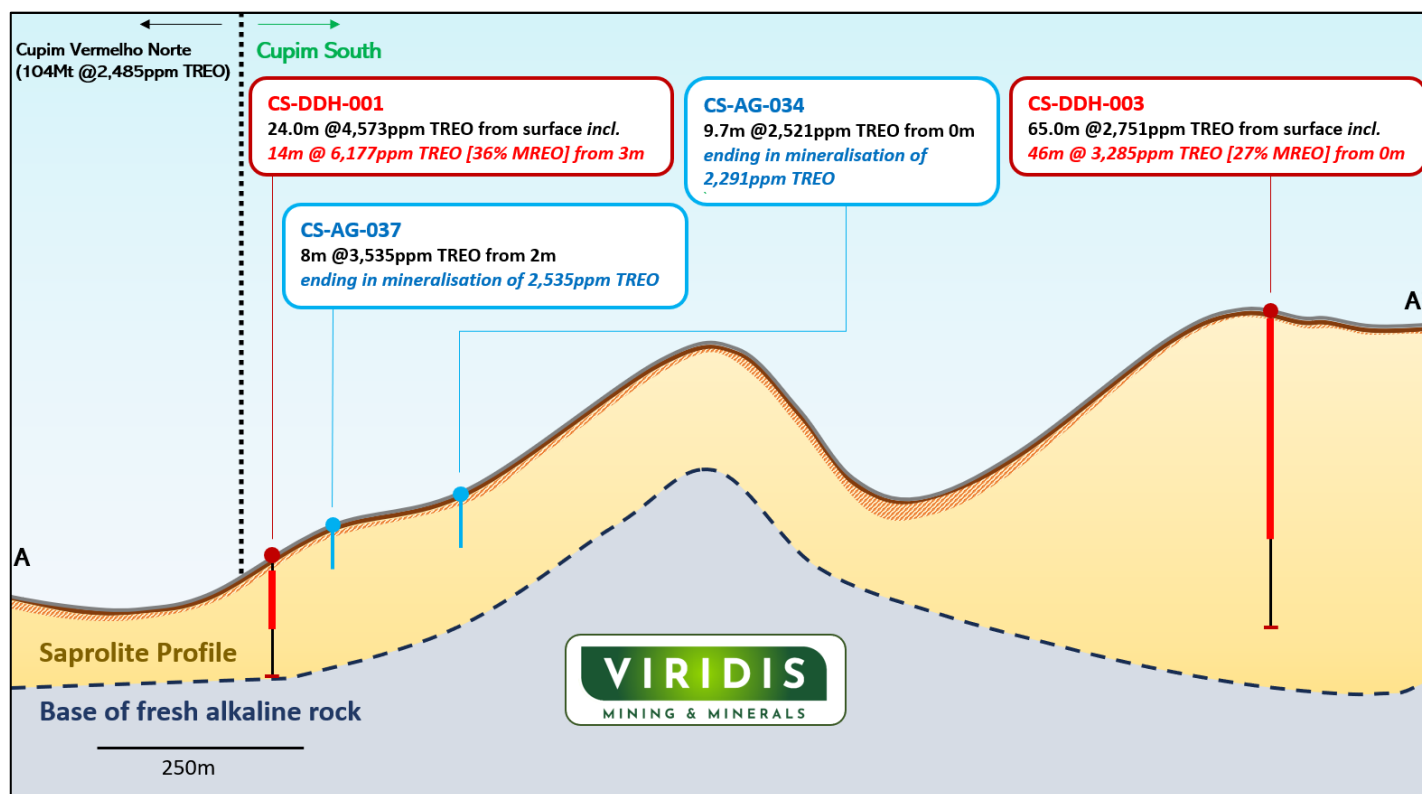


Figure 6: Geological interpretation of Cross-section AA' of Cupim South Prospect as seen in Figure 5.

Complementary to this, Viridis recently expanded its land package which includes the option to acquire the Centro Sul prospect (4km²), which is ~2.5km Southeast of Cupim South and hosts similar deeply weathered geological profile which can bolster the Colossus resource potential within the southern district of the Alkaline Complex.

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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 Mining and Minerals Brazil Ltda), compiled and evaluated the technical information in this release and is a member of the Australian Institute of Geoscientists (AIG) (MAusIMM, 2023, 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 the inclusion in the report of the matters based on information in the form and context in which it appears.

