

Management's Discussion and Analysis

Quarterly Highlights

Six months ended November 30, 2022

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

The following management discussion and analysis - quarterly highlights (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 Q2-23 AAD. This MD&A Highlights should be read in conjunction with the Corporation's unaudited condensed interim financial statements as of November 30, 2022 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, 2022. 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 AAD	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, 2021 to May 31, 2022	
Q1-23	June 1, 2022 to August 31, 2022	
Q2-23	September 1, 2022 to November 30, 2022	
Q2-23 AAD	June 1, 2022 to November 30, 2022	
Q3-23	December 1, 2022 to February 28, 2023	
Q4-23	March 1, 2023 to May 31, 2023	
Fiscal 23	June 1, 2022 to May 31, 2023	

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 under the symbol GMA on the TSX Venture Exchange (the "Exchange") and under the symbol GOMRF on the OTCOB market.

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 develop and scale-up its proprietary technologies. All research and development initiatives of Geomega are conducted by Innord.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

2. CORPORATE UPDATE (CONT'D)

2.1 Financial Highlights

Geomega has \$4,019,582 of cash and cash equivalents as of November 30, 2022 and a working capital of \$4,376,903 (working capital of \$5,040,553 as at May 31, 2022).

For the Q2-23 YTD, the Corporation recorded a net loss of \$1,104,975 compared to a net loss of \$505,946 for Q2-22 YTD. Excluding the effects of fluctuations from the investment in an associate, a net loss of \$491,499 was realized in Q2-23 YTD compared to a net loss of \$706,030 in Q2-22 YTD. The main variations are as follows:

- Research fees of \$196,688 (\$60,000 in Q2-22 YTD). Innord is performing research projects to apply its technology for extraction of critical metals by processing Bauxite residues. Part of the funding for these projects comes from a partner in the aluminum sector. Research revenues are recorded as the Corporation spends money and resources on these projects. With the growth within the research team, work has accelerated compared to the same quarter of the previous year.
- Exploration and evaluation expenses, net of tax credits of \$587,525 (\$383,446 in Q2-22 YTD). Now
 that the engineering of the demonstration plant for magnet recycling is well ongoing, the
 Corporation has started working on new research projects with the objective to adapt its
 technology to new streams. Several new employees have been hired to accelerate the
 development of these new projects.
- Professional fees of \$47,275 (\$71,200 during Q2-22 YTD). In 2022, costs of \$18,401 were incurred in legal fees for intellectual properties and other corporate files. These are non-recurring charges.
- Filing fees of \$34,578 (\$48,956 in Q2-22 YTD). A one-time fee of \$8,500 USD was paid during Q1-22 related to the upgrade performed in the US OTC market where the Company moved from "OTC Pink" to "OTCQB venture".
- Rent expense of \$48,721 (\$22,047 in Q2-22 YTD). Rent expense remained relatively stable year over year, but with the end of the previous sublease agreement and the start of equipment orders for its demonstration plant, the Corporation reduced the area it sublets at its premises in Saint-Bruno-de-Montarville.
- Government grants on operating expenses of \$365,699 (\$129,381 at Q2-22 AAD). The Corporation
 has received various grants for its ongoing research projects. The rate and the quantity of research
 activities has increased due to growth within its team of researchers and engineers, but a new
 grant from the Technoclimat program has been put in place (see section 2.2). As this grant covers
 expenses dating back to June 2021, a lump sum has been recorded in the income statement.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

2. **CORPORATE UPDATE** (CONT'D)

- Investment income of \$31,810 (\$7,627 in Q2-22 AAD). As the Corporation invests its cash surplus in low-risk, fixed-return investments, it was able to benefit from the increase in prime rates, which enabled a rise in rates on GICs and high interest saving accounts.
- Impairment of an investment in an associate of \$519 917 (nil in Q2-22 YTD). With the decline observed on the financial markets since the beginning of 2022, the fair value of the investment in Kintavar Exploration Inc. fell for the first time below its book value when the share price on the Exchange was at \$0.045 as of November 30, 2022. An impairment has therefore been recorded to reduce the investment to its estimated recoverable value. A recovery in value may be recorded if the stock rebounds in the coming months.

2.2 Financing Received

Since the beginning of the Fiscal 23, the Corporation received a total of \$40,876 following the exercise of 400,000 stock options against which 400,000 shares were issued.

