For personal use only

VIRIDIS MINING & MINERALS

ASX: VMM MARKET ANNOUNCEMENT

Viridis Demonstration Plant Exceeds PFS Recovery Assumptions

Continuous operation validates the Colossus flowsheet and highlights potential upside to project economics

ASX Release: 23 July 2026

Highlights

- **Viridis Mining and Minerals Limited ('Viridis' or the 'Company') is pleased to announce steady-state continuous production of Mixed Rare Earth Carbonate ('MREC') from its state-of-the-art Demonstration Plant, following successful initial start-up announced 26 May 2026.**
- **July 2026 MREO[A] recoveries have exceeded 80%, materially outperforming the metallurgical recoveries adopted in the Pre-Feasibility Study ('PFS'). Average July 2026 recoveries of 79% MREO and 64% TREO[B] compare with PFS assumptions of 76% and 57%[1], respectively, highlighting the potential for meaningful improvements to project economics as these enhanced recoveries are incorporated into the Definitive Feasibility Study ('DFS').**
- **Demonstration Plant optimisation remains ongoing, with several process enhancements and operating initiatives yet to be implemented that are expected to further improve metallurgical recoveries.**
- **The Demonstration Plant has operated reliably on a continuous 24-hour basis, leveraging fully automated Programmable Logic Controller ('PLC') control systems, integrated water and reagent recycle circuits and an on-site laboratory to optimise feed blends, ore types, pH operating windows and other key process parameters influencing rare earth recoveries.**
- **Product qualification work is progressing with strategic offtake partner Solvay[2]. High-grade MREC samples have been produced to specification and shipped to Solvay's La Rochelle facility in France.**
- **Run-of-mine ('ROM') feed has been sourced from the Northern Concessions, which underpin the early years of the Colossus mine plan, providing representative recovery factors for incorporation into the DFS and project financial model.**
- **Validation of the process flowsheet under continuous commercial-style operation has confirmed the robustness and repeatability of MREC production, enabling the Company to finalise key process design criteria and several capital and operating cost decisions for the DFS.**
- **Leveraging the design and scale of the Demonstration Plant, Viridis has also undertaken several technical scopes for the commercial plant with the following outcomes:**
  - Counter Current Decantation ('CCDs') – target underflow solids content and overflow clarity proven.
  - Residue and MREC precipitation filters – competent filter cakes produced at target moisture content, derisking residue backfill and product bagging design.
  - Water treatment – successful operation of water treatment package skid to prove zero liquid discharge operation, water recycling and Ammonium Sulphate ('Amsul') reagent recovery.
  - Coupon testing for confirmation of materials of construction for commercial plant.
- **The Rare Earth Research and Processing Centre ('CPTR') facility continues to demonstrate its strategic importance, hosting technical due diligence by independent lenders' engineers supporting Project Financing scope of the banking consortium, and high-level government and institutional delegations, including EU Commissioner Jozef Síkela[3].**

[A] Total Rare Earth Oxides ('TREO'): $La_2O_3 + CeO_2 + Pr_6O_{11} + Nd_2O_3 + Sm_2O_3 + Eu_2O_3 + Gd_2O_3 + Tb_4O_7 + Dy_2O_3 + Ho_2O_3 + Er_2O_3 + Tm_2O_3 + Yb_2O_3 + Lu_2O_3 + Y_2O_3$

[B] Magnetic Rare Earth Oxides ('MREO'): $Dy_2O_3 + Nd_2O_3 + Pr_6O_{11} + Tb_4O_7$

Viridis Mining and Minerals Limited | ACN: 121 969 819
Level 50, 108 St Georges Terrace, Perth, WA 6000
Telephone: + 61 3 9071 1847 Email: info@viridismining.com.au
www.viridismining.com.au

For personal use only

Managing Director, Rafael Moreno commented:

"The Demonstration Plant continues to exceed our expectations and marks another important milestone in the development of the Colossus Project. Successfully operating under continuous 24-hour automated conditions is a significant achievement in itself, however the most vital outcome is that we are consistently achieving metallurgical recoveries above those assumed in our PFS. Every percentage point improvement in recovery translates directly into higher rare earth production from the same ore feed, creating the potential for meaningful improvements in project economics as we progress towards the DFS.

