



Geomega Resources Inc.

Management's Discussion and Analysis
Quarterly Highlights

Nine months ended February 28, 2023

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 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 Q3-23 YTD. This MD&A Highlights should be read in conjunction with the Corporation’s unaudited condensed interim financial statements as of February 28, 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, 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
Q3-22	December 1, 2021 to February 28, 2022
Q3-22 YTD	June 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
Q3-23	December 1, 2022 to February 28, 2023
Q3-23 YTD	June 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.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

2. CORPORATE UPDATE (CONT'D)

2.1 Financial Highlights

Geomega has \$3,602,279 of cash and cash equivalents (\$4,142,279 including the short-term investments) as of February 28, 2023 and a working capital of \$4,277,961 (working capital of \$4,376,903 as at May 31, 2022).

For the Q3-23 YTD, the Corporation recorded a net loss of \$961,516 compared to a net loss of \$1,072,744 for Q3-22 YTD. Excluding the effects of fluctuations from the investment in an associate and from investments in listed companies, a net loss of \$720,798 was realized in Q3-23 YTD compared to a net loss of \$1,136,912 in Q3-22 YTD. The main variations are as follows:

- Research fees of \$381,314 (\$60,000 in Q3-22 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. Work on these projects have significantly increased compared to the previous year. Refer to section 2.4 for more information.
- Salaries, employee benefits and share-based compensation of \$200,538 (\$238,897 in Q3-22 YTD). The salaries have increased by 52% following the increase in employees to support the growth, but the share-based compensation included in this account has gone from \$130,000 in Q3-22 YTD to \$68,000 in Q3-23 YTD. This is explained by the fact that no options were issued at the last AGM.
- Exploration and evaluation expenses, net of tax credits of \$977,587 (\$613,707 in Q3-22 YTD). The final stages of engineering of the demonstration plant are advancing and the Corporation has started working on new research projects with the objective of adapting its technology to new streams. New employees have been hired in 2023 to support the growth.
- Professional fees of \$50,485 (\$106,230 during Q3-22 YTD). In 2022, costs of \$24,808 were incurred in legal fees for intellectual properties and other corporate files. These are non-recurring charges. An amount of \$28,623 in audit fees was also reclassified to prepaid in 2022 during Q4. The Q4-22 YTD expense was overallocated of this amount.
- Filing fees of \$47,570 (\$58,959 in Q3-22 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 \$72,963 (\$23,225 in Q3-22 YTD). Rent expense remained 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 \$480,395 (\$210,418 at Q3-22 YTD). 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 new grants were also received in 2023 (see section 2.2). Since a part of these grants covers expenses dating back to June 2021, a lump sum has been recorded in the income statement.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

2. CORPORATE UPDATE (CONT'D)

- Investment income of \$73,874 (\$8,575 in Q3-22 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.
- Gain on disposal of exploration and evaluation assets of \$136,833 (nil in Q3-22 YTD). As explained in detail in the section 2.5, the Corporation has optioned out its Pomme property to Mt Monger. \$70,000 in cash and 666,667 shares of MTM were received so far on this transaction. Since the Corporation did not capitalise any cost, the entire proceed was recorded as a revenue.
- Impairment of an investment in an associate of \$519,917 (nil in Q3-22 YTD). With the decline observed on the financial markets, 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 \$0.06 as of August 31, 2022. An impairment has therefore been recorded to reduce the investment to its estimated recoverable value. Perhaps, as of December 29, 2022, the investment in Kintavar has been reclassified to an investment in a listed company (see section 2.7) and the variation in fair value are now recorded as unrealized gain or loss in fair value of investments in listed companies, along with the variation in fair value of the investment in Mt Monger Resources.

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 April 27, 2023, the Corporation announced that its private R&D subsidiary Innord Inc. has been awarded a \$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. Since this contract was signed after the quarter end, nothing was recorded in the interim financial statements.