On January 27, 2023, the Corporation announced that it has been awarded a \$3M grant from the Technoclimat Program, administered by the Ministry of the Environment and the Fight Against Climate Change, Wildlife and Parks (MELCCFP) towards the construction of the magnet recycling demonstration plant. This grant covers future expenses as well as certain expenses retroactive to June 1, 2021. An amount of \$514,454 has been provisioned and recorded as a grant receivable for expenses already incurred as of November 30, 2022. This amount has been applied to the following accounts:

Inventories (asset)	1,124 \$
Deposits on acquisition of property and equipment (asset)	244,242 \$
Government grants on operating expenses (operating expenses)	<u>269,088 \$</u>
Government grants receivable (asset)	514,454 \$

The Corporation has also received payments on other confirmed grants. The following amounts have been received of which a part has been applied against property and equipment and a part against research expenses with the balance being recorded as deferred grants:

- Sustainable Development Technology Canada (SDTC): \$196,266 received out of \$1,541,000.
- Ministry of Energy and Natural Resources of Quebec (MERN): \$60,000 received out of \$400,000.
- Quebec Ministry of Economy and Innovation Innovation Program: \$75,000 received out of \$150,000.
- Ministry of the Environment and the Fight Against Climate Change, Wildlife and Parks-Technoclimat Program: \$750,000 received (after quarter end) out of \$3,000,000.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

2. **CORPORATE UPDATE** (CONT'D)

2.3 Demonstration Plant

Engineering, procurement and pre-construction activities have been progressing as planned over the last 3 months. Geomega engaged the services of BBA, a Canadian engineering consulting firm specializing in energy, mining and metals, oil, gas and biofuels, to complete the final stage of detailed engineering and prepare the project for construction. The work started in December and is expected to finish around April/May. Progress at the various sections of the project is explained below. More information will be provided as these milestones are met.

- ✓ Process design Process flow diagrams (PFD) are complete. Piping & Instrumentation Diagrams (P&ID) are at around 100% completeness level with only minor modifications expected as the project evolves towards construction.
- ✓ Auxiliary items Instrument list, valve list and the control system design have been updated based on the latest P&ID version. Purchase orders are expected to be issued in February.
- ✓ Equipment and packages Equipment and package ordering continued throughout the last 3 months. The main equipment for the crushing and grinding circuit was received in December 2022. More equipment for other portions of the plant is expected to be received end of January / early February 2023. Several equipment drawings are being finalized with vendors and are expected to be issued for construction not later than February 2023.
- ✓ Pre-construction activities The peripheral engineering design (civil and architectural, HVAC and structural system, drain system designs, etc.) was awarded to BBA. The work started in December 2022 and is advancing as expected. The project technical risk assessment, performed by an external group, provided only minor recommendations in order to comply with the best industry safety practices. The full HAZOP (Hazard and Operability) study is scheduled for early February 2023 and will be performed by BBA. Permitting activities that began in Fall 2022 are progressing and will continue throughout the year.
- ✓ Layout The latest version of the layout and equipment mechanical design were provided to BBA who will deliver the plant 3D model. That work has now begun and is advancing as planned.
- ✓ Complementary testwork Bench scale testwork has continued throughout the last 3 months. The main objectives of this work are optimization and verification of reagent needs and process robustness versus deviation in operation conditions.
- ✓ Construction activities As the peripheral design and 3D model are completed by BBA, the Corporation will be requesting detailed construction proposals during 2023.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

2. CORPORATE UPDATE (CONT'D)

2.4 Bauxite Residues Processing

Geomega is pleased with the progress of the Bauxite Residues project and management is optimistic about the potential of this project to drive exciting developments in 2023. Lab work continued to investigate more paths to monetize diverse streams of products and will extend throughout the year. The majority of the equipment for the initial phase of the pilot plant covering the core of the transformation process has been received. Layout of this phase of the pilot plant is complete, and installation began in January 2023. The continuous pilot plant is expected to deliver kilograms of material of the main product streams which will be used for testing by end users. Both bench scale and piloting work on this project will continue throughout the year and updates will be provided as milestones are achieved.

3. OUTLOOK ON THE UPCOMING MONTHS

Geomega's objectives are to develop processing technologies and to apply them to rare earth elements and other critical and strategic metals where the existing technologies have poor environmental performance such as large footprints, high consumption of acids, low recoveries, large amounts of waste or loss of valuable metals. The various projects of the Corporation are in different phases of development but since many of these technologies and applications end up having synergies, the rate of progress in some of the projects can change significantly. Ultimately, Geomega is looking to apply its technologies to high value opportunities and deploy them through building and operating the plants, licensing to major companies around the world or a combination of both, depending on the project.