Importantly, these results have been achieved while optimisation work remains ongoing. The Demonstration Plant has provided us with an exceptional platform to test and refine key operating parameters under commercial-scale conditions, and we have already identified several additional optimisation initiatives that have the potential to further enhance recoveries ahead of finalising the DFS. Beyond improving recoveries, the Demonstration Plant has also enabled us to validate critical process equipment, optimise operating parameters and finalise a number of CAPEX and OPEX assumptions for the commercial plant.

The Demonstration Plant has become a critical de-risking tool for the Colossus Project. It is providing lenders, strategic partners and offtake customers with tangible proof that our simple flowsheet performs reliably under continuous operation while producing high-quality Mixed Rare Earth Carbonate to specification. With financing, permitting, commercial negotiations and DFS activities all progressing in parallel, these operating results further strengthen our confidence as we advance towards Final Investment Decision in the coming months."

Colossus Demonstration Plant Operational Update

Viridis is pleased to announce that its state-of-the-art MREC Demonstration Plant has been operating consistently and reliably from May 2026. Steady improvement and refinement in the plant operations have been focused on metallurgical recoveries and product impurity specifications.

July 2026 MREO (Nd, Pr, Dy, Tb) recoveries have exceeded 80%, following several process optimisation initiatives conducted in June 2026. The average recoveries in July 2026 of 79% MREO and 64% TREO are materially above the PFS recoveries of 76% MREO and 57% TREO[1] which were based on extensive test work at Australian Nuclear Science and Technology Organisation ('ANSTO'). A summary of the data for July 2026 is provided in the following table.

Table 1: *Recovery Data during July 2026*

	MREO Recovery %	TREO Recovery %
Average	**78.8**	**64.0**
Median	80.3	65.1
Max	80.9	68.9
Min	74.4	55.2
Std. Deviation	2.5	4.7

Demonstration Plant Replicates Commercial Plant Flowsheet

The Demonstration Plant replicates the process flowsheet of the proposed commercial facility and is designed to process 100kg/hr of clay feed. Importantly, the Demonstration Plant incorporates an advanced process control system to enable continuous operation and generate critical operating data to support final commercial design and optimisation. At this scale, the Demonstration Plant is believed to be among the largest of its kind outside China.

