ASX: VMM MARKET ANNOUNCEMENT

PHASE II DRILLING COMMENCES AT COLOSSUS IONIC CLAY PROJECT

ASX Release: 3 October 2023

Highlights

- **Commencement of Phase II drilling to progress exploration at the Colossus Project, with a total of five drill rigs now operational across the Colossus Project.**

- **Phase II scope has now been expanded to consist of diamond and air-core drilling to target new areas of the Alkaline Complex at depth, focusing first on Cupim South and Sien prospects. Auger drilling by JOGMEC intersected 15m @ 3,127ppm TREO, 5 metres away from Cupim South Prospect[1].**

- **Historic drilling on the Sien Prospect** was previously limited to 3-metre auger holes, **which intersected high REE grades with significant MREO content, warranting further deeper drilling[2]:**
  - **3m @ 1,470ppm TREO** from surface (33% MREO) ending in mineralisation (F1)
  - **3m @ 1,780ppm TREO** from surface (31% MREO) ending in mineralisation (F2)
  - **3m @ 1,679ppm TREO** from surface (30% MREO) ending in mineralisation (F3)
  - **3m @ 1,785ppm TREO** from surface (34% MREO) ending in mineralisation (F4)

Executive Chairman Agha Shahzad Pervez commented:

"In light of the successful commencement of auger drilling throughout the Colossus Project, the team believes that it is essential to expand the scope of our drilling to include diamond and air-core rigs, to test and gain an understanding on the full depth potential of saprolite profiles within our concessions.

The recent intercept of 58m @ 2,702ppm TREO drilled recently at the Caldeira Project[3] is located only ~1.1km southeast of our Cupim South prospect, and illustrates the depth potential of high-grade mineralised saprolite within the Pocos De Caldas Alkaline Complex. These depths and results can only be achieved through diamond and air-core drilling which we believe is imperative to our maiden exploration program.

We are very fortunate to have secured diamond and air-core drill rigs just 2 weeks into our maiden drill program, which are now mobilised and currently completing their first holes.

This outcome was the result of the diligent work completed by our Brazil executive team and we are excited to see the results of both our auger, air-core and diamond drill assays."

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Phase II Drilling Commences with Expanded Scope

Viridis Mining and Minerals Limited ("Viridis" or "Company") is pleased to report that it has expanded the scope of its maiden drill program, and commenced Phase II. The expansion of scope to Phase II drilling will include additional deeper holes through utilising one diamond and one air-core drill rig, which have been mobilised on site.

Phase I and II drilling will occur simultaneously with five drill rigs running in parallel across the Colossus Ionic Adsorption Clay ("IAC") Project. These five rigs consist of three auger drill rigs (limited to 20m) running across the Fazenda, Ceten and Carijo prospects, one air-core drill rig running across the Caminho das Pedras prospect and one diamond drill rig running across the Cupim South prospect.

Given the fact auger drill rigs have limitations of depth up to the water table or a maximum of 20 metres, the geology which has been understood to date indicates the clay body extends beyond the water table and shows potential for hosting a deeper clay profile. Viridis believes to gain a better understanding of the full thickness potential of the clay profiles an air-core and diamond rig are necessary in combination with low-cost auger drilling which will be used to form a maiden resource estimate.

Figure 1: *Diamond drill rig setup and commencing Phase II drilling at Cupim South prospect, to be completed in parallel with Phase I.*