On March 7, 2023, the Corporation announced that it has been awarded \$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. An amount of \$309,911 has been provisioned and recorded as a grant receivable for the expenses already incurred as of February 28, 2023. This amount has been applied in the financial statements to the following accounts:

	\$
Deposits on acquisition of property and equipment (asset)	261,275
Government grants on operating expenses (operating expenses)	<u>48,637</u>
Government grants receivable (asset)	309,911

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

2. CORPORATE UPDATE (CONT'D)

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. An amount of \$472,703 has been provisioned and recorded against payment received in the deferred grant as of February 28, 2023. This grant covers future expenses as well as certain expenses retroactive to June 1, 2021. The following amount were recorded in the financial statements:

	\$
Inventories (asset)	744
Deposits on acquisition of property and equipment (asset)	233,696
Government grants on operating expenses (operating expenses)	<u>238,263</u>
Deferred grant (liability)	<u>472,703</u>

The Corporation has also received payments on other confirmed grants. The following amounts have been received as of February 28, 2023 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 out of \$3,000,000.

2.3 Demonstration Plant

Engineering, procurement and pre-construction activities have been progressing as planned until February 2023. 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 was expected to finish around April/May. The decision to consolidate all the company activities into one facility in St Hubert caused a delay in some of that engineering work as work had to be postponed to avoid redoing some of the work twice. 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 May/June.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

2. CORPORATE UPDATE (CONT'D)

- ✓ 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 was received from January to March 2023. Several equipment drawings are being finalized with vendors and are expected to be issued for construction in May/June 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 but was postponed in February. 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 was completed to 90% by BBA. Environmental permitting activities that began in Fall 2022 are progressing and will continue throughout the year. Permitting at the municipal level has started as well.
- ✓ Layout – The layout and equipment mechanical design are being updated for the St Hubert facility. Once complete, these will be provided to BBA who will deliver the plant 3D model. That work is ongoing.
- ✓ Complementary testwork – Bench scale testwork continues regularly. 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.

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.

2.5 Option agreement on Pomme property

On February 22, 2023, the Corporation concluded an agreement with Mt Monger Resources Limited (ASX:MTM, “Mt Monger”) to option out the Pomme property. Refer to section 4.2 for more information on this property.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

2. CORPORATE UPDATE (CONT'D)

The terms of the option agreement with Mt Monger 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 Mt Monger will grant to the Corporation a 2% NSR on the property and the Corporation will grant Mt Monger the right to buy-back at any time 1% for AUD \$1,000,000.

2.6 New location in St-Hubert

Following a thorough review of its current and future projects and operations and exhaustive research of the industrial real estate market in the Greater Montreal area, the Corporation has decided to combine all its operations into a single larger location in the town of St Hubert, Quebec.

The addition of new R&D projects over the last 24 months, including the most recent HCl recycling process with more projects in the pipeline to expand our technologies to other major applications, has resulted in an increased space requirement for Geomega. On the other hand, the current facilities in Boucherville no longer made it possible to meet these growing needs neither for laboratory space nor for offices necessary to support hiring. With the construction of the magnet recycling demonstration plant starting later this year, the Corporation used the opportunity to relocate all the activities under one roof instead of expanding into a 3rd facility, incurring extra costs and more delays later on. The St-Hubert facility will meet the current needs while permitting growth and creating synergies between the different departments and projects.

The standalone facility of over 18,000 sq.ft in the Gérard-Leclerc industrial zone of St Hubert, Longueuil, is located less than 8km from our previous location and has all the same location advantages such as less than 30 minutes from Montreal and within 6 hours from major North American cities such as Boston, New York and Toronto with access to several major highways and expressways. Two airports are located within 40 minutes of the location, the Trudeau International Airport in Montreal and the Montreal-Saint-Hubert-Longueuil airport. Most importantly is the access to major seaways with the Port of Montreal, 20 minutes, which is the largest container transshipment centre in the Great Lakes system – Saint Lawrence Seaway and a direct link to Europe and the East coast of the United States, as well as the marine terminal in Contrecoeur which is only 30 minutes away. The availability of outdoors space at the St Hubert facility is another important benefit over the previous location as it allows more flexibility with the utilities that are required to be installed for the operation of the magnet recycling plant.