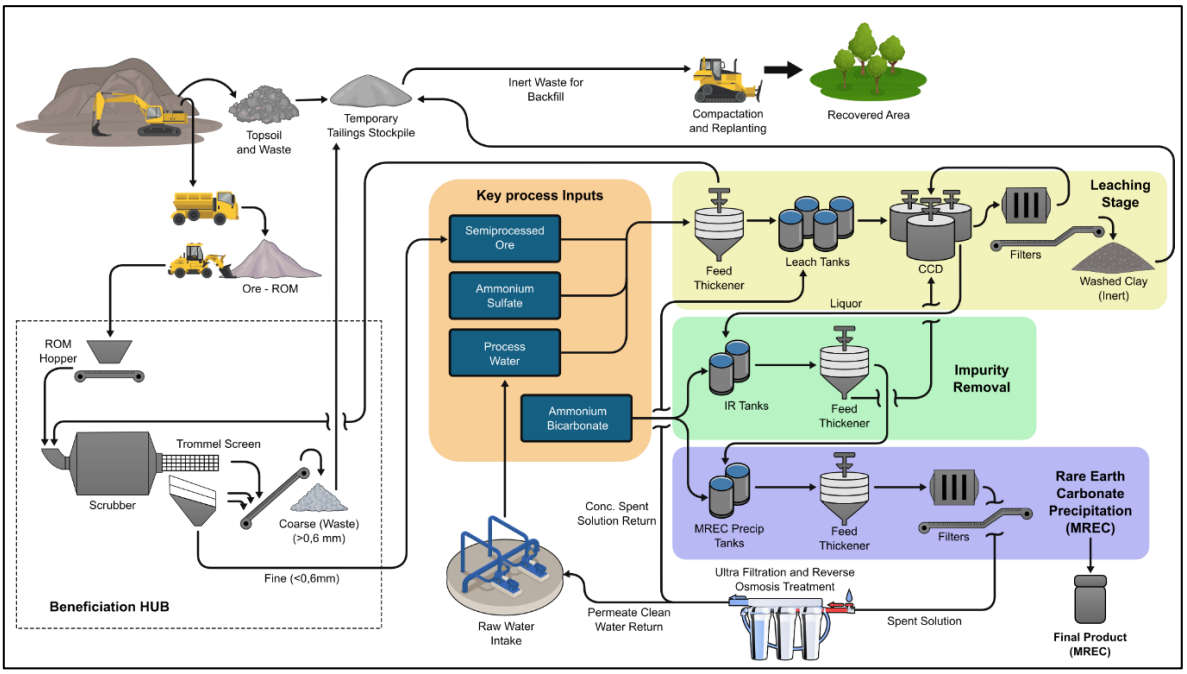

Figure 1: *Viridis Colossus flowsheet schematic*

Figure 2: *Viridis' MREC Demonstration Plant is one of the largest known semi-industrial, continuous operation plant outside China*

Demonstration Plant using Early Production Year ROM

The Demonstration Plant is presently taking ROM feed ore from the Company's Northern Concessions. Mine pits CW-01 and CW-02, which represent the Company's first 18-24 months of commercial plant feedstock, have been selected to ensure rigorous recovery factors for comparable ROM grades are carried into the DFS and financial modelling due for completion in August 2026.

Achieving MREO recoveries under steady state continuous operations with feed grade that is on the low side of the life of mine ('LOM'), generates an additional layer of conservatism in the financial modelling.

Table 2: *Colossus Northern Concessions, Demo plant feed grade comparison*

Material	Ore Tonnes	TREO (ppm)	MREO (ppm)
Trench CW-01, Northern Concessions	557	2794	803
Trench CW-02, Northern Concessions	569	2933	802
PFS LOM (9 July 2025)	98.5Mt	3380	936

For personal use only

For personal use only

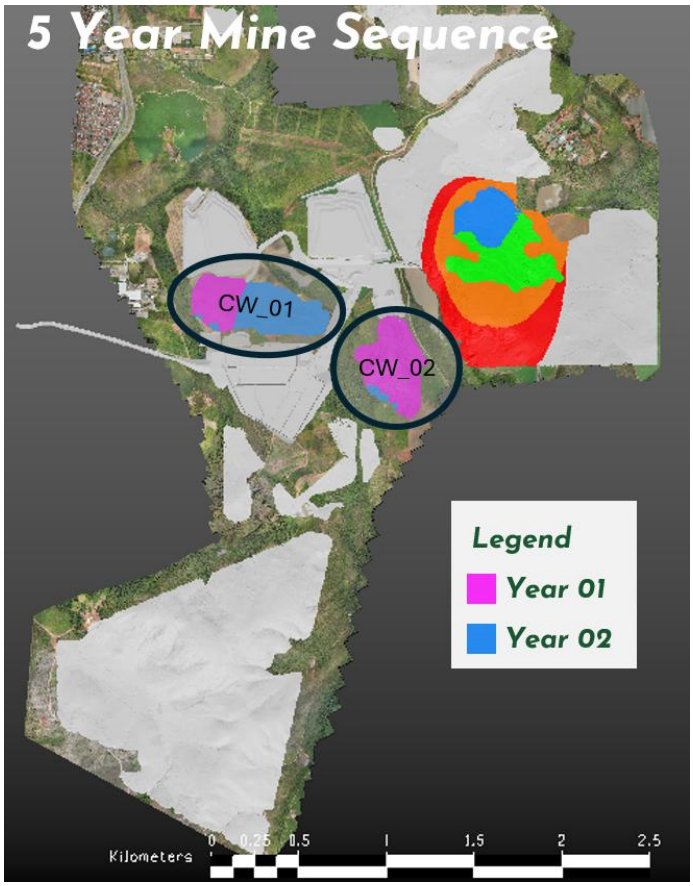

Figure 3: *Colossus Northern Concessions, pits CW-01 and CW-02 used for Demonstration Plant ROM*

Demonstration Plant Improvements translate to Commercial Plant Success

Several process improvements have been implemented during the last two months of operation. This has resulted in important learnings for engineering and operational teams.

