

Geomega Resources Inc.

Management's Discussion and Analysis Quarterly Highlights

Three months ended August 31, 2021

The following quarterly highlights management discussion and analysis (the "MD&A Highlights") of the financial condition and results of the operations of Geomega Resources Inc. (the "Corporation", "Company" or "Geomega") constitutes management's review of the factors that affected the Corporation's financial and operating performance for Q1-22. This MD&A Highlights should be read in conjunction with the Corporation's unaudited condensed interim financial statements as at August 31, 2021 prepared in accordance with the International Financial Reporting Standards ("IFRS"), as well as with the management discussion and analysis for the year ended May 31, 2021. All figures are in Canadian dollars unless otherwise noted.

Further information regarding the Corporation and its operations are filed electronically on the System for Electronic Document Analysis and Retrieval (SEDAR) in Canada and can be found on www.sedar.com.

Abbreviation	Period
Q1-22	June 1, 2021 to August 31, 2021
Q2-22	September 1, 2021 to November 30, 2021
Q3-22	December 1, 2021 to February 28, 2022
Q4-22	March 1, 2022 to May 31, 2022
Fiscal 22	June 1, 2021 to May 31, 2022
Q1-21	June 1, 2020 to August 31, 2020
Q2-21	September 1, 2020 to November 30, 2020
Q3-21	December 1, 2020 to February 28, 2021
Q4-21	March 1, 2021 to May 31, 2021
Fiscal 21	June 1, 2020 to May 31, 2021

- Nature of activities

Geomega is a mineral exploration and evaluation corporation focused on the discovery and sustainable development of economic deposits of metals in Quebec. Geomega is committed to meeting the Canadian mining industry standards and distinguishing itself with innovative engineering, high stakeholder engagement and dedication to local transformation benefits. The common shares of the Corporation are trading on the TSX Venture Exchange (the "Exchange") under the symbol GMA.

As society moves from consumption of fossil fuels to more sustainable energy sources, Geomega believes that the future of clean energy resides in one of the rare earth elements ("REE") called neodymium. Neodymium is vital for the production of high-performance permanent magnets used in a wide variety of electrical motors. Such motors are in increasing demand with the growth of sustainable-energy initiatives such as hybrid and electric vehicles and direct-drive wind turbines.

Innord Inc. ("Innord") is the innovation arm of Geomega and was created in March 2015 to optimize the value of the separation technology by facilitating its development through direct investments of key financial partners. Innord is a wholly owned subsidiary of Geomega that holds all the separation rights and laboratory equipment. The primary goal of Innord is to successfully scale-up its proprietary REE separation process. All research and development initiatives of Geomega are conducted by Innord.

- CORPORATE UPDATE

2.1 Financial Highlights

Geomega has \$3,438,199 of cash and cash equivalents as at August 31, 2021 and a working capital of \$3,396,997 (working capital of \$3,407,874 as at May 31, 2021).

- **CORPORATE UPDATE (CONT'D)**

- For Q1-22, the Corporation recorded a net loss of \$361,390 compared to a net loss of \$380,163 for Q1-21. Excluding the effects of fluctuations from the investment in an associate, a net loss of \$333,890 was realized in Q1-22 compared to a net loss of \$353,411 in Q1-21. The main variations are as follows:
 -
- Research fees of \$ 60,000 (nil in Q1-21). Innord received a lump sum of \$ 60,000 from a partner in the aluminum sector with the goal of advancing research in the extraction of critical and strategic metals from bauxite residues.
- Exploration and evaluation expenses, net of tax credits of \$141,457 (\$99,074 in Q1-21). See the analysis of work on the Montviel property in Section 4.1. Innord's research and engineering team has grown since Q1-20 from 4 employees to 7 employees in Q1-22, an increase going hand in hand with the progress made in research and development projects, also explaining the increase in expenses related to the separation process. In terms of engineering, expenses of \$37,723 were incurred in connection with work on the rare earth recycling demonstration plant. A SR&ED credit provision was recorded for \$65,038 while the previous year's credit provision was recorded only in Q2-21 for \$79,939.
- Professional fees of \$44,919 (\$73,551 during Q1-21). The Q1 expense for professional fees always includes the audit fees, which remained the same as the previous year. In Q1-21, the Corporation also received an invoice of \$21,626 for legal consulting fees in regards of the debt financing and various non-recurrent transactions in 2022
- Travel, conference, and investor relations of \$90,335 (\$47,420 during Q1-21). With the increase in the level of activity and the approaching production of rare earth oxides from the demonstration plant, the Corporation has invested in order to increase its visibility in the market with several marketing agreements as well as for its participation in tradeshows. Although, with the COVID-19 situation, some marketing activities were canceled, postponed, or put on pause during Fiscal 21. Some marketing contracts that were put on hold have been restarted at the beginning of Fiscal 22. A total of \$23,095 for Q1-22 and \$27,200 of the Q1-21 expense represent share-based compensation.
- Share of loss of an associate of \$27,500 (\$13,753 in Q1-21) and net loss on dilution of investment in an associate of nil (\$12,999 in Q1-21). Kintavar is the only associate of the Corporation and this investment is accounted for using the equity method. There was no major change in Kintavar's Capital during Q1-22 and no transaction affecting the portion held by Geomega during the summer of 2021. Activities in the field were more important than the previous year at the same period when COVID-19 had caused a slowdown and delay in the summer exploration program.

