



Geomega Resources Inc.

Management's Discussion and Analysis
Quarterly Highlights

Six months ended November 30, 2023

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Six months ended November 30, 2023

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 Q2-24 YTD. This MD&A Highlights should be read in conjunction with the Corporation’s unaudited condensed interim financial statements as of November 30, 2023 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, 2023. 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
Q1-24	June 1, 2023 to August 31, 2023
Q2-24	September 1, 2023 to November 30, 2023
Q2-24 YTD	June 1, 2023 to November 30, 2023
Q3-24	December 1, 2023 to February 28, 2024
Q4-24	March 1, 2024 to May 31, 2024
Fiscal 24	June 1, 2023 to May 31, 2024
Q1-23	June 1, 2022 to August 31, 2022
Q2-23	September 1, 2022 to November 30, 2022
Q2-23 YTD	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 OTCQB 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.

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2. CORPORATE UPDATE

2.1 Corporate Overview

Geomega develops innovative technologies for extraction and separation of rare earth elements and other critical metals essential for a sustainable future. It has a diversified portfolio of projects and technologies at various readiness levels such as rare earths magnet recycling, bauxite residues valorization, the Montviel rare earths project hydrometallurgy, hydrochloric acid recycling and several others.

During the Q2-24 period, the Corporation continued working on its two main projects. Detailed engineering activities in preparation for construction continued in parallel to procurement, permitting and bids receiving from the various construction contractors.

The bauxite residues valorization technology pilot plant continued commissioning and testing. Step by step commissioning will continue until the entire pilot plant is ready for continuous operation. Samples are collected as needed for end user validations and overall technology validation.

2.2 Financial Highlights

Geomega has \$2,025,369 in cash and cash equivalents (\$2,525,369 including the short-term investments) as of November 30, 2023 and a working capital of \$3,063,320 (working capital of \$3,714,856 as at May 31, 2023).

For the Q2-24 YTD, the Corporation recorded a net loss of \$1,282,474 compared to a net loss of \$1,104,975 in Q2-23 YTD. Excluding the effects of fluctuations from the investment in an associate, a net loss of \$692,473 was realized in Q2-24 YTD compared to a net loss of \$491,499 in Q2-23 YTD. The main variations are as follows:

- Research fees (revenues) of \$343,844 (\$196,688 in Q2-23 YTD). Innord is performing a research project to apply its technology to the extraction of critical metals by processing bauxite residues. Part of the funding for this project comes from a partner in the aluminum sector. Research revenues are recorded as the Corporation spends money and resources on this project. As the process advances and more equipment is received, the workforce associated to this project has significantly increased. Refer to section 2.4 for more information.
- Salaries, employee benefits and share-based compensation of \$212,882 (\$124,756 in Q2-23 YTD). Share-based compensation attributed to administration has dropped from \$53,679 in Q2-23 YTD to \$9,954 in Q2-24 YTD since no options were issued during Fiscal 23. On the other hand, new employees were added to the accounting and administration to support the present growth and the increased number of projects.
- Exploration and evaluation expenses, net of tax credits of \$1,101,890 (\$587,525 in Q2-23 YTD). The final stages of engineering of the demonstration plant are advancing and the Corporation is working on new research projects with the objective of adapting its technology to new streams which require more staff and generate more expenses. Engineering increased to \$356,269 compared to \$103,266 in Q2-23 YTD while salaries were up to \$602,581 vs \$362,957 in Q2-23 YTD.
- Professional fees of \$123,644 (\$47,275 during Q2-23 YTD). In Q2-24 YTD, the main drivers were the costs of \$35,989 (\$4,738 in Q2-23 YTD) in legal fees for intellectual properties and \$69,015 in audit fees (\$56,710 in Q2-23 YTD) which takes place during the summer.
- Government grants on operating expenses of \$703,937 (\$365,699 during Q2-23 YTD). The Corporation has received in the past years various grants for its ongoing research projects. Refer to section 2.3 for more information on the grants received and recorded in the financial statements.