The Company confirms that it is not aware 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. *Meteoritic Resources NL (ASX: MEI) announcement dated 1 May 2023 'Caldeira REE Project Maiden Mineral Resource'*
2. *VMM ASX announcement dated 1 August 2023 'Acquisition Potential Tier One Ionic Clay Rare Earth Project'*
3. *Polygenetic processes in the genesis of clay deposit of Poços de Caldas alkaline massif in southeastern Brazil, C. Montes, A. Melfi, A. Carvalho, A. Viera-Coelho, Journal of Applied Clay Science, 2016*
4. *Comparison of characteristics and geochemical behaviors of REEs in two weathered granitic profiles generated from metamictized bedrocks in Western Peninsular Malaysia, A. Yaraghi, K. Ariffin, N. Baharun, Journal of Asian Earth Sciences, 2020*
5. *Adsorption of rare earth elements in regolith-hosted clay deposits, A. Borst, M. Smith et al., 2020*
6. *The role of clay minerals in the formation of the regolith-hosted heavy rare earth element deposits, M. Li, M. Zhou, Journal of American Mineralogist, 2020*
7. *VMM ASX announcement dated 29 August 2023 'Initial Metallurgical Work Confirm Colossus True IAC Project'*

APPENDIX A: DRILL LOCATION

Diamond and auger drill coordinates of assays reported within this announcement:

Prospect	Drill ID	ANM Process No.	East (m)	North (m)	Elevation (m)	Depth
Carijó	CJ-AG-25	830113/2006	340200	7586200	1291	10.0
	CJ-AG-26	830113/2006	340166	7586011	1326	13.0
	CJ-AG-29	830113/2006	342895	7576568	1405	2.0
Cupim South	CS-DDH-001	833560/1996	342886	7576603	1465	26.3
	CS-DDH-002	833560/1996	343316	7576056	1354	21.3
	CS-DDH-003	833560/1996	343076	7575384	1317	90.9
	CS-AG-16	833560/1996	343400	7575938	1374	2.8
	CS-AG-21	833560/1996	342970	7575835	1428	8.4
	CS-AG-22	833560/1996	343113	7575949	1439	20.0
	CS-AG-23	833560/1996	343259	7576097	1403	11.0
	CS-AG-27	833560/1996	342835	7575952	1447	5.5
	CS-AG-28	833560/1996	342980	7576093	1449	7.6
	CS-AG-29	833560/1996	343120	7576231	1411	11.0
	CS-AG-32	833560/1996	342706	7576082	1409	11.0
	CS-AG-33	833560/1996	342836	7576237	1426	8.3
	CS-AG-34	833560/1996	342975	7576371	1410	9.7
	CS-AG-36	833560/1996	342697	7576371	1398	9.5
CS-AG-37	833560/1996	342840	7576508	1401	10.0	
Central	CT-AG-01	830927/2016	340800	7584600	1276	9.0
	CT-AG-02	830927/2016	340999	7584598	1272	10.5
	CT-AG-03	830927/2016	339404	7584798	1286	8.0
	CT-AG-04	830927/2016	339600	7584800	1288	4.0
	CT-AG-05	830927/2016	339800	7584800	1262	13.0
	CT-AG-06	830927/2016	340200	7584800	1263	12.0
	CT-AG-07	830927/2016	340400	7584800	1269	7.0
	CT-AG-09	830927/2016	340600	7584800	1273	8.0
	CT-AG-10	830927/2016	341000	7584800	1270	10.0
	CT-AG-11	830927/2016	340206	7584614	1263	10.0
	CT-AG-13	830927/2016	339572	7584691	1284	6.0
	CT-AG-14	830927/2016	339406	7584609	1289	6.0
	CT-AG-17	830927/2016	340200	7586000	1324	5.0
CT-AG-18	830927/2016	340400	7586000	1320	10.0	
Fazenda	FZ-DDH-001	9031/1966	342086	7583635	1273	50.2
	FZ-DDH-002	9031/1966	342333	7584036	1280	34.9
	FZ-AG-102	9031/1966	341797	7585004	1305	8.8
	FZ-AG-103	9031/1966	341974	7585029	1310	10.9
	FZ-AG-104	9031/1966	342203	7585006	1297	8.7
	FZ-AG-110	9031/1966	340818	7585478	1263	1.9