MREC Precipitation

A key contributor to MREC product quality and mechanical recovery is the MREC precipitation mechanics and kinetics. Several refinements in the MREC precipitation circuit focused on shear, pH control and recycle rates have led to notable improvement in particle size and MREC cake filterability.

Figure 4: *MREC precipitation improvements*

For personal use only

MREC Filtration

Improvements in MREC filtration through better understanding of cycle times and cake discharge have generated competent filter cakes with consistent moisture content and colour.

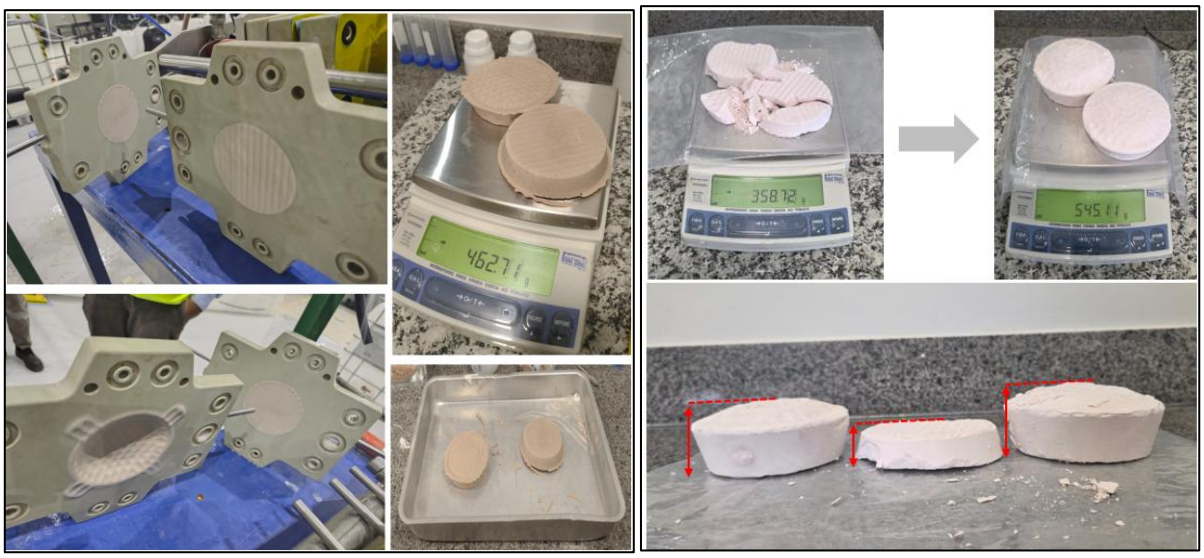

Figure 5: *Competent MREC filter cakes*

Residue Filtration

Optimisation has been conducted for residue filtration through better understanding of cycle times, feed pressure and drying stages. This has generated competent filter cakes with consistent moisture content and prevented sticky discharge. Effective dewatering and washing of filter cake suitable for mine backfilling is aligned with best-practice sustainability standards.