2.2 Other Sources of financing

During Q1-22, the Corporation received a total of \$244,553 from the exercise of 737,875 warrants, 800,000 options and 104,800 broker warrants. A total of 1,642,675 shares were issued.

On June 2, 2021, the Corporation secured a grant of \$80,708 from Next Generation Manufacturing Canada (NGEN) which will reimburse up to 50% of research costs on the production of aluminum, iron and rare earths from bauxite residues. Payments related to this grant will be received as costs are incurred. An amount of \$50,000 was also secured from the Industrial Research Assistance Program of the National Research Council of Canada (IRAP-CNRC) for this project.

- **CORPORATE UPDATE (CONT'D)**

2.3 Various

On October 4, 2021, the Corporation announced the upgrade of its common shares to the OTCQB Venture Market (the "OTCQB"), operated by OTC Market Group, New York. The OTCQB is the premier venture marketplace for early-stage and developing U.S. and international companies that are committed to providing a high-quality trading and information experience for their U.S. investors. Participating companies must meet high financial standards, including be current in their financing reporting, follow best practice corporate governance, have a professional third-party sponsor introduction and undergo an annual verification and management certification process. The Corporation's U.S. shares will continue trading under its current U.S. symbol "GOMRF".

3. Outlook ON the UPcoming months

Validation of the separation technology through processing industrial residues was and remains Geomega's main objective since 2015. These R&D activities are conducted by Innord Inc, wholly owned subsidiary of Geomega and the research arm of Geomega. The Corporation is focusing on producing rare earth oxides, which are used in the production of permanent magnets, from high grade industrial residues.

The Corporation's objectives over the next months include:

Demonstration plant

- Increase the inhouse engineering team to accelerate and complete detailed engineering for the demonstration plant
- Complete equipment reviews with suppliers
- Initiate procurement of long lead items
- Finalize the contract with the construction company
- Obtain permits for the demonstration plant
- Continuation of separation tests to obtain a purity of 99.9% and more
- Secure alternative sources of supply to ensure the long-term profitability of the plant's business operations

- Secure supply agreements with potential customers

Bauxite residues

- Validation testwork and techno-economic feasibility evaluation in preparation for the pilot plant phase

Montviel (REE, Nb)

- Progressive optimization of the Montviel process scheme

Other R&D projects

- Progressive evaluation of multiple feeds
- Discussions with various mining and industrial companies to identify opportunities for Innord's technology
- EXPLORATION AND VALIDATION OF THE SEPARATION TECHNOLOGY ACTIVITIES

4.1 Expense summary - Montviel property

			Three months ended August 31	
Montviel Property			2021	2020
			\$	\$
Acquisition and maintenance			361	-
Exploration				
Share-based compensation			4,403	5,088
Supplies and tools			654	-
Transport and lodging			-	839
Taxes, permits and insurances			-	360
Total exploration			5,057	6,287
Evaluation				
Salaries and benefits – separation process			133,826	113,807
Separation process			52,134	16,799
Depreciation of property and equipment			6,651	4,430
Engineering			37,723	-
Total Evaluation			230,334	135,036
Gross E&E expenses			235,752	141,323
Government grants			(28,972)	(38,490)
Net tax credits			(65,323)	(3,759)
Net E&E expenses - Montviel			141,457	99,074

Alain Cayer, P. Geo., M.Sc., Vice-President Exploration of Geomega, a qualified person as defined in NI 43-101 supervised the preparation of the technical information in sections 4.1, 4.2 and 4.3.