Prospect	Drill ID	ANM Process No.	East (m)	North (m)	Elevation (m)	Depth
	FZ-AG-111	9031/1966	341000	7585400	1269	6.0
	FZ-AG-116	9031/1966	340800	7585600	1271	4.0
	FZ-AG-117	9031/1966	341000	7585600	1300	4.0
	FZ-AG-118	9031/1966	340800	7585800	1274	2.6
	FZ-AG-119	9031/1966	341000	7585800	1303	10.0
	FZ-AG-120	9031/1966	340800	7586000	1288	5.0
	FZ-AG-121	9031/1966	341000	7586000	1307	11.8
	FZ-AG-30	9031/1966	341602	7583605	1310	11.0
	FZ-AG-31	9031/1966	341795	7583602	1320	6.0
	FZ-AG-32	9031/1966	341994	7583601	1356	7.5
	FZ-AG-43	9031/1966	341409	7583804	1332	9.0
	FZ-AG-44	9031/1966	341602	7583795	1328	14.0
	FZ-AG-45	9031/1966	341801	7583797	1314	7.0
	FZ-AG-46	9031/1966	342002	7583801	1335	10.0
	FZ-AG-57	9031/1966	341401	7583997	1321	7.0
	FZ-AG-58	9031/1966	341601	7584003	1308	11.0
	FZ-AG-59	9031/1966	341801	7583997	1299	9.0
	FZ-AG-67	9031/1966	341199	7584200	1294	11.0
	FZ-AG-68	9031/1966	341399	7584196	1296	10.0
	FZ-AG-69	9031/1966	341600	7584199	1286	7.0
	FZ-AG-70	9031/1966	341801	7584197	1283	6.0
	FZ-AG-72	9031/1966	342198	7584197	1301	12.0
	FZ-AG-78	9031/1966	341206	7584400	1283	12.0
	FZ-AG-79	9031/1966	341400	7584400	1277	4.0
	FZ-AG-80	9031/1966	341593	7584397	1273	4.0
	FZ-AG-82	9031/1966	341968	7584371	1279	5.0
	FZ-AG-83	9031/1966	342191	7584412	1279	5.0
	FZ-AG-85	9031/1966	341198	7584596	1266	3.0
	FZ-AG-86	9031/1966	341400	7584598	1269	4.0
	FZ-AG-95	9031/1966	341799	7584802	1318	12.0
	FZ-AG-96	9031/1966	341998	7584763	1330	15.0
	FZ-AG-97	9031/1966	342197	7584801	1308	11.0
	FZ-AG-98	9031/1966	342391	7584791	1282	3.0

APPENDIX B: ASSAY RESULTS COMPILED

Auger Drilling: All holes were drilled vertically.

Location	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO (ppm)	MREO %	TREO at end of hole (ppm)
Carijo	CJ-AG-25	0	10	10	2,441	396	16%	2785
	CJ-AG-26	5	13	8	1,481	167	11%	1736
	CJ-AG-29	0	2	2	1,299	103	8%	1280
Cupim South	CS-AG-16	0	2.8	2.8	1,552	139	9%	1532
	CS-AG-21	0	8.4	8.4	1,568	369	24%	1412
	CS-AG-22	0	20	20	2,119	428	20%	2071
	CS-AG-23	6	11	5	3,267	1,156	35%	3296
	CS-AG-27	0	5.5	5.5	2,960	1,038	35%	2149
	CS-AG-28	0	6	6	1,423	316	22%	1176
	CS-AG-29	3	11	8	3,584	1,255	35%	3552
	CS-AG-32	4	11	7	3,403	1,261	37%	2991
	CS-AG-33	0	8.3	8.3	1,566	349	22%	1706
	CS-AG-34	0	9.7	9.7	2,551	725	28%	2291
	CS-AG-36	5	9.5	4.5	6,067	2,415	40%	6034
CS-AG-37	2	10	8	3,535	1,205	34%	2535	
Central	CT-AG-01	0	9	9	1,722	198	11%	1469
	CT-AG-02	3	10.5	7.5	2,924	621	21%	2353
	CT-AG-03	3	8	5	1,338	146	11%	1405
	CT-AG-04	0	4	4	1,072	72	7%	1398
	CT-AG-05	0	13	13	1,206	98	8%	1337
	CT-AG-06	0	12	12	1,347	179	13%	2020
	CT-AG-07	0	5	5	1,042	56	5%	1189
	CT-AG-09	2	8	6	2,013	302	15%	1750
	CT-AG-10	5	10	5	1,006	97	10%	1024
	CT-AG-11	0	7	7	2,059	371	18%	2196
	CT-AG-13	0	5	5	2,322	574	25%	3157
	CT-AG-14	0	5	5	2,289	760	33%	987
	CT-AG-17	0	5	5	1,381	122	9%	1693
CT-AG-18	1	10	9	1,120	78	7%	1169	
Fazenda	FZ-AG-30	7	11	4	3,065	810	26%	3028
	FZ-AG-31	3	6	3	3,910	1,381	35%	5968
	FZ-AG-32	0	8	8	1,578	170	11%	1171
	FZ-AG-43	0	9	9	1,559	178	11%	1707
	FZ-AG-44	6	14	8	5,441	2,110	39%	8291
	FZ-AG-45	0	7	7	1,408	143	10%	1514
	FZ-AG-46	0	10	10	1,465	170	12%	1352
	FZ-AG-57	0	7	7	1,415	118	8%	1394
	FZ-AG-58	0	11	11	1,791	189	11%	1797
	FZ-AG-59	0	9	9	1,237	117	9%	1123
FZ-AG-67	0	10	10	1,734	173	10%	1771	
FZ-AG-68	0	10	10	1,722	199	12%	1795	

