



## 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 ([see press release](#)), 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 ([see press release](#)).

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 ([See press release](#)).
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.

- 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.

```
graph LR; A[Crushed and ground ore] --> B[Roasting]; B --> C[Alkali earth extraction]; C --> D[S/L separation]; D --> E[Iron extraction]; E --> F[S/L separation]; F --> G[Iron precipitation]; G --> H[Iron oxide]; D --> I[Carbonate precipitation]; I --> J[Alkali-earth carbonates]; I --> C; F --> K[Reagent 2 recovery]; K --> E; G --> L[Reagent 3 recovery]; L --> M[REE extraction]; M --> N[S/L separation]; N --> O[Cracking/Dissolution unit]; O --> P[Rare earth precipitation]; P --> Q[Iron phosphate precipitation unit]; Q --> R[Gypsum precipitation]; R --> S[Gypsum]; R --> T[Mn/Mg salts]; Q --> U[Iron phosphate]; P --> V[REE/Sc/Nb concentrate]; O --> W[Reagent 4]; W --> P; O --> L; L --> M;
```

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.

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.

**For further information, please contact:**

Kiril Mugerman  
President and CEO  
Geomega  
514-223-1449 ext. 3  
[kmugerman@geomega.ca](mailto:kmugerman@geomega.ca)

Nancy Thompson  
Vorticom Public Relations  
212-532-2208  
[nancyt@vorticom.com](mailto:nancyt@vorticom.com)  
Twitter: @Geomega\_REE

**Cautions Regarding Forward-Looking Statements**

*Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*

*This news release contains statements that may constitute "forward-looking information" or "forward-looking statements" within the meaning of applicable Canadian securities legislation. Forward-looking information and statements may include, among others, statements regarding future plans, costs, objectives or performance of the Corporation, or the assumptions underlying any of the foregoing. In this news release, words such as "may", "would", "could", "will", "likely", "believe", "expect", "anticipate", "intend", "plan", "estimate" "target" and similar words and the negative form thereof are used to identify forward-looking statements. Forward-looking statements should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether, or the times at or by which, such future performance will be achieved. No assurance can be given that any events anticipated by the forward-looking information will transpire or occur, including as regards the commercialization of any of the technology referred to above, or if any of them do so, what benefits the Corporation will derive. Forward-looking statements and information are based on information available at the time and/or management's good-faith belief with respect to future events and are subject to known or unknown risks, uncertainties, assumptions and other unpredictable factors, many of which are beyond the Corporation's control. These risks, uncertainties and assumptions include, but are not limited to, those described under "Risk Factors" in the Corporation's annual management's discussion and analysis for the fiscal year ended May 31, 2024, which is available on SEDAR at [www.sedar.com](http://www.sedar.com); they could cause actual events or results to differ materially from those projected in any forward-looking statements. The Corporation does not intend, nor does the Corporation undertake any obligation, to update or revise any forward-*

*looking information or statements contained in this news release to reflect subsequent information, events or circumstances or otherwise, except if required by applicable laws.*