



Geomega Resources Inc.

Management's Discussion and Analysis
Quarterly Highlights

Six months ended November 30, 2021

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

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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 Q2-22. This MD&A Highlights should be read in conjunction with the Corporation’s unaudited condensed interim financial statements as at November 30, 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
Q2-22 YTD	June 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, 2012 to May 31, 2022
Q1-21	June 1, 2020 to August 31, 2020
Q2-21	September 1, 2020 to November 30, 2020
Q2-21 YTD	June 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

1. 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.

2. CORPORATE UPDATE

2.1 Financial Highlights

Geomega has \$3,058,432 of cash and cash equivalents as at November 30, 2021 and a working capital of \$3,147,107 (working capital of \$3,407,874 as at May 31, 2021).

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

Six months ended November 30, 2021

2. CORPORATE UPDATE (CONT'D)

For Q2-22 YTD, the Corporation recorded a net loss of \$505,946 compared to a net loss of \$608,636 for Q2-21 YTD. Excluding the effects of fluctuations from the investment in an associate, a net loss of \$706,030 incurred in Q2-22 YTD compared to a net loss of \$550,437 in Q2-21 YTD. The main variations are as follows:

- Research fees of \$60,000 (nil in Q1-21 YTD). Innord received a lump sum of \$60,000 from a partner in the aluminum sector with the objective of advancing research in the extraction of critical and strategic metals from bauxite residues.
- Exploration and evaluation expenses, net of tax credits of \$254,065 (\$81,771 in Q2-21 YTD). See the analysis of work on the Montviel property in Section 4.1. Innord's research and engineering team has grown since the beginning of fiscal 2022 going from 4 employees to 7 employees, an increase going hand in hand with the progression of work related to the demonstration plant as well as the increase in the number of research and development projects. In terms of engineering, expenses of \$51,631 were incurred in connection with work on the rare earth recycling demonstration plant.
- Professional fees of \$71,200 (\$116,476 during Q2-21 YTD). The expense for professional fees 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.
- Travel, conference, and investor relations of \$168,556 (\$115,382 during Q2-21 YTD). 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 tradeshow. Some marketing contracts that were put on hold have been restarted at the beginning of Fiscal 22. A total of \$46,684 for Q2-22 YTD and \$60,049 of the Q2-21 YTD expense represent share-based compensation.
- Filing fees of \$48,956 (\$20,670 in Q2-21 YTD). The increase in these costs is mainly due to expenses related to the upgrade carried out on the American OTC market (see section 2.3) where the Corporation went from "OTC Pink" to "OTCQB venture". Expenses of \$22,500 USD were incurred for this purpose, of which \$14,000 will recur annually.
- Rent expense of \$22,047 (\$55,412 in Q2-21 YTD). Since April 2021, the Corporation has been subletting an unused part of its premises in Saint-Bruno-de-Montarville in order to amortize the expense while waiting for the commissioning of its demonstration plant, which is scheduled for 2022. \$31,058 was billed as such for Q2-22 YTD.
- Share of loss of associate of \$84,747 (\$20,130 during Q2-21 AAD) and net gain following dilution of investment in associate of \$284,831 (net loss of \$38 \$067 during Q2-21 YTD). Kintavar is the only associate of the Corporation and this investment is accounted for using the equity method. 15,929,244 shares of Kintavar were issued in a private placement in November 2021 at a unit cost higher than the book value of the shares held by Geomega, which creates an accounting gain for the Corporation. The increase in the share of loss is due to an increase in Kintavar's activities which is explained by a slowdown in the summer of 2020 due to COVID-19 followed by an increase in work on the Wabash property in the summer 2021 to prepare for a drilling campaign.

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

Six months ended November 30, 2021

2. CORPORATE UPDATE (CONT'D)

2.2 Other Sources of financing

During Q2-22 YTD, the Corporation received a total of \$277,785 from the exercise of 737,875 warrants, 1,150,000 options and 104,800 broker warrants. A total of 1,992,675 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.

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

- Detailed engineering and planning of the construction phase with the construction contractor
- Complete equipment review with suppliers
- Initiate purchase of long lead time items
- Finalize the contract with the construction company
- Obtaining permits for the demonstration plant
- Continuation of separation tests to obtain a purity of 99.9% and more
- Secure alternate sources of supply to ensure long-term profitability of plant 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

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

Six months ended November 30, 2021

4. EXPLORATION AND VALIDATION OF THE SEPARATION TECHNOLOGY ACTIVITIES

4.1 Expense summary - Montviel property

Montviel Property	Three months ended November 30		Six months ended November 30	
	2021	2020	2021	2020
	\$	\$	\$	\$
Acquisition and maintenance	1,109	418	1,470	418
Exploration				
Salaries and benefits	372	-	372	-
Share-based compensation	4,030	4,095	8,433	9,183
Geology	654	-	1,308	-
Transport and lodging	(124)	(1,792)	(124)	(954)
Taxes, permits and insurances	-	-	-	360
Total exploration	4,932	2,303	9,989	8,589
Evaluation				
Salaries and benefits	134,910	127,824	268,736	226,248
Share-based compensation	27,253	9,307	53,546	24,690
Separation process	23,121	13,178	48,962	30,238
Depreciation of property and equipment	8,015	4,430	14,666	8,860
Engineering	13,908	-	51,631	-
Total Evaluation	207,207	154,739	437,541	290,036
Gross E&E expenses	213,248	157,460	449,000	299,043
Government grants	(100,409)	(95,526)	(129,381)	(134,016)
Net tax credits	(231)	(79,497)	(65,554)	(83,256)
Net E&E expenses - Montviel	112,608	(17,563)	254,065	81,771

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 to 4.5.

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 149 mining claims totalling 8,275 hectares as at November 30, 2021.

4.2 ISR Technology Development

Dr. Pouya Hajjani, 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.

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

Six months ended November 30, 2021

4. 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 an engineering update was provided in July 2021. Work was progressing by both external and in-house engineers on detailed engineering. In fall 2021, the Corporation began hiring additional senior engineers in various disciplines to accelerate the current work and to become fully independent of external engineering firms. The deliverables of the ongoing detailed engineering and the information from the construction contractor will allow the firm to begin ordering the equipment.

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 strong economics based on its proprietary technology, even at the lowest rare earth prices that were observed between 2015 and 2019.

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

Six months ended November 30, 2021

4. 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)

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

Six months ended November 30, 2021

4. 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. Work is progressing well with results showing promising future for the technology. The Corporation expects to complete the ongoing bench scale test work in the coming months and begin a pilot scale project soon after.

5. 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.

January 25, 2022

(s) Kiril Mugerma

Kiril Mugerma
President and CEO

(s) Mathieu Bourdeau

Mathieu Bourdeau
CFO

Geomega Resources Inc.

Corporate Information

Management

Kiril Mugeran, President & CEO
Alain Cayer, VP Exploration
Mathieu Bourdeau, CFO
Pouya Hajiani, CTO

Board of directors

Gilles Gingras, President of the Audit Committee ¹⁾
Kosta Kostic
Mario Spino ¹⁾
Matt Silvestro
Nick Nickoletopoulos¹⁾
Kiril Mugeran

Notes:

1) Member of the Audit Committee

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