Location	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO (ppm)	MREO %	TREO at end of hole (ppm)
	FZ-AG-69	0	7	7	1,658	123	7%	1770
	FZ-AG-70	0	6	6	1,477	152	10%	1506
	FZ-AG-72	0	12	12	1,357	116	9%	1472
	FZ-AG-78	0	12	12	1,617	169	10%	1978
	FZ-AG-79	0	4	4	1,037	85	8%	916
	FZ-AG-80	0	1	1	827	102	12%	827
	FZ-AG-82	0	3	3	1,279	75	6%	1269
	FZ-AG-83	3	5	2	845	103	12%	914
	FZ-AG-85	0	3	3	877	143	16%	869
	FZ-AG-86	0	2	2	858	63	7%	831
	FZ-AG-95	0	12	12	1,683	204	12%	1856
	FZ-AG-96	0	15	15	2,521	504	20%	2196
	FZ-AG-97	6	11	5	3,178	1,103	35%	1661
	FZ-AG-98	0	3	3	1,369	315	23%	987
	FZ-AG-102	0	8.8	8.8	1,366	144	11%	882
	FZ-AG-103	0	10.9	10.9	2,207	354	16%	3261
	FZ-AG-104	4	8.7	4.7	2,525	731	29%	1799
	FZ-AG-110	0	1.9	1.9	1,167	120	10%	1164
	FZ-AG-111	3	6	3	2,052	472	23%	2269
	FZ-AG-116	1	4	3	2,296	565	25%	2902
	FZ-AG-117	0	4	4	1,428	197	14%	1505
	FZ-AG-118	0	2.6	2.6	1,107	163	15%	1156
	FZ-AG-119	8	10	2	3,488	1,342	38%	5954
	FZ-AG-120	0	5	5	1,437	90	6%	1185
	FZ-AG-121	0	11.8	11.8	1,112	93	8%	947

Table 1: REE assays from auger drilling hosted within weathered clays, 800ppm TREO cut-off, 2m dilution.