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2. CORPORATE UPDATE (CONT'D)

- Investment income of \$67,095 (\$31,810 in Q2-23 YTD). 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.
- Finance costs \$152,928 (\$25,778 during Q2-23 YTD). On August 12, 2023, the Corporation signed a new lease agreement in order to move its demonstration plant, labs and offices in St-Hubert, Quebec. Following IFRS 16 guidelines, a right-of-use asset and a lease liability were created based on the actual interest rates. The amortization of the lease liability creates a finance cost every month.
- Gain on disposal of exploration and evaluation assets of \$44,492 (nil in Q2-23 YTD). On August 31, the Corporation has optioned out the Montviel-Sud Property in exchange of a cash and share based considerations. Refer to section 2.6 for more information on this transaction.
- Net gain on settlement of lease agreement of \$171,242 (nil in Q2-23 YTD). On October 2, 2023, the Corporation signed an agreement with the owner of the premises at 1123 Marie-Victorin in St-Bruno-de-Montarville to vacate the premises in exchange for a lump sum amount of \$175,000. Since the signature of the lease in St-Hubert in April 2023, the premises in St-Bruno-de-Montarville served no purpose for the Corporation. The right-of-use asset and the underlying lease were reversed, and the difference was recorded against the gain in the profit and loss statement.
- Impairment of an investment in an associate of \$598,040 (\$519,917 in Q2-23 YTD). With the decline observed on the financial markets, the fair value of the investment in Kintavar Exploration Inc. continued to fall during Q2-24 YTD. Since the fair market value is under the cost of the investment, an impairment expense is booked in the financial statements.

2.3 Sources of financing

During Q2-24 YTD, 1,150,000 options were exercised for total proceeds of \$95,750.

On November 27, 2023, the Corporation announced the obtaining of a \$2.04M grant from Next Generation Manufacturing Canada (NGen) for the construction of Geomega's rare earths recycling demonstration plant in St-Hubert, Quebec. The funding is part of a total envelope of \$2.96 million awarded to Geomega and a private Quebec based R&D company to perform the project titled "Recycling and Production of Rare-Earth Oxides from Permanent Magnet Scrap".

	\$
Payment received (net of financing fees)	10,728
Accrued as at November 30 2023	131,596

On the previously announced grants, the following were recorded in the financial statements:

For the \$493K grant from the Program to Support Research and Development for the Extraction, Transformation and Recycling of Critical and Strategic metals, administered by Consortium de recherche et d'innovation en transformation métallique (CRITM), towards the development of a process for recycling of hydrochloric acid (HCl) from several metal chlorides which can be used for rare earth elements (REE) and scandium (Sc) recovery from multiple sources the following has been recorded to the financial statements so far:

	\$
Payment received	69,085
Accrued as at November 30 2023	77,531

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2. CORPORATE UPDATE (CONT'D)

For the \$3M in funding from the Government of Canada's Critical Minerals Research, Development and Demonstration (CMRDD) Program, administered by Natural Resources Canada (NRCan), towards the construction of the magnet recycling demonstration plant, the following has been recorded to the financial statements so far:

	\$
Payment received	281,996
Accrued as at November 30 2023	683,095

For the \$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, the following has been recorded to the financial statements so far:

	\$
Payment received	750,000
Accrued as at November 30 2023	680,375

For the \$1.691M grants from the Sustainable Development Technology Canada (SDTC) and the Quebec Ministry of Economy and Innovation – Innovation Program, towards the development of a technology to reduce the bauxite residues:

	\$
Payment received	868,200
Accrued as at November 30 2023	769,899

For the \$400K grant from the Ministry of Energy and Natural resources of Quebec (MERN) towards the development of bench scale technology for the treatment of Montviel REE deposit.

	\$
Payment received	60,000
Accrued as at November 30 2023	104,375

2.4 Demonstration Plant

After the restart of the engineering activities by BBA in May 2023, work focused on process and layout adjustments for the new facility. The updated plant 3D layout has reached around 80% completion. Additional information from mechanical, electrical and civil engineering disciplines is being added gradually. The plant layout 3D model (Sept. 2023 version) can be seen in Figure 1 below.

Procurement activities have been ongoing since July 2023 and several main equipment items have been ordered and / or approved for construction in the last few months. Some equipment had to be adjusted to the new layout and will be ordered as soon as the final quotes and designs are approved. In September 2023, Geomega performed Factory Acceptance Tests (FAT) and obtained the required training in preparation for equipment assembly and operation on 3 major pieces of equipment that were ordered in 2022 and earlier in 2023.

Several permitting activities continue as well. Data continues to be collected on Geomega's process and plant design before a final submission for environmental permitting with the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP) is done.

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2. CORPORATE UPDATE (CONT'D)

A baseline environmental study has been performed at the St Hubert facility including the installation of 3 monitoring water wells around the site. Documentation for the various municipal permits continues to be prepared by engineering and the construction contractors.