The Corporation owns 100% of the Montviel property, located approximately 100 km north of Lebel-sur-Quévillon and 45 km west of the Cree First Nation of Waswanipi. The Montviel property comprises 162 mining claims totalling 8,998 hectares as at August 31, 2021.

4.2 ISR Technology Development

Dr. Pouya Hajiani, process inventor, engineer and CTO of Geomega supervised and approved the technical information of this section.

Innord develops innovative technologies for extraction and separation of rare earth elements and other critical metals essential for a sustainable future. With a focus on renewable energies, vehicle electrification, automation, reduction in greenhouse gas emissions and energy usage, rare earth magnets or neo-magnets (NdFeB) are at the center of all these technologies. Geomega's strategy revolves around gradually de-risking its innovative technology ("Innord Separation of Rare Earths (ISR Technology)") while working directly with the main players in these industries to recycle the magnets that power all those technologies.

- EXPLORATION AND VALIDATION OF THE SEPARATION TECHNOLOGY ACTIVITIES (CONT'D)

The Corporation completed a successful pilot scale-up in 2019 and had its material validated by potential end users for manufacturing of permanent magnets and has since focused on the next scale up of the technology to a demonstration plant. Geomega received from Hatch the required documentation to proceed to the next step of engineering and is working since August 2020 on completing its 2nd pilot plant to validate and confirm some of the changes that were completed to the technology since 2019. This validation work was successfully completed in January 2021.

Geomega is advancing towards the construction of the demonstration plant that will be using the ISR technology to recycle rare earth magnets and produce rare earth oxides. On October 1st, 2019, the Corporation published the results of the Front-End Engineering & Design ("FEED") study. The updated design has been scaled up in order to operate on a single work shift of 8 to 10 hours. As a result of this sizing increase and process optimization by Geomega, the demonstration plant could reach a throughput capacity of 1.5 ton per shift, a 50% increase over the initial design. On a per hour basis, this demonstrates a 4.5X increase.

The engineering work to date confirmed that the ISR process that was developed by Innord, a subsidiary of Geomega, is technically feasible and uses off the shelf equipment thereby making it easier to scale up.

In September 2020, the Corporation provided updated capital costs (including working capital) for the demonstration plant which increased from \$3.2M to \$4.8M. Although the equipment cost remains the same as what was presented in the FEED study, the Corporation revised upwards the estimate for plant construction and for the remaining cost of engineering.

The Company published the positive results of the pilot tests in January 2021 and is now continuing internal engineering work that will allow ordering of equipment to begin. At the same time, discussions are underway with external firms to complete the next engineering step required to begin construction. Discussions with suppliers and construction companies are ongoing and the Company is looking to order major items in fall 2021.

4.3 Environmental Geochemistry

There are four (4) environmental studies that are ongoing on Montviel. These are long term studies with repetitive sampling.

4.4 Preliminary Economic Assessment ("PEA")

The corporate commitment to sustainable development dictated the following operational parameters for the Montviel project: i) underground mining scenario with paste backfill, ii) reduction in reagents to be transported by road and iii) electrical operations with a low voltage power line. It has taken more than three and a half years of metallurgical work and optimization to meet these three parameters.

In 2015, Montviel's flow sheet was greatly simplified. All of the acid required for hydrometallurgy was to be generated on site with the insertion of a closed loop acid regeneration unit. In addition, two physical processes at the beneficiation step significantly decrease the ore mass moving to hydrometallurgy.

The Corporation continues to evaluate the rare earth market and believes that the Montviel deposit, with the largest bastnaesite type mineralization 43-101 resource estimate in North America, could demonstrate solid economics based on its proprietary technology even at current market pricing.

• EXPLORATION AND VALIDATION OF THE SEPARATION TECHNOLOGY ACTIVITIES (CONT'D)

The Company continues to optimize and gradually improve the process scheme by adding changes that had been implemented with the technology since 2015. These changes continue to improve the process and make the Montviel project more economically robust, less vulnerable to REO price fluctuations and more environmentally friendly by closing the processing loop. Once the optimizations and improvements are complete, the Company will publish the PEA on the project.