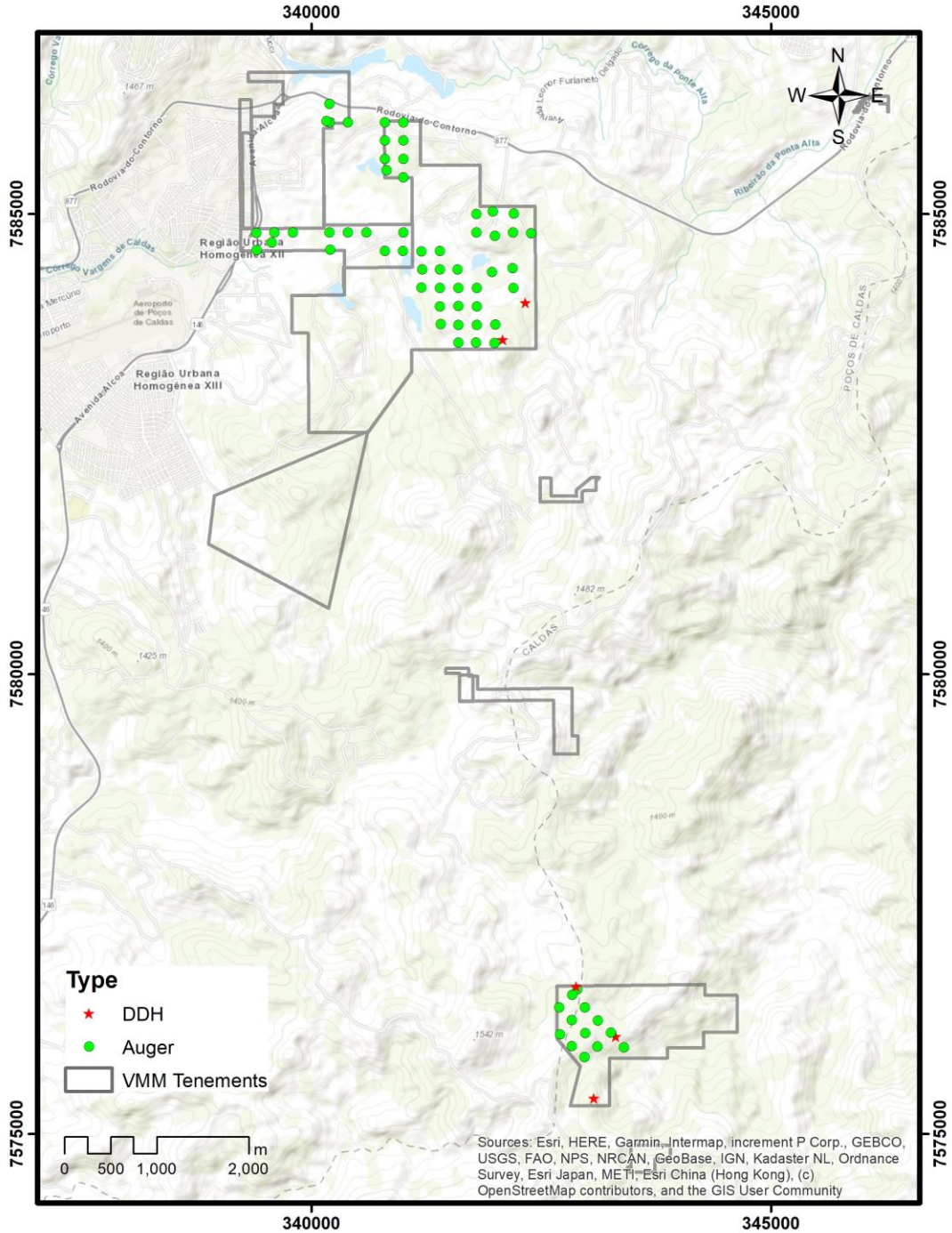
Diamond Drilling: All holes were drilled vertically.

Location	Hole	From (m)	To (m)	Length (m)	TREO (ppm)	MREO (ppm)	MREO %
Cupim South	CS-DDH-001	0	24	24	4,573	1,742	38%
	<i>Including</i>	3	17	14	6,177	2,441	40%
	CS-DDH-002	0	15	15	2,214	651	29%
	CS-DDH-003	0	65	65	2,799	775	28%
	<i>Including</i>	0	46	46	3,285	903	27%
Fazenda	FZ-DDH-001	0	40	40	2,162	633	29%
	<i>Including</i>	7	24	17	3,042	1,021	34%
	FZ-DDH-002	0	21	21	2,132	443	21%
	<i>Including</i>	11	21	10	2,760	894	32%

Table 2: REE assays from diamond drilling hosted within weathered clays, 900ppm TREO cut-off, 2m dilution.

APPENDIX C: DRILL LOCATIONS OF HOLES REPORTED IN THIS ANNOUNCEMENT

Drilling location



Appendix D: JORC Code, 2012 Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Nature of Sampling: Both diamond core drilling 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 21 metres. In contrast, diamond core drilling was executed using HQ and HWL diametres, continuing until contact with fresh rock was achieved. These techniques were implemented to secure accurate and representative sampling while preserving the integrity of the collected cores and samples. Method of Collection: Samples from auger drilling, conducted at various diametres, were retrieved directly from the auger 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: 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. Sample Weight: The sample weights varied according to the method and core diametre, with auger drilling samples ranging from 4Kg to 12Kg and diamond core drilling samples from 2Kg to 6Kg. Packaging & Labeling: Auger 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.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Type of Drill: The exploration program employed two primary drilling techniques: auger drilling and diamond core drilling. Auger drilling, using diametres of 4", 3.5", 2.5", and 2", targeted surface and near-surface samples down to 21 metres. Diamond core drilling, with HQ and HWL bit sizes, was used for continuous core samples down to the fresh rock. Drill Method: Auger drilling utilized 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. Drill Rig: Lightweight, mechanized 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 Parametres: Auger drilling was conducted to a maximum depth of 21 metres, with various drill bit diametres. Diamond drilling continued until fresh rock was encountered, using HQ and HWL bit sizes to ensure core integrity. Drill Orientation: Drilling was exclusively vertical, with no orientation monitoring due to the straightforward nature of the approach, deemed most suitable for the geological targets.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Recovery Rates: The project achieved an excellent recovery, with 99% 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 optimize sample integrity and recovery.