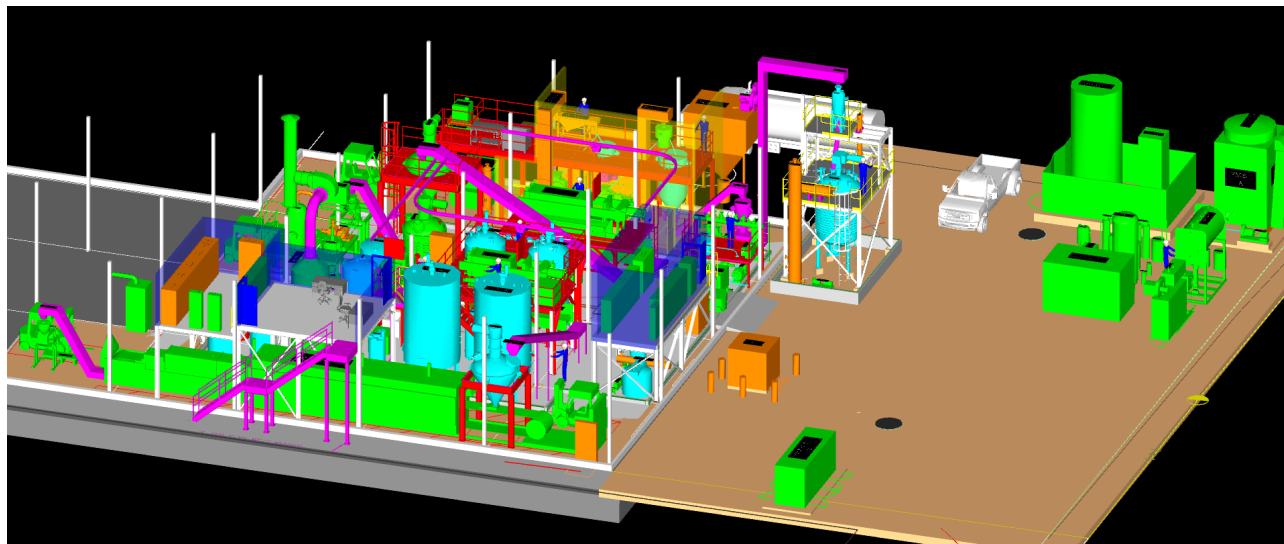


Figure 1: [Demonstration plant 3D layout](#)

2.5 Bauxite Residues Processing

Assembly of the bauxite residues valorization technology pilot plant has been advanced (see Figure 2 and 3), and commissioning has been ongoing since August. Additional analytical equipment required for the operation of the pilot plant has been received and other has been ordered and expected to be received in the spring of 2024. Pilot testwork and commissioning is ongoing. The pilot plant will be adjusted and modified as needed based on the results. More information will be provided as piloting is progressing and milestones are achieved.



Figure 2: [Pilot plant setup at the Boucherville facility](#)

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2. CORPORATE UPDATE (CONT'D)



Figure 3: [Pilot plant setup at the Boucherville facility](#)

2.6 Option agreement on Montviel-Sud Property

On August 31, 2023, the Corporation concluded an agreement with MTM Critical Metals Limited (ASX:MTM, "MTM"), the same company that optioned the Pomme property on February 22, 2023, to option out the Montviel-Sud property. Refer to section 4.3 for more information on the property.

The terms of the option agreement with MTM for Montviel-Sud are as followed:

	Cash Payments	Issuance of common shares	Work
	\$ CAD	\$ AUD	\$ CAD
Option to earn 100%			
At the signature of the final agreement (completed)	25,000	25,000	Nil
On or before August 31, 2024	50,000	50,000	50,000
On or before August 31, 2025	75,000	75,000	200,000
On or before August 31, 2026	Nil	Nil	450,000
Total for a maximum participation of 100%	150,000	150,000	700,000

Pursuant to the agreement, MTM will grant the Corporation a 2% NSR on the property and the Corporation will grant MTM the right to buy-back at any time 1% for AUD \$1,000,000.

The Corporation received 457,033 shares of MTM during the quarter and total option payments resulted in a gain on disposal of exploration and evaluation assets of \$44,492.

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2. CORPORATE UPDATE (CONT'D)

2.7 Various

On October 2, 2023, the Corporation signed an agreement with the owner of the premises at 1123 Marie-Victorin in St-Bruno-de-Montarville to vacate the premises in exchange for a lump sum of \$175,000. Since the signature of the lease in St-Hubert in April 2023, the premises in St-Bruno-de-Montarville served no purpose for the Corporation. The right-of-use asset and the underlying lease were reversed, and the difference was recorded against the gain in the statement of profit and loss.