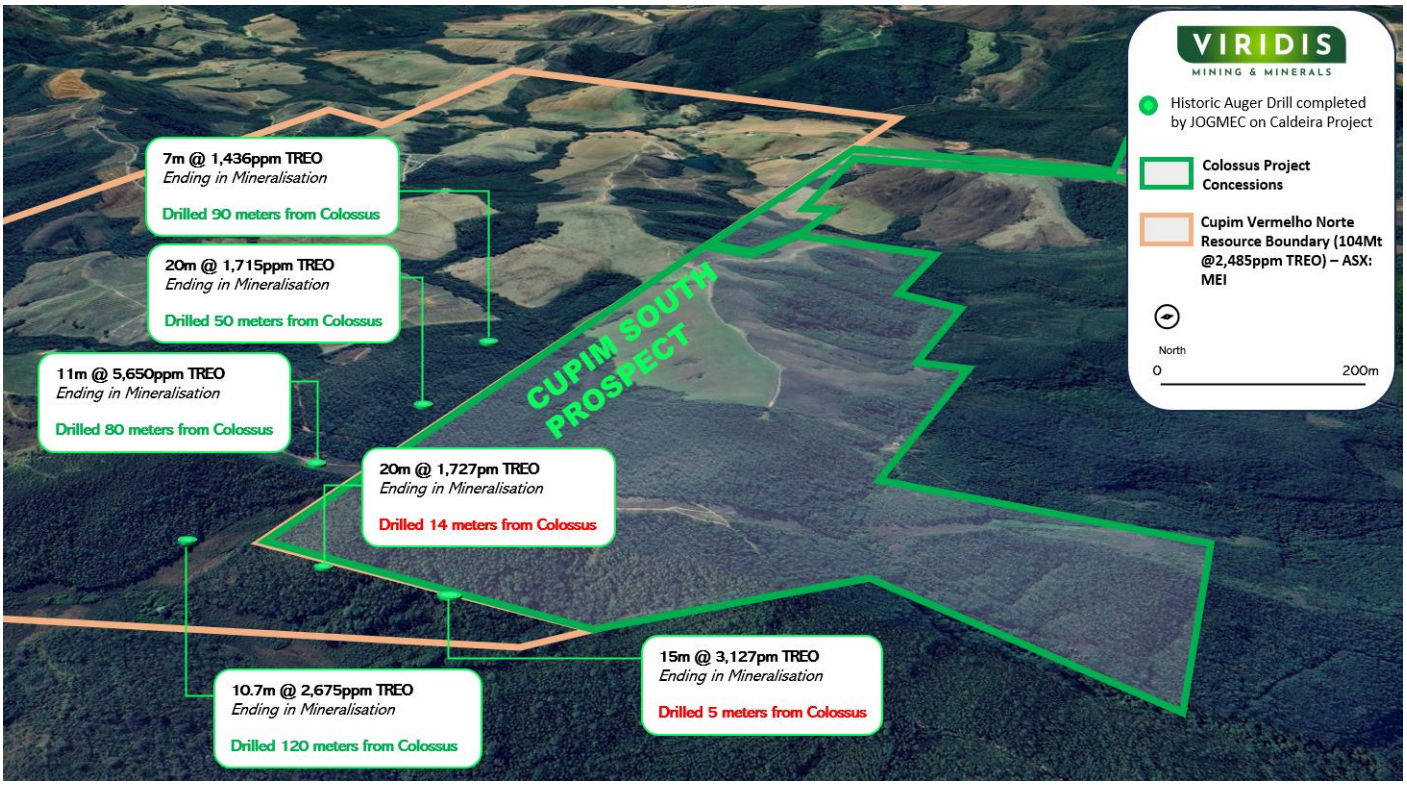

Figure 2: *Satellite image of Cupim South Prospect, an extension of the Cupim Vermelho Norte resource body near JOGMEC historic auger holes[1].*