		<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of 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. 	<ul style="list-style-type: none"> 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 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 such as 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 that no significant geological features or sample attributes are omitted. 																																
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Sample Preparation Facility: Auger samples were processed at the SGS-GEOSOL laboratory, while diamond drill hole (DDH) samples were handled by ALS-Lab. Both facilities are located in Vespasiano-MG, Brazil. General Sample Preparation: Samples underwent rigorous physical preparation following standard industry practices at the SGS-GEOSOL laboratory. This encompassed: <ul style="list-style-type: none"> Homogenization: Comprehensive mixing was performed on the samples to ensure uniform particle distribution. Separation: From each sample, an aliquot of 150g was reserved for ammonium sulfate leaching tests. Drying: All samples were dried at a controlled temperature of up to 65°C. Sub-sampling: Utilizing a Jones splitter, sub-samples of approximately 250g were extracted. Pulverization: The 250g sub-sample was pulverized using a steel mill until 95% of the sample particles achieved a fineness below 150 mesh. For the DDH samples, twin duplicates were dispatched to assess the representativity of the samples. 																																
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 parameters 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. 	<p>Laboratory: All assay tests for the auger samples were conducted by the SGS-GEOSOL laboratory in Brazil and all the DDH samples were conducted by the ALS laboratory in Lima - Peru.</p> <p>Assay Techniques:</p> <p>a. ICP MS_ Determination by Fusion with Lithium Metaborate - ICP MS for Major Oxides. Some elements and their detection limits include:</p> <table border="0"> <tr> <td>Al₂O₃</td> <td>0,01 - 75 (%)</td> <td>Ba</td> <td>10 – 100,000 (ppm)</td> </tr> <tr> <td>Fe₂O₃</td> <td>0,01 - 75 (%)</td> <td>K₂O</td> <td>0,01 - 25 (%)</td> </tr> <tr> <td>Na₂O</td> <td>0,01 - 30 (%)</td> <td>P₂O₅</td> <td>0,01 - 25 (%)</td> </tr> <tr> <td>TiO₂</td> <td>0,01 - 25 (%)</td> <td>V</td> <td>5 – 10,000 (ppm)</td> </tr> <tr> <td>CaO</td> <td>0,01 - 60 (%)</td> <td>Cr₂O₃</td> <td>0,01 - 10 (%)</td> </tr> <tr> <td>MgO</td> <td>0,01 - 30 (%)</td> <td>MnO</td> <td>0,01 - 10 (%)</td> </tr> <tr> <td>SiO₂</td> <td>0,01 - 90 (%)</td> <td>Sr</td> <td>10 – 100,000 (ppm)</td> </tr> <tr> <td>Zn</td> <td>5 – 10,000 (ppm)</td> <td>Zr</td> <td>10 – 100,000 (ppm)</td> </tr> </table> <p>b. PHY01E: Loss on Ignition (LOI) was determined by calcining the sample at 1,000°C.</p>	Al ₂ O ₃	0,01 - 75 (%)	Ba	10 – 100,000 (ppm)	Fe ₂ O ₃	0,01 - 75 (%)	K ₂ O	0,01 - 25 (%)	Na ₂ O	0,01 - 30 (%)	P ₂ O ₅	0,01 - 25 (%)	TiO ₂	0,01 - 25 (%)	V	5 – 10,000 (ppm)	CaO	0,01 - 60 (%)	Cr ₂ O 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)
Al ₂ O ₃	0,01 - 75 (%)	Ba	10 – 100,000 (ppm)																															
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Na ₂ O	0,01 - 30 (%)	P ₂ O ₅	0,01 - 25 (%)																															
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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)																															