At the Annual General and Special Meeting (the “AGSM”) that took place on October 25, 2023, Karine Emond was named to the Board of Directors of the Corporation. As a seasoned commercial lawyer specializing in manufacturing and supply chain, Mrs. Emond helps her clients enhance their business models through optimal commercial agreements, giving the tools required to management teams in the deployment of strategies and concrete action plans. She is a business enabler, always keeping in mind the business risks and objectives versus the legal perspective of things. She is known for developing synergies with stakeholders towards a common vision by strengthening links and collaborating on common goals.

On the same day at the AGSM, a new omnibus equity incentive plan was implemented to replace the actual stock option plan that was last reconducted on October 26, 2022. The Omnibus offers a wider range of incentive awards, including stock options (“Options”), restricted share units (“RSUs”), performance share units (“PSUs”), and deferred share units (“DSUs”) (collectively, the “Awards”) to attract, retain and motivate employees, directors, executive officers and consultants of the Corporation. The aggregate number of common shares reserved for issuance pursuant to Awards of Options granted under the Omnibus Plan (including the Predecessor Options currently outstanding under the Previous Plan) shall not exceed 8% of the Corporation’s total issued and outstanding common shares from time to time. In respect of DSUs, RSUs or PSUs, the aggregate number of common shares reserved for issuance pursuant to Awards other than for Options granted under the Omnibus Plan shall not exceed 5,000,000 common shares. The options issued under the previous plan are still eligible. No option or other awards were issued under the new Omnibus Plan as at November 30, 2023.

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 have 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
- Environmental and municipal permitting
- Equipment receiving and ground preparation for the construction work
- Sign construction contractors and begin plant construction on site
- Various complimentary tests on process, final products, by products (as needed)
- Feed sourcing (regular ongoing activity)

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

Bauxite Residue Sustainable Processing

- Continue bench scale testwork, modeling, process design and optimization
- Commissioning of pilot plant
- Pilot testing of the core of the transformation process
- Produce kilograms of material of the main product streams for testing by end users

Montviel REE Deposit – Bench Scale

- Bench scale testwork, modeling, process design and optimization

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

- HCl recycling process – Continue bench scale testwork
- R&D on different feeds (mining and industrial waste)

Corporate

- Continue hiring for select key positions as needed.

4. EXPLORATION AND VALIDATION OF PROCESSING TECHNOLOGIES ACTIVITIES

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.

4.1 Expense summary - Montviel property

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 96 mining claims totalling 5,333 hectares as at November 30, 2023.

	Three months ended November 30		Six months ended November 31	
Montviel	2023	2022	2023	2022
	\$	\$	\$	\$
Acquisition and maintenance	-	-	-	-
Exploration				
Share-based compensation	291	2,046	727	4,780
Supplies	1,308	654	1,962	1,308
Taxes, permits and insurances	-	-	-	360
Total exploration	1,599	2,700	2,689	6,448
Evaluation				
Salaries and benefits	332,913	201,803	605,710	374,310
Separation process	43,688	35,572	142,514	90,856
Depreciation of property and equipment	28,564	11,185	48,092	13,370
Engineering	46,086	80,655	356,267	103,266
Total Evaluation	451,251	329,215	1,152,583	581,804
Gross E&E expenses	452,850	331,915	1,152,272	588,252
Tax credits	(572)	(284)	(53,352)	(727)
Net E&E expenses - Montviel	452,278	331,631	1,101,890	587,524

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

4.2 Pomme (under option agreement)

The Pomme REE project ("Pomme"), also known as Montviel-Nord, is located adjacent to the north of the Montviel REE-Nb deposit that was discovered by Geomega in 2011. The Pomme property comprises 43 mining claims totalling 2,386 hectares as at November 30, 2023.

On February 22, 2023, the Corporation concluded an agreement with MTM Critical Metals Limited (ASX:MTM, "MTM") to option out the Pomme property.

The terms of the option agreement with MTM for Pomme are as followed:

All amounts are in AUD	Cash Payments \$	Issuance of common shares \$	Work \$
Option to earn 100%			
At the signature of the LOI (completed)	20,000	Nil	Nil
At the signature of the final agreement (completed)	50,000	50,000	Nil
On or before February 22, 2024	100,000	100,000	300,000
On or before February 22, 2025	100,000	100,000	700,000
On or before February 22, 2026	Nil	Nil	1,000,000
Total for a maximum participation of 100%	270,000	250,000	2,000,000

Pursuant to the agreement MTM will grant to the Corporation a 2% NSR on the property and the Corporation will grant MTM the right to buy-back at any time 1% for AUD \$1,000,000.