Map of Exploration Data on Colossus Project

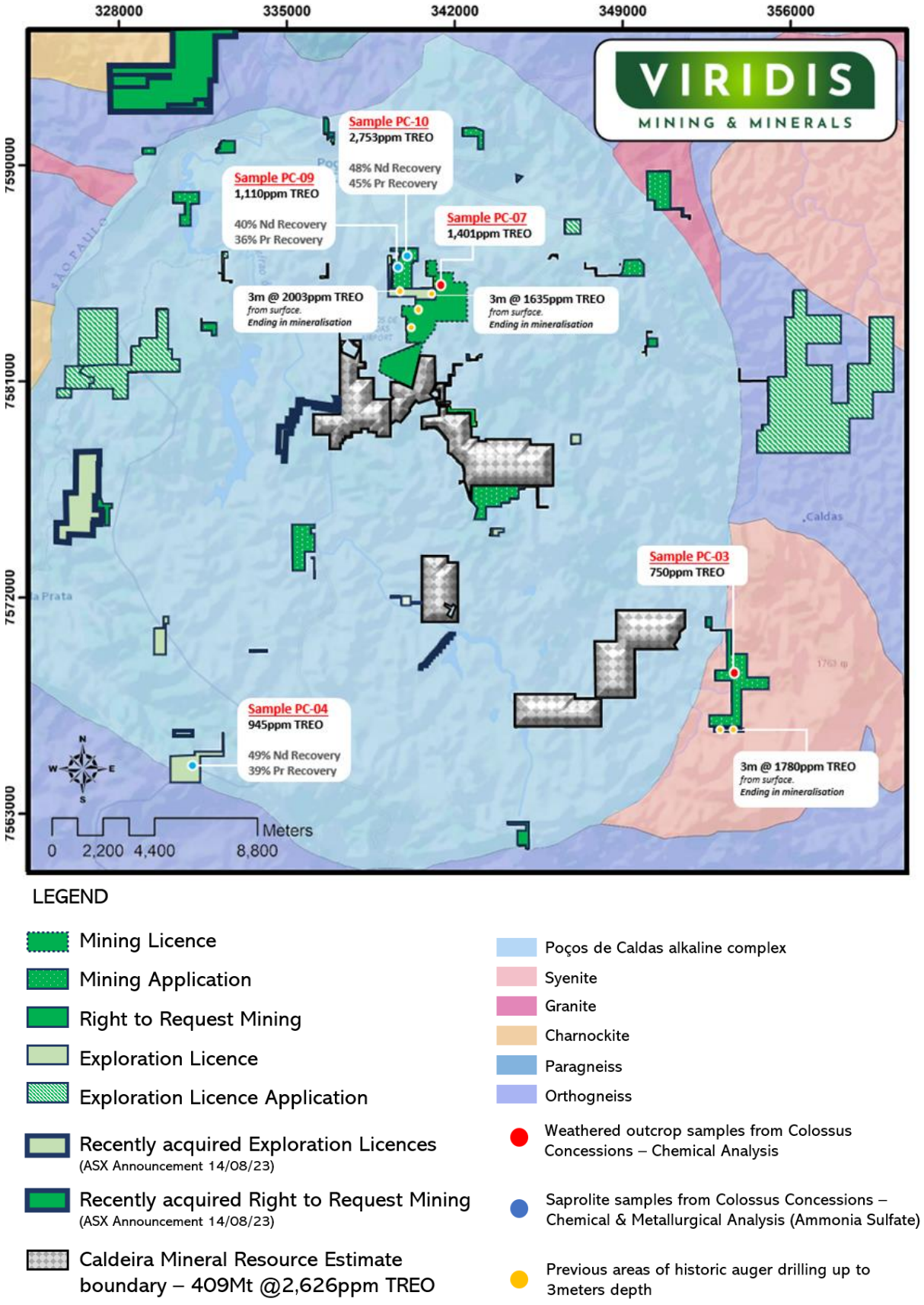

Figure 3: *Map of all sample locations on Colossus concessions with highlights of areas previously drilled by 3-metre Auger holes that have all ended in mineralisation[1,2].*

Geology of Ionic Clays

In the Poços de Caldas Complex, we find the optimal conditions for an IAC type rare earth elements ("REE") deposit. Its alkaline rocks, rich in feldspars, weather mainly into kaolinite. Simultaneously, these rocks contain bastnaesite, a rare earth fluocarbonate. Upon weathering, bastnaesite releases REEs, which ionically bond with the existing clay minerals, further upgrading the region's mineral profile[4].

The upper layer in this region consists of clayey soil and bauxite. Through lateralisation, some of the upper layer's rare earths are mobilised to the intermediate horizon, where kaolinite is the main clay mineral, retaining the REEs in ionic form adsorbed onto its structure[4,6,7].

Within IAC deposits, the top layer presents the lowest levels of REE mineralisation, as illustrated in the deposition model of both Malaysian and South China Ionic Clay Projects (see Figure 4 and Figure 5).