		<p>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:</p> <table border="0"> <tr> <td>Ce</td><td>0.1 – 10,000 (ppm)</td> <td>Dy</td><td>0.05 – 1,000 (ppm)</td> </tr> <tr> <td>Gd</td><td>0.05 – 1,000 (ppm)</td> <td>Ho</td><td>0.05 – 1,000 (ppm)</td> </tr> <tr> <td>Nd</td><td>0.1 – 10,000 (ppm)</td> <td>Pr</td><td>0.05 – 1,000 (ppm)</td> </tr> <tr> <td>Th</td><td>0.1 – 10,000 (ppm)</td> <td>Tm</td><td>0.05 – 1,000 (ppm)</td> </tr> <tr> <td>Yb</td><td>0.1 – 1,000 (ppm)</td> <td>Eu</td><td>0.05 – 1,000 (ppm)</td> </tr> <tr> <td>Er</td><td>0.05 – 1,000 (ppm)</td> <td>Lu</td><td>0.05 – 1,000 (ppm)</td> </tr> <tr> <td>La</td><td>0.1 – 10,000 (ppm)</td> <td>Tb</td><td>0.05 – 1,000 (ppm)</td> </tr> <tr> <td>Sm</td><td>0.1 – 1,000 (ppm)</td> <td>Y</td><td>0.05 – 1,000 (ppm)</td> </tr> <tr> <td>U</td><td>0.05 – 10,000 (ppm)</td> <td></td><td></td> </tr> </table> <p>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.</p> <p>Comments on Assay Data and Tests: The assay techniques employed are well-suited for the elements and minerals of interest. The methods utilised, combined with the reputable quality control practices of the SGS-GEOSOL and ALS laboratories, ensure the reliability of the assay data.</p>	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)	La	0.1 – 10,000 (ppm)	Tb	0.05 – 1,000 (ppm)	Sm	0.1 – 1,000 (ppm)	Y	0.05 – 1,000 (ppm)	U	0.05 – 10,000 (ppm)														
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<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Significant intersections have not been independently verified by alternative company personnel yet. Auger Twinned holes were used to Quality Control. Primary data collection follows a structured protocol, with standardized 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 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. <table border="0"> <thead> <tr> <th>Element</th> <th>Oxide</th> <th>Factor</th> </tr> </thead> <tbody> <tr><td>Ce</td><td>CeO₂</td><td>1.2284</td></tr> <tr><td>La</td><td>La₂O₃</td><td>1.1728</td></tr> <tr><td>Sm</td><td>Sm₂O₃</td><td>1.1596</td></tr> <tr><td>Nd</td><td>Nd₂O₃</td><td>1.1664</td></tr> <tr><td>Pr</td><td>Pr₆O₁₁</td><td>1.2082</td></tr> <tr><td>Dy</td><td>Dy₂O₃</td><td>1.1477</td></tr> <tr><td>Eu</td><td>Eu₂O₃</td><td>1.1579</td></tr> <tr><td>Y</td><td>Y₂O₃</td><td>1.2699</td></tr> <tr><td>Tb</td><td>Tb₄O₇</td><td>1.1762</td></tr> <tr><td>Gd</td><td>Gd₂O₃</td><td>1.1526</td></tr> <tr><td>Ho</td><td>Ho₂O₃</td><td>1.1455</td></tr> <tr><td>Er</td><td>Er₂O₃</td><td>1.1435</td></tr> <tr><td>Tm</td><td>Tm₂O₃</td><td>1.1421</td></tr> <tr><td>Yb</td><td>Yb₂O₃</td><td>1.1387</td></tr> <tr><td>Lu</td><td>Lu₂O₃</td><td>1.1371</td></tr> </tbody> </table> <ul style="list-style-type: none"> The TREO (Total Rare Earth Oxides) was determined by the sum of the following oxides: CeO₂, Dy₂O₃, Er₂O₃, Eu₂O₃, Gd₂O₃, Ho₂O₃, La₂O₃, Lu₂O₃, Nd₂O₃, Pr₆O₁₁, Sm₂O₃, Tb₄O₇, Tm₂O₃, Y₂O₃, Yb₂O₃. And for the MREO (Magnetic Rare Earth Oxides), the following oxides were considered: Dy₂O₃, Gd₂O₃, Ho₂O₃, Nd₂O₃, Pr₆O₁₁, Sm₂O₃, Tb₄O₇. The results of the analyses and controls have not been announced 	Element	Oxide	Factor	Ce	CeO ₂	1.2284	La	La ₂ O ₃	1.1728	Sm	Sm ₂ O ₃	1.1596	Nd	Nd ₂ O ₃	1.1664	Pr	Pr ₆ O ₁₁	1.2082	Dy	Dy ₂ O ₃	1.1477	Eu	Eu ₂ O ₃	1.1579	Y	Y ₂ O ₃	1.2699	Tb	Tb ₄ O ₇	1.1762	Gd	Gd ₂ O ₃	1.1526	Ho	Ho ₂ O ₃	1.1455	Er	Er ₂ O ₃	1.1435	Tm	Tm ₂ O ₃	1.1421	Yb	Yb ₂ O ₃	1.1387	Lu	Lu ₂ O ₃	1.1371
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		yet.
Location of data points	<ul style="list-style-type: none"> 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. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> 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 a level of accuracy within centimetres. The grid system employed for the project is based on the SIRGAS 2000 UTM coordinate system. This universal grid system facilitates consistent data interpretation and integration with other geospatial datasets. To ensure the quality and reliability of the topographic location data, benchmark and control points were established within the project area.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The auger drilling is conducted on a regular grid with a spacing of 200 x 200 metres. This grid spacing is designed to provide a detailed exploration framework suitable for the area of interest, and aims to define our initial inferred resource, offering a foundational understanding of the geological and grade continuity in the targeted zone. The data spacing and distribution for the auger drilling are considered appropriate for the intended purpose of establishing an inferred mineral resource. 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 mineralization zones. The exploratory nature of the diamond drilling further supports the overall geological understanding, although its data spacing is not predefined. No sample compositing has been applied in the reporting of 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	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 mineralized 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 mineralized zones and provides a representative view of the overall geology and mineralization. There is no indication that the orientation of the drilling has introduced any sampling bias about the crucial mineralized structures. The drilling orientation aligns well with the known geology of the deposit, ensuring accurate representation and unbiased sampling of the mineralized zones. Any potential bias due to drilling orientation is considered negligible in this context.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> 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	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All samples were acquired from tenements owned by Viridis Mining and Minerals LTD, following an agreement with the Varginha Parties. Specifically: Northern Concessions: <ul style="list-style-type: none"> ANM 009.031/1966 Area: 446.66 hectares Status: Mining Licence Location: Fazenda ANM 830.113/2006 Area: 137 hectares Status: Mining Application Location: Carijo ANM 830.927/2016 Area: 70.37 hectares Status: Exploration Licence Location: CENTRAL Cupim South Prospect: <ul style="list-style-type: none"> ANM 833.560/1996 Area: 154.26 hectares Status: Mining Application Location: Cupim South
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Historical exploration in the area comprises notable endeavours 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.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> 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 has a semblance of 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 (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