The Corporation's intended activities are presented here and are divided by major ongoing projects.

Rare Earths Recycling

- Continue detailed engineering of the demonstration plant (internally & BBA)
- Continue procurement activities
- Integrate equipment design into the piping and instrumentation diagram (P&ID) as these are received
- Peripheral engineering design (civil and architectural, HVAC system, drain system designs, etc.)
 (BBA)
- Independent HAZOP study (BBA)
- o Place orders for instrumentation, valves and control system
- Layout and 3D modelling (BBA)
- o Permitting
- Obtain detailed construction quotes based on "For construction" drawings
- Equipment receiving and ground preparation
- Various complimentary tests on process, final products, by products (as needed)
- Feed sourcing (always ongoing activity)

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

3. OUTLOOK ON THE UPCOMING MONTHS (CONT'D)

Bauxite Residue Sustainable Processing

- o Continue bench scale testwork, modeling, process design and optimization
- o Receive final equipment for phase I of the pilot plant
- Assembly and testing of the received equipment
- Commissioning of pilot plant
- Pilot testing of the core of the transformation process
- o Produce kilograms of material of the main product streams for testing by end users

Montviel REE Deposit - Bench Scale

o Bench scale testwork, modeling, process design and optimization

Other Sources & Other Metals (REE, Lithium, Graphite, Hydrogen and other metals)

o R&D on different feeds (mining and industrial waste)

Corporate

o Continue hiring for select key positions as needed.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

4. EXPLORATION AND VALIDATION OF PROCESSING TECHNOLOGIES ACTIVITIES

4.1 Expense summary - Montviel property

	Three months ended November 30		Six months ended November 30	
Montviel	2022	2021	2022	2021
	\$	\$	\$	\$
Acquisition and maintenance	-	1,109	-	1,470
Exploration				
Salaries and benefits	-	372	-	372
Share-based compensation	2,046	4,030	4,780	8,433
Geology	654	654	1,308	1,308
Transport and lodging	-	(124)	-	(124)
Taxes, permits and insurances	-	-	360	-
Total exploration	2,700	4,932	6,448	9,989
Evaluation				
Salaries and benefits	187,713	134,910	374,836	268,736
Share-based compensation	14,090	27,253	(526)	53,546
Separation process	35,572	23,121	90,856	48,962
Depreciation of property and equipment	11,185	8,015	13,370	14,666
Engineering	80,655	13,908	103,266	51,631
Total Evaluation	329,215	207,207	581,804	437,541
Gross E&E expenses	331,915	213,248	588,252	449,000
Net tax credits	(285)	(231)	(728)	(65,554)
Net E&E expenses - Montviel	331,630	213,017	587,524	383,446

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.

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, 2022.

4.2 Rare Earths Recycling Technology Development

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

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

4. EXPLORATION AND VALIDATION OF PROCESSING TECHNOLOGIES ACTIVITIES (CONT'D)

Geomega 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 derisking its innovative technologies while working directly with the main players in these industries to recycle the magnets that power all those technologies.

Geomega has been advancing engineering towards the construction of the demonstration plant that will be using its 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 demonstrated a 4.5X increase.

The engineering work to date confirmed that the processing technology 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 remained 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 Corporation 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 inhouse engineers on detailed engineering. In fall 2021, the Corporation began hiring additional senior engineers in various disciplines to accelerate the work and to become fully independent of external engineering firms for process engineering.

In March 2022, the Corporation published the initial layout of the rare earths recycling demonstration plant to be located in Saint-Bruno-de-Montarville, Quebec.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

4. EXPLORATION AND VALIDATION OF PROCESSING TECHNOLOGIES ACTIVITIES (CONT'D)

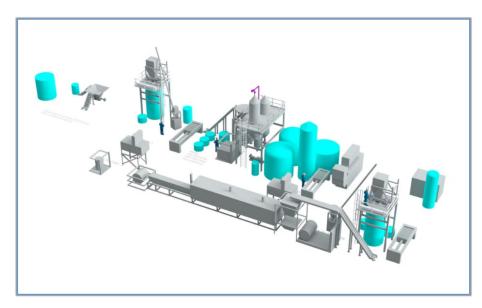


Figure 1: 3D layout of the REE recycling demonstration plant

With an expanded team of engineers since the end of 2021, Geomega has been able to advance on many aspects of the engineering such as process design, equipment and packages, auxiliary items, layout and more. Equipment ordering began in May 2022 while the external engineering firm BBA was engaged in December 2022 to complete the final phase of detailed engineering and pre-construction activities. The most recent update can be found in section 2.3 above.

