

Geomega provides update on Montviel hydrometallurgical process developments

Montreal, June 17, 2025 – Geomega Resources Inc. ("**Geomega**" or the "**Corporation**") (TSX.V: GMA) is pleased to provide an update on the hydrometallurgical process developments for the Montviel rare earth deposit.

Following the restart of the hydrometallurgical testwork on Montviel in 2022 (<u>see press release</u>), Geomega was able to significantly upgrade the process flow sheet and apply various process improvements that should benefit project economics and reduce the environmental footprint of the deposit in comparison to the work published in 2015 (<u>see press release</u>).

As previously disclosed in 2022, the main technical objectives of the study were the following:

- 1. To remove the flotation circuit which is a major operating cost and was accounting for 15% REE loss to the tailings. Eliminating the flotation circuit should result in the tailings facility being removed as well which was an important capital cost.
- 2. To cut the number of steps and simplifying the flowsheet in comparison to the work published and then patented in 2020 (<u>See press release</u>).
- 3. To demonstrate valorization of other metals present in the ore. This allows the project to not be dependent only on rare earths which tend to have significant price fluctuations. Management believes that the possibility of having easily marketable offtake streams distributes this financial risk and the environmental footprint among the various products allowing the project to remain economic and sustainable even during low rare earth pricing periods.

Some of the main improvements achieved during this testwork are:

• Elimination of fine grinding and flotation beneficiation

• Valorization of about 40% of the overall ore into several offtake streams (not including carbonates) Circuit 1

- Recovery of carbonates a potential minor revenue stream that could reduce waste rock generated by the project or that would be used for paste backfill
- Recovery of reagent in Circuit 1

Circuit 2

- Recovery of iron a high purity iron product for DRI (Direct Reduced Iron) application, an important revenue stream and a significant waste volume reduction
- Recovery of reagent in Circuit 2
- Iron recovery of about 75% to iron oxide stream.

Circuit 3

• Critical minerals concentrate including rare earth elements, scandium and niobium with recoveries of about 95% for REO and Sc and 85% for Nb.

- Iron Phosphate (FePO4) product recovery an important revenue stream for the LFP (Lithium Iron Phosphate) batteries market
- Mn/Mg salts recovery an important revenue stream for the agricultural and battery markets

Following the completion of the testwork, an internal techno-economic assessment was completed. The hydrometallurgical process was modeled using Aspen Plus software and supported by all the testwork. The mining operation parameters were based on the work that was done between 2012 and 2015. Additional work by an external firm would need to be performed before a Preliminary Economic Assessment (PEA) could be completed and results published. The positive conclusions of this internal study will be used by the Corporation in evaluating the next steps in advancing the Montviel deposit.

"I would like to thank the Ministère de l'Énergie et des Ressources Naturelles (MERN) for providing the financial support to launch this project back in 2022. The Quebec Gouvernement continues to provide strong support for the development of the critical and strategic mineral industry in the province and this project demonstrates exactly that. The combination of the project specific advantages of Montviel such as its location, access to infrastructure, labor force and the size of the resource together with the processing technology that Geomega has developed over the years should result in both economical and environmental benefits for the project. Having a project that can survive the major price fluctuations which are common in rare earths will be important to establishing a sustainable and reliable western supply chain." commented Kiril Mugerman, President & CEO of Geomega.

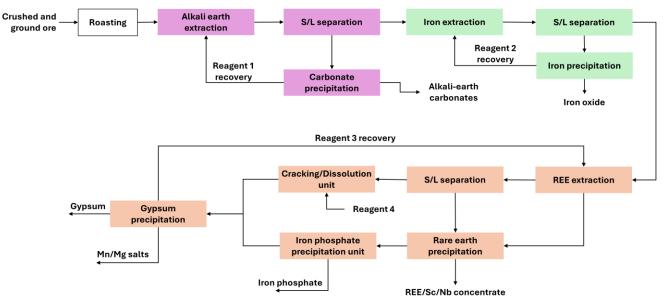


Figure 1: Geomega's proprietary Montviel process flow sheet

The testwork has been conducted by the technical team of Innord Inc, a private wholly owned subsidiary of Geomega. All the testwork and the technology developments have been supervised by Dr. Pouya Hajiani (Ph.D. Chemical Engineering), CTO of GéoMégA and he approves the technical information in this press release.

About Geomega (<u>www.geomega.ca</u>)

Geomega develops innovative technologies for extraction and separation of rare earth elements and other critical metals essential for a sustainable future. Geomega works with various feed streams to apply its technologies to waste valorization. This includes NdFeB magnet recycling, bauxite residue and sulphide tailings

processing. Geomega's strategy revolves around gradually de-risking its innovative technology and delivering cashflow and return value to shareholders while working directly with the main players in their respective industries.

As its technologies are demonstrated on larger scales, Geomega is committed to work with major partners to help extract value from mining feeds, tailings and other industrial residues which contain rare earths and other critical metals. Irrespective of the metal or the source, Geomega adopts a consistent approach to reduce the environmental impact and to contribute to lowering greenhouse gases emissions through recycling the major reagents in the process.

Geomega also owns the Montviel rare earth carbonatite deposit, the largest 43-101 bastnaesite resource estimate in North America and holds over 16.8M shares, representing approximately 13% of the issued and outstanding shares, of Kintavar Exploration Inc. (KTR.V), a mineral exploration company that is exploring for copper projects in Quebec, Canada.

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