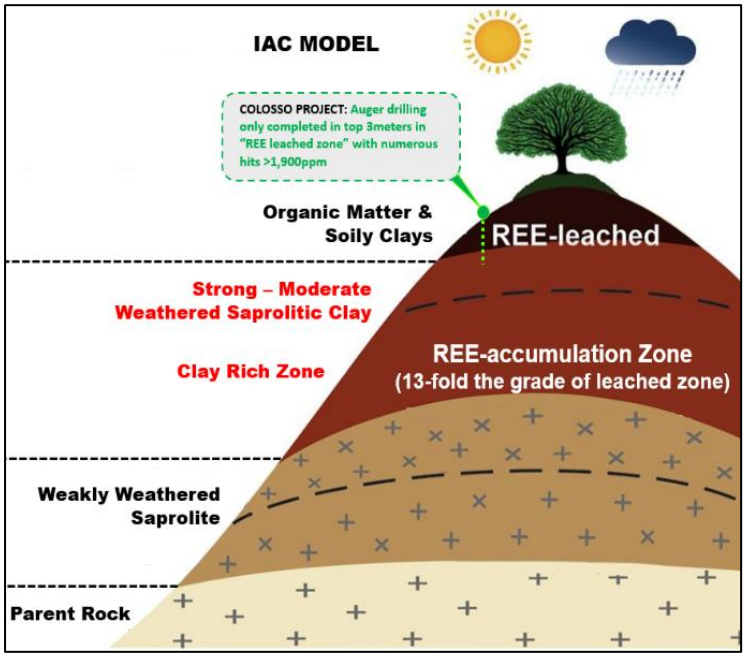

Figure 4: *Deposition Model of Malaysian Ionic Clay Project superposition of Colossus Project Auger Drill depths[5].*

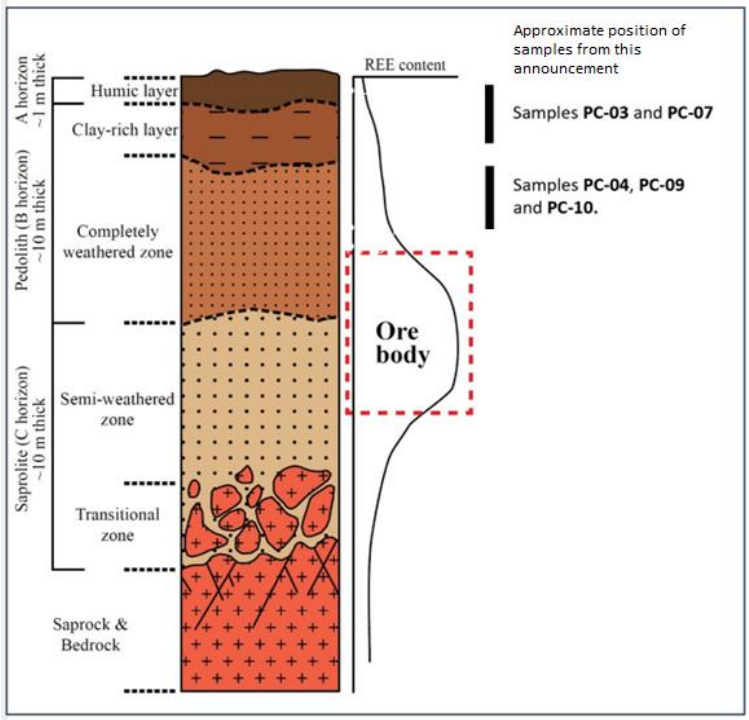

Figure 5: *General IAC Deposition Model (Li & Zhou, 2020) with an estimated placement of the Colossus Project samples based on their visual and chemical characteristics[7].*

Contacts

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About Viridis Mining and Minerals

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

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

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. *Meteoric 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. *MEI announcement dated 31 August 2023 'Remarkable REE Drill Results Outside Caldeira Resource'*
4. *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*

5. *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*
6. *Adsorption of rare earth elements in regolith-hosted clay deposits, A. Borst, M. Smith et al., 2020*
7. *The role of clay minerals in formation of the regolith-hosted heavy rare earth element deposits, M. Li, M. Zhou, Journal of American Mineralogist, 2020*