4.5 Treatment of bauxite residues

In the ongoing efforts to apply its environmentally friendly processing technology to various feeds, the Corporation's wholly owned subsidiary Innord, has developed a bench scale process to process Bauxite Residues ("BR"), a potentially valuable by-product that is being generated during refining of alumina using the Bayer process. Innord has entered into a research collaboration agreement with an international industrial partner to extract rare earth elements (REE), scandium (Sc) and other critical and potentially valuable metals from this readily available material.

Large quantities of this caustic red mud are generated worldwide every year, posing environmental and safety challenges. Storage of bauxite residues is a challenge for alumina refineries with over 80 plants across the world currently producing alumina from bauxite ore. It is estimated that over 1.5 million tonnes of bauxite residues are generated every year and as the demand for aluminum metal increases so does the production of bauxite residues. As a result of population growth, many of these plants are now located inside urban areas resulting in storage space limitations and increasing environmental regulations that threaten these operations. Closure of these alumina refineries could result in the loss of thousands of jobs and millions of dollars of economic benefits for these regions. With over 4 billion tonnes of BR stored in tailings globally, this feed material represents potential \$400B in metal value that could be unlocked using Innord's technology.

Geomega believes that BR is a perfect fit to expand Innord's extraction technology. Drawing from the strengths and versatility of its technology, Innord had been seeking to identify large industrial and mining waste challenges with the following characteristics:

- High iron (Fe) content – in BR >40% Fe₂O₃
- Loss of critical and strategic metals in the tailings (rare earth elements, scandium, titanium and vanadium)
- Need for reagents recycling and tailings volume reduction

Ownership of the Intellectual Property developed by Innord through this research work will remain with the Corporation. With BR representing a global challenge, Innord is developing the technology with the objective to make it available globally through a licensing / royalty structure once the technology has demonstrated its economical and environmental feasibility on a larger scale.

Relative to existing methods (less than 5% of global BR is being used today) and contrary to previously developed metallurgical approaches that either only displace the environmental impact towards effluents and/or other residues, provide insufficient volume reduction or have limited economic viability, Innord's process potential offers the following benefits:

- Significant tailings volume reduction (>80%)
- Minimize effluents by recycling the main reagents, which would in turn reduce operating costs and avoid creating other waste streams
- Value maximization of the available metals, thereby enhancing the economics of the process, which include:
 - Bulk traditional metals such as Al and Fe
 - Strategic metal concentrates (REE, Sc, Ti, V)

• EXPLORATION AND VALIDATION OF THE SEPARATION TECHNOLOGY ACTIVITIES (CONT'D)

The ongoing work continues to test and validate the process at the bench scale in preparation for potential pilot testing, focus on characterization of outlet streams and the techno-economical feasibility study of the technology. The industrial partner is contributing material for the testwork and expertise on various product stream specifications.

• SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies, methods of computation and presentation applied in the Financial Statements are consistent with those of the previous financial year ended May 31, 2021, except for the following conventions:

Revenue recognition

The revenue corresponds to research fees invoiced by the Innord for collaborative research work with third parties in the sector of the valuation of mining and industrial residues as well as critical and strategic metals.

Fees received are recognized in the statement of comprehensive loss as the work is performed and there is no longer any obligation for the Corporation in consideration for the amounts received.

Income is measured at the fair value of the consideration received.

October 27, 2021

(s) Kiril Mugerman

Kiril Mugerman
President and CEO

(s) Mathieu Bourdeau

Mathieu Bourdeau
CFO

Management

Kiril Mugerman, President & CEO
Alain Cayer, VP Exploration
Mathieu Bourdeau, CFO
Pouya Hajjani, CTO

Board of directors

Gilles Gingras, President of the Audit Committee ¹⁾
Kosta Kostic ¹⁾
Mario Spino ¹⁾
Matt Silvestro
Nick Nickoletopoulos
Kiril Mugerman

Notes:

1) Member of the Audit Committee

Head office

75 boul. de Mortagne
Boucherville (Quebec)
J4B 6Y4
Tel.: (450) 641-5119
Website: <https://ressourcesgeomega.ca>

Lawyers

McMillan S.E.N.C.R.L., s.r.l./LLP
1000 Sherbrooke O., #2700
Montréal, Québec
H3A 3G4

Auditors

PricewaterhouseCoopers, s.e.n.c.r.l.
1250, boul. René-Lévesque Ouest, bureau 2500
Montréal (Quebec)
H3B 4Y1

Transfer agents

Computershare Inc.
1500, rue Robert-Bourassa, bureau 700
Montréal (Quebec)
H3A 3S8
Tel.: (514) 982-7888