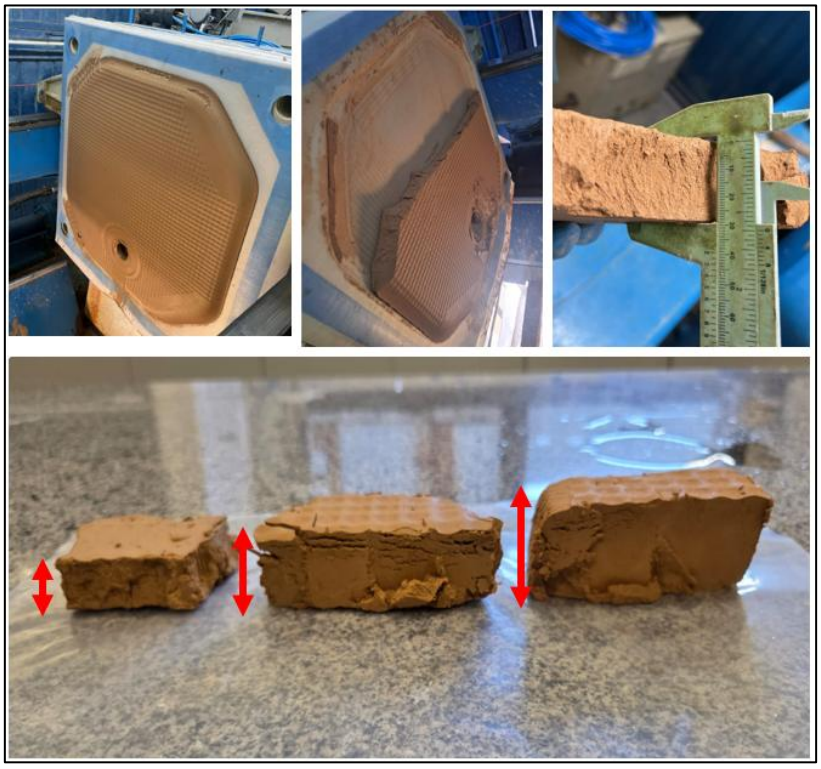

Figure 6: *Competent Residue filter cakes*

For personal use only

Counter Current Decantation ('CCD') Circuit

Continuous improvements to thickener operation through flocculation optimisation, feed mixing and feed dilution have improved both underflow and overflow characteristics. This has led to the following benefits to the overall process:

- Improved underflow solids have assisted in reducing cake moisture and optimising residue filtration cycles.
- High clarity with low solids content in the thickener overflow has reduced clay carryover to the MREC product, driving improvement in key product quality measurements.

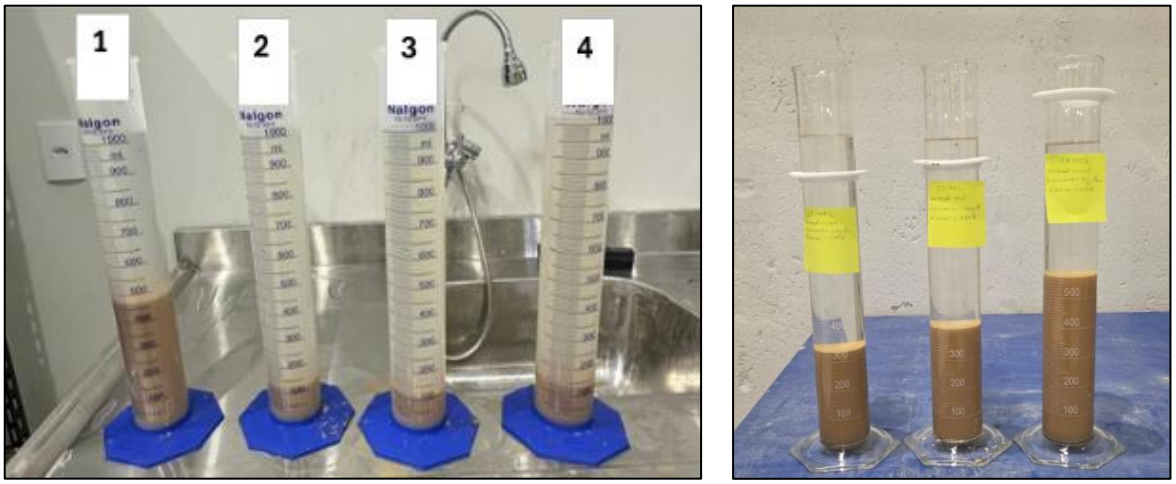

Figure 7: *Improvement in Sedimentation Performance*

Third Party Laboratory and Data Analysis Tools

Solid and liquor samples are being analysed using the certified and independent SGS laboratory in Belo Horizonte.