4.3 Montviel-Sud (under option agreement)

The Montviel-Sud REE project is located adjacent to the south of the Montviel deposit. In the past years, the Montviel-Sud and the Montviel property were considered as one property. During Q1-24, the 2 projects were divided in order to option Montviel-Sud. The Corporation also claimed 10 extra mining claims adjacent to its already existing claims in order to option out a package of 20 claims which are now known as Montviel-Sud. The property comprises 20 mining claims totalling 1,111 hectares as at November 30, 2023.

On August 31, 2023, the Corporation concluded an agreement with MTM Critical Metals Limited (ASX:MTM, "MTM") to option out the Montviel-Sud property. Refer to section 2.6 for more information on this transaction.

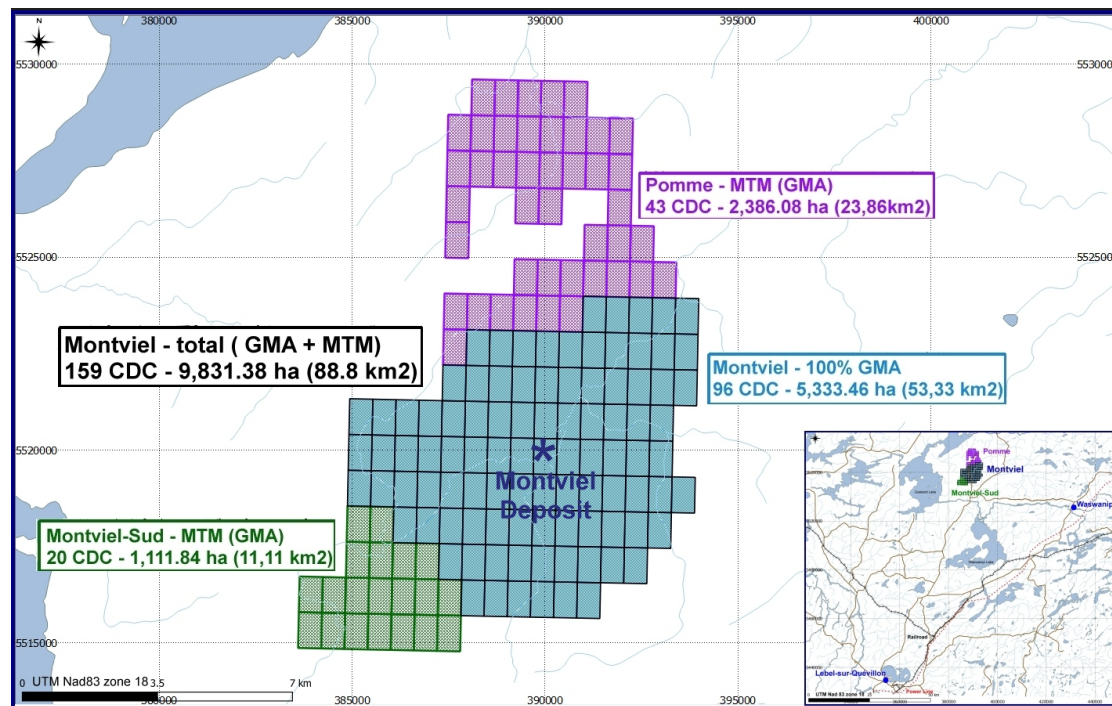
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4. EXPLORATION AND VALIDATION OF PROCESSING TECHNOLOGIES ACTIVITIES (CONT'D)

The following figure shows the different properties in the Montviel area:



4.4 Rare Earths Recycling Technology Development

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

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 de-risking 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.

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

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 belocated in Saint-Bruno-de-Montarville, Quebec. Following the decision in April 2023 to move the demonstration plant to St Hubert, a layout redesign was initiated.

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 2.4 above.

4.5 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.

4.6 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.

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

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

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.

4.7 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.

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

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.

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)

Bench scale lab work continued to investigate more paths to monetize diverse streams of products throughout 2022 and 2023. Layout and equipment selection for the initial phase of the pilot plant covering the core of the transformation process was performed in late 2022 and in 2023. 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. The most recent update can be found in section 2.5 above.

January 25, 2024

(s) Kiril Mugerman

Kiril Mugerman
President and CEO

(s) Mathieu Bourdeau

Mathieu Bourdeau
CFO

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

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Mathieu Bourdeau, CFO
Pouya Hajiani, CTO

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Kosta Kostic ²⁾
Matt Silvestro, President of the Governance Committee ²⁾
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- 2) Member of Corporate Governance, Nomination and Compensation Committee*

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