

HATCH AWARDED COLOSSUS SCOPING STUDY AND ENGINEERING SUPPORT CONTRACT

ASX Release: 15 February 2024

Highlights

- ▶ Viridis has awarded leading professional services firm, Hatch Pty Ltd (“Hatch”), a contract to deliver a Scoping Study for the Colossus Project and general Engineering Support.
- ▶ Hatch is a global multidiscipline engineering, management and development consultancy, with experienced execution offices in Perth, Australia and Belo Horizonte, Brazil. Both offices have a strong track record with rare earth processing throughout a full project lifecycle.
- ▶ Engineering support from the Perth Hatch office is now underway and the formal Scoping Study will commence in March 2024, with the initial focus being on the highly prospective Northern concessions consisting of Fazenda, Caminho Das Pedras, Central and Carijo Prospects.
- ▶ The key deliverables from the Scoping Study will include:
 - Processing and production methods, flow rates and associated mine life.
 - Review of capital expenditure (“CAPEX”) estimate to deliver the Colossus Project and the associated Operating expenditure (“OPEX”) estimate to operate the project at nameplate throughput.
 - Project Execution Schedule, including anticipated critical path.
- ▶ The output from the Scoping Study will enable Viridis to execute other key scopes on the Development pathway and these include:
 - Full asset lifecycle financial modelling, to support project financing and offtake discussions and finalisation of the project execution plan.
 - Technical output (plot plans, flowrates, emissions etc.) to support Mining Permit Applications, Environmental Impact Assessments (“EIA”) and regulatory submissions.
 - Technical and economic outputs to support the conversion of mineral resource to reserve.
- ▶ Metallurgical flow sheet development will be supported by the ongoing ANSTO test work program¹ and the early Engineering engagement with Hatch will provide guidance on the additional lab testing required to de-risk the final flow sheet design.

Chief Executive Officer, Rafael Moreno commented:

“We are thrilled to have secured a strategic world class professional services contractor such as Hatch, with specialist rare earth processing experience to work with our teams here in Perth and Belo Horizonte, Brazil.

Having spent most of my career delivering major capital projects, you quickly learn that the calibre of your engineering contractor, early in your development journey, plays a crucial part in de-risking the execution phase of the project including the environmental approvals process.

Discussions held with Hatch management have given Viridis confidence that the team understands the value drivers of delivering a Scoping Study which reduces the complexity of the flow sheet design and technology selection, sets a global benchmark in environmental standards whilst keeping the facility OPEX at the low end of the cost curve."

Hatch Director Metals Australia-Asia, Claude D'Cruz commented:

"Hatch is excited to be working with Viridis to undertake the Scoping Study for the Colossus Rare Earth Element (REE) Project in Minas Gerais, Brazil.

We look forward to working closely with Viridis to set the Project up for future success by drawing on our significant expertise in the processing of rare earths and associated elements, and our substantial project delivery experience".

About Hatch

Hatch is a global multidiscipline engineering, management, and project development consultancy, with execution offices in both Perth, Australia and Belo Horizonte, Brazil.

This is ideal to support Viridis given the location of its executive management and technical teams. The Hatch Perth and Belo Horizonte offices work in the mining and metals, infrastructure, and energy sectors. Both offices have a first-class reputation for delivering engineering and project delivery services.

Viridis has strategically selected Hatch for the Colossus Project, based on the location of their execution offices and outstanding experience in REE processing space, with specific focus in Brazil.

Colossus Project Scoping Study Details

The Scoping Study has been developed to assess the technical options available to deliver the Colossus Project and the associated economic analysis with the options being proposed. The study will initially focus on the highly prospective Northern concessions, consisting of Fazenda, Caminho Das Pedras, Central and Carijo and then expand to the remaining concessions.

Led by Hatch Australia and Viridis, the key deliverables from the assessment will include:

- Processing and production methods, flow rates and associated life-of-mine ("LoM") options.
- Logistics and Facility infrastructure, including production plant locations.
- Key facility design documents (e.g. Plot Plans, Mechanical and Electrical line lists) to support high-level MTOs for Civils, Structural, Mechanical, Electrical.
- Power, Water, and Environmental study.
- Mine extraction, backfilling, and rehabilitation options.
- CAPEX: Pre-production capital costs and LoM sustaining capital.
- OPEX: Mining, processing, and G&A operating costs for pre-production activities and LoM.
- Project Execution Schedule: include anticipated critical path.
- Project Risks, Opportunities, and key technology Register.
- Economic analysis: NPV, IRR, cashflow, Payback period.

Development Plant Key Activities

The output from the Scoping Study will enable Viridis to execute other key scopes on the aggressive Development timeline and these include:

- Full asset lifecycle financial modelling, to support project financing and offtake discussions and finalisation of the project execution plan.

- Technical output (plot plans, flowrates, emissions etc.) to support Mining Permit Applications, EIAs and regulatory submissions.
- Technical and economic outputs to support the conversion of mineral resource to reserve.

ANSTO Test Work Program

Metallurgical flow sheet development will be supported by the ongoing ANSTO test work program and the early Engineering engagement with Hatch will provide guidance on the additional lab testing required to de-risk the final flow sheet design.

ANSTO proposed scope of works to include:

- Leach testing through Q1-Q2 2024 on samples that make up the MRE. The initial leaching program will use Ammonium Sulfate as the lixiviant, pH4 at room temperature.
- Test optimised recoveries using the full spectrum of sample preparations and modifying solid %, several lixiviants across a range of concentrations and pH levels.
- Test ionic recoveries on the range of material across the saprolite profile – transported soil cover, leached clays, weathered clays and transitional material.
- Investigate the impurity removal stage in detail to minimise REE losses.
- Investigate the product precipitation stage, including reagent choice and product wash requirements.
- Flowsheet test works under laboratory plant conditions.

Approved for release by the Board.

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

Chief Executive Officer

Tel: + 61 3 9071 1847

Email: rafaelm@viridismining.com.au

Media Enquiries

Fadi Diab

Phoenix Global Investments

info@phoenixglobalinvestments.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, 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.

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.

Hatch Services and Deliverables

Hatch's services and study deliverables will be prepared for exclusive use by Viridis, are not intended for public disclosure, must not be used or relied upon by third parties, cover only selected aspects of Viridis' Projects, are based on various information provided by or on behalf of Viridis and are subject to various assumptions, conditions and disclaimers. Hatch does not endorse or otherwise provide any guarantee, warranty or other statement on the feasibility or any particular outcome of Viridis' Projects.

References

1. *VMM ASX announcement dated 30 November 2023 "ANSTO Appointed to Commence Ionic Metallurgical Test Work"*