Data received from the SGS laboratory feeds directly into a Power BI platform improving data visualisation and trend analysis to support decision making by engineering and operational teams.

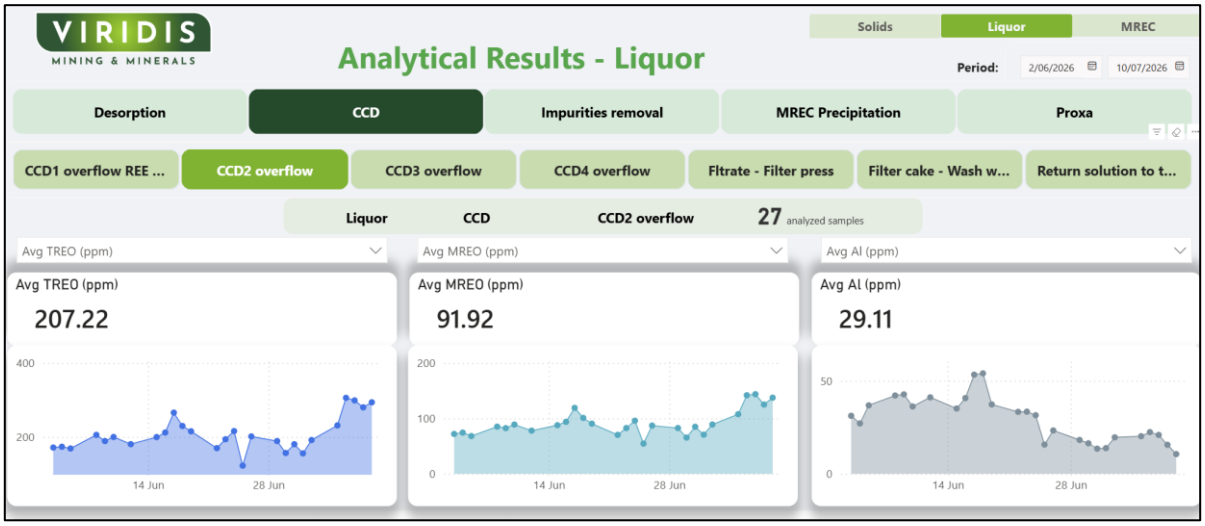

Figure 8: *Data visualisation in Power BI*

Future Work

With strong confidence in MREO recovery now achieved, future Demonstration Plant operations will focus on several areas to further ensure commercial plant success:

- Additional process and equipment optimisations including reagent consumption, recovery refinement, and testing of various process sensitivities.
- Vendor (and EPCM) access to the Demonstration Plant following long lead item equipment order placement ('LNTP') to support equipment design optimisation and further testing as part of the provision of performance guarantees.
- Generate further MREC samples for product qualification with Solvay.
- Ongoing training of operations and maintenance teams.

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

Contacts

For more information, please visit our website, www.viridismining.com.au or contact:

Carly Terzanidis
Company Secretary
Tel: + 61 3 9071 1847
Email: cosec@viridismining.com.au

Rafael Moreno
Managing Director
Tel: + 61 3 9071 1847
Email: rafael.moreno@viridismining.com.au

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, with a Mineral Resource Estimate and Ore Reserve Estimate for Rare Earth Elements following completion of a Pre-Feasibility Study;
- The South Kitikmeot Project, where the Company intends to continue gold exploration;
- 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 prospective for kaolin-halloysite.

Competent Person Statement

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 in the case of estimates of Production Targets and forecast financial information that all material assumptions and technical parameters underpinning the estimates in the relevant referenced market announcements continue to apply and have not materially changed. To the extent disclosed above, the Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

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,

For personal use only

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

References

1. VMM ASX announcement dated 9 July 2025: Colossus PFS Unlocks World-Class Project Economics.
2. VMM ASX announcement dated 2 June 2026: Viridis Signs Strategic Offtake and Technical Partnership LoI with Solvay.
3. VMM ASX announcement dated 22 June 2026: European Union Commissioner Visits Colossus Project.

For personal use only