

Homerun Resources Inc. Rare Earth Element (REE) Separation Technology Partnership

written by Raj Shah | October 29, 2025

October 29, 2025 ([Source](#)) – Homerun Resources Inc. (TSXV: HMR) (OTCQB: HMRFF) (“Homerun” or the “Company”) is pleased to announce that it has executed a binding Memorandum of Understanding (“MoU”) with Magnum Mining & Exploration Limited (“Magnum”) (ASX: MGU) (OTCQB: MGUFF), to jointly evaluate the application of Homerun’s ultra-pure silica sand for the adsorption and chromatographic separation of rare earth elements (“REE”) samples supplied by Magnum.

HIGHLIGHTS

Homerun and Magnum will evaluate the use of Homerun’s **high-purity silica** potential column media for ion-exchange chromatography, as reported in scientific literature for REE separation.^{1,2}

The program of works to be undertaken will aim to determine whether Homerun’s high-purity materials can be optimised for **ion-exchange or chromatographic separation of REEs from ore samples sourced from Magnum’s Brazilian REE projects.**

If successful, the program has the potential to lead to a **lower-footprint alternative to conventional solvent extraction for REEs**, and in particular, Heavy REEs. Any new process know-how or IP generated during testing will be **jointly owned** by the parties.

It is envisaged that initial testing will be conducted at bench scale, with the possibility of further scalability through further **modular pilot-scale additions** if results are positive.

Recent peer-reviewed studies^{1 2} report bench-scale continuous extraction chromatography on silica-based media achieving **≥99.9% purity for individual Heavy REEs** using mineral-acid eluents, indicating potential process and **environmental advantages versus conventional bulk solvent extraction.**

The research initiative complements Magnum's focus to accelerate the development and commercialisation of its Brazilian REE projects.

Homerun and Magnum consider Brazil to be the **ideal jurisdiction to develop ex-China REE ore and concentrate supply chains**, given the abundance of REE prospects, established laboratory infrastructure and potential operating cost advantages.

Magnum's Chairman, Michael Davy, commented: *"We are very pleased to be initiating this research collaboration partnership with Homerun. We believe this MoU adds smart optionality to our strategy to drive value across our REE portfolio. At minimal cost, we can test whether Homerun's high-purity silica has the potential to streamline REE separation from our Brazilian ore with a reduced solvent footprint. If successful, Magnum could unlock faster and cleaner routes to supplying REEs to market from its highly prospective Brazilian REE assets, where we have achieved exceptional exploration and leach results to date. We look forward to working with Homerun and by extension contributing to the broader wave of innovation we are seeing in the REE space, both in Australia and internationally."*

Homerun's CEO, Brian Leeners, commented: *"This collaboration is an exciting opportunity for Homerun to advance the application of our ultra-pure silica product in a new generation of rare-earth element separation technologies. By leveraging our high-purity feedstock with Magnum's promising Brazilian rare-earth assets, we believe we can deliver environmentally improved,*

lower-carbon-footprint processing solutions that are critical to the energy transition. We look forward to driving innovation, lowering costs, and creating value for the stakeholders of both companies through this partnership.”

DETAILS OF THE MOU

Under the MoU the Parties will joint evaluate, the following:

- The bench scale application of the HMR ultra-pure silica sand for adsorption and chromatographic separation of rare earth elements from MGU’s REE projects in Brazil.
- Subject to the success of the bench scale test, a pilot test of the jointly developed solution.
- Eventual commercialisation of the jointly developed solution.

All IP created during the testing phases will be jointly controlled by the Parties. If a Party determines that chromatographic separation of rare earth elements is not suitable to their materials supplied for the purpose of the testing, they may exit the MoU and the other Party will have the right to utilise the IP obtained to their benefit. The Parties shall develop budgets to jointly cover the costs incurred related to the testing phases. The MoU term will expire in 12 months (subject to renewal). The MOU may be terminated on 30 days notice’ or due to an Event of Default or Force Majeure.

BACKGROUND INFORMATION ON HREE SEPARATION TECHNOLOGY

Recent peer-reviewed studies^{1,2} report bench-scale continuous extraction chromatography on silica-based media, achieving ≥99.9% purity for individual HREEs using mineral-acid eluents, indicating potential process and environmental advantages versus conventional bulk solvent extraction (while SX remains the

current industrial standard). Magnum considers the research opportunity with Homerun an exciting and low-cost initiative that has the potential to accelerate the commercialisation of its Brazilian REE projects.

ABOUT HOMERUN

Homerun Resources Inc. (TSXV: HMR) is building the silica-powered backbone of the energy transition across four focused verticals: Silica, Solar, Energy Storage, and Energy Solutions. Anchored by a unique high-purity low-iron silica resource in Bahia, Brazil, Homerun transforms raw silica into essential products and technologies that accelerate clean power adoption and deliver durable shareholder value.

- **Silica:** Secure supply and processing of high-purity low-iron silica for mission-critical applications, enabling premium solar glass and advanced energy materials.
- **Solar:** Development of Latin America's first dedicated 1,000 tonne per day high-efficiency solar glass plant and the commercialization of antimony-free solar glass designed for next-generation photovoltaic performance.
- **Energy Storage:** Advancement of long-duration, silica-based thermal storage systems and related technologies to decarbonize industrial heat and unlock grid flexibility.
- **Energy Solutions:** AI-enabled energy management, control systems, and turnkey electrification solutions that reduce costs and optimize renewable generation for commercial and industrial customers.

With disciplined execution, strategic partnerships, and an unwavering commitment to best-in-class ESG practices, Homerun is focused on converting milestones into markets-creating a scalable, vertically integrated platform for clean energy

manufacturing in the Americas.

**On behalf of the Board of Directors of
Homerun Resources Inc.**

“Brian Leeners”

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¹ [Journal of Chromatography, Volume 1745, 29 March 2025, “Efficient extraction chromatography method for the separation of heavy rare earth elements from various sources.”](#)

² [Journal of Rare Earths, Volume 41, Issue 2, February 2023, “Research progress of rare earth separation methods and](#)

technologies".