4.3 Environmental Geochemistry

Several environmental studies on Montviel were launched between 2012 and 2015. Various data has been collected until 2017 by various research groups. No sampling is being done at the moment. Results of these studies could be used in the future for environmental permitting and baseline studies.

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 decreased 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.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

4. EXPLORATION AND VALIDATION OF PROCESSING TECHNOLOGIES ACTIVITIES (CONT'D)

The Corporation continues to gradually optimize and improve the flow sheet. With the additional funding from the MERN and the private placement announced on February 9, 2022, a project was started to improve on the technology that was developed and patented in 2015 (see news releases from April 29, 2015, May 20, 2015 and June 11, 2020) by incorporating the knowledge and experience gained from developing the rare earth recycling project and the bauxite residues project since then.

The main technical objectives to be investigated in this project are:

- Eliminating the flotation circuit
- Valorization of the iron by-product
- Recycling of the main leaching reagents

The successful implementation of these objectives would simplify the process of extracting rare earths and niobium and could significantly reduce its operating costs. The economic benefits of this project include:

- Cost reduction of the chemical reagents
- Energy savings by avoiding very fine grinding that is required for flotation, solid heat recovery and other adjustments
- Improving total REE recovery through whole ore leaching
- Reduction of mining waste and tailings management costs
- Increase of potential revenues through various by-products

Furthermore, the social and environmental impacts of the project are similarly important and will help obtain the required permits in the future and support of the local communities and the Waswanipi CREE First Nation. The environmental benefits of this project include:

- Reduction of water consumption
- Reduction of liquid effluents
- Reduction of solid mining waste volumes
- Reduction of overall energy consumption and greenhouse gas emissions for REE production compared to previous flowsheet
- Further evaluation of the possibility of paste-backfill

These modifications keep improving the process and making the Montviel project more economically robust, less sensitive to REO price fluctuations and more environmentally friendly by closing the processing loop.

The results of the project will be used to complete a Preliminary Economic Assessment (PEA) on the Montviel deposit.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

4. EXPLORATION AND VALIDATION OF PROCESSING TECHNOLOGIES ACTIVITIES (CONT'D)

4.5 Treatment of bauxite residues

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.

Bench scale testwork on the BR technology began in 2020. Funding from industrial partners and governmental grants in 2021 helped complete the initial bench scale work and bring the project towards piloting. On March 31, 2021, Geomega announced a \$4M funding for a 24 month pilot plant and feasibility study of its sustainable & complete valorization of BR processing technology. The project was funded by Rio Tinto, SDTC, Quebec Government and Geomega. The pilot project is to demonstrate the scalability of the technology while testing and validating various technical parameters before completing a feasibility study.

On April 25, 2022, in parallel to the BR technology, Rio Tinto and Innord have agreed to begin evaluating various opportunities to monetize the iron compounds produced by Innord's Bauxite Residues Technology (IBRT). As part of the 12 months project, Innord has committed to develop and test an extension technology to IBRT to produce the desired product that will then be evaluated by Rio Tinto. The Intellectual property developed from this project extension will be owned by Rio Tinto who is fully funding the project. Innord will receive a royalty payment for the underlying base technology (IBRT) upon commercialization of the technology and any production of commercial products. Details of the agreement between Geomega and Rio Tinto, including the royalty level, will remain confidential.

Management Discussion & Analysis – Quarterly Highlights Six months ended November 30, 2022

4. EXPLORATION AND VALIDATION OF PROCESSING TECHNOLOGIES ACTIVITIES (CONT'D)

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:
 - o Bulk traditional metals such as Al and Fe
 - Strategic metal concentrates (REE, Sc, Ti, V)

January 27, 2023	
(s) Kiril Mugerman	(s) Mathieu Bourdeau
Kiril Mugerman	Mathieu Bourdeau
President and CEO	CFO

Management Discussion & Analysis- Quarterly Highlights Three months ended August 31 2021

Management

Kiril Mugerman, 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
Matt Silvestro ¹⁾
Nick Nickoletopoulos ¹⁾
Kiril Mugerman

Notes:

1) Member of the Audit Committee

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