Criteria	JORC Code explanation	Commentary
		<p>ability of these deposits to offer relatively environmentally friendly mining prospects compared to traditional hard rock REE mines further enhances their appeal.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> Eastings 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 style="list-style-type: none"> Auger Drilling: Total number of holes: 66 Number of twin holes: 2 Average depth per hole: 8.29 metres Diamond Drilling: Total number of holes: 5 Average depth per hole: 44.68 metres
Data aggregation methods	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> 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 mineralized zones. All drill holes are vertical and are appropriate for the deposit type, ensuring unbiased sampling of the mineralization. Due to the geometry of the mineralization and the vertical orientation of the drill holes, the down hole lengths can be considered close representations of the true widths of the mineralized zones. However, for absolute precision, further studies would be required. In cases where there might be a discrepancy between downhole lengths and true widths, it should be noted that "down hole length, true width not known".
Diagrams	<ul style="list-style-type: none"> 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. 	<p>The data presented in this report offers a better understanding of the information. Various diagrams and supplementary information included in the document, enhancing the clarity and accessibility of the geological findings and exploration results.</p> <p>Figure 1 Map showing drill highlights, sample locations, and concessions.</p> <p>Figure 2 Cross section AA' across Northern Concessions.</p>

Criteria	JORC Code explanation	Commentary
		<p>Figure 3 Comparison of FZ-DDH-001 and IAC deposition model.</p> <p>Figure 4 Assay data for CT-AG-13.</p> <p>Figure 5 Satellite view with drill highlights.</p> <p>Figure 6 Cross-section AA' of Cupim South Prospect.</p> <p>APPENDIX A Drill location details.</p> <p>APPENDIX B Assay results.</p> <p>APPENDIX C Drill locations in this announcement.</p>
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. In essence, this report is a faithful representation of the exploration activities and findings without any undue bias or omission.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> There is no additional substantive exploration data to report currently.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Future works include carry on the auger, diamond and RC drilling campaign in 2023/2024, geological mapping, geochemical and metallurgical tests, and mineralogical characterisation.