Administration, engineering and R&D activities will continue at the Boucherville facility until all the laboratories and offices are built as part of the construction of the demonstration plant.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

2. CORPORATE UPDATE (CONT'D)

Having all the company activities centralized with space to expand the R&D and perform multiple projects at the same time is going to benefit Geomega in the long run. This new R&D facility will be able to accommodate the growing pipeline of projects that are already in the application for funding phase. This new location will allow Geomega to streamline its operations in the future and simplify the construction of the demonstration plant.

The agreement, which will begin on May 1, 2023, is for an initial term of sixty (60) months with two options to renew for an additional sixty (60) months. The monthly base rent is \$24,000 which represents \$288,000 annually. An asset and a liability will be recognized in future quarterly financial statements under IFRS 16.

2.7 Investment in Kintavar

As at February 28, 2023, the Corporation held 16,857,143 common shares or 13.11% (May 31, 2022 – 13.72%) interest in Kintavar Exploration Inc. (“Kintavar”). The shares of Kintavar were trading at \$0.06 per share on that date.

On December 29, 2022, Kintavar closed a private placement consisting of 5,148,750 units issued at a price of \$0.08 per unit. Each unit is composed of one (1) flow through share and one (1) common share purchase warrant, each whole warrant entitling the holder hereof to acquire one (1) common share at a price of \$0.10 per share until December 29, 2024. As a result of the private placement, the Corporation’s ownership in Kintavar decreased to 13.11% of the issued and outstanding common shares of Kintavar.

As a result of the decrease in Kintavar’s ownership, the Corporation reassessed the determination of its significant influence on Kintavar. Considering that the participation of Geomega has significantly fallen under the 20% threshold, that the level of transactions between the two companies was reduced to a bear minimum and that the nature of the activities of both companies have taken different paths, the Corporation concluded that it no longer had significant influence over Kintavar and classified its investment in the common shares of Kintavar as Financial assets at fair value through profit or loss.

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.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

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

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)
- Complete the independent HAZOP study (BBA)
- Place orders for instrumentation, valves and control system
- New layout and 3D modelling for St Hubert facility (BBA)
- Environmental and municipal 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)

Bauxite Residue Sustainable Processing

- Continue bench scale testwork, modeling, process design and optimization
- Finish receiving 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
- 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 – start the 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 and 4.2.

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 106 mining claims totalling 5,889 hectares as at February 28, 2023.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

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

Montviel	Three months ended February 28		Nine months ended February 28	
	2023	2022	2023	2022
	\$	\$	\$	\$
Acquisition and maintenance	413	-	1,926	1,470
Exploration				
Salaries and benefits	-	-	-	372
Share-based compensation	1,314	5,574	6,094	14,007
Geology	654	654	1,962	1,962
Transport and lodging	-	-	-	(124)
Taxes, permits and insurances	-	-	360	-
Total exploration	1,968	6,228	8,416	16,217
Evaluation				
Salaries and benefits	239,129	131,085	618,277	399,821
Share-based compensation	9,021	45,703	8,495	99,249
Separation process	97,226	25,196	189,179	74,158
Depreciation of property and equipment	25,342	3,071	128,608	54,702
Engineering	10,329	12,478	23,699	27,144
Total Evaluation	381,047	217,533	968,258	655,074
Gross E&E expenses	383,428	223,761	978,600	672,761
Net tax credits	(285)	6,352	(1,013)	(59,202)
Net E&E expenses - Montviel	383,143	230,113	977,587	613,559

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. In the past years, the Pomme property and the Montviel property were considered as one property. During the year 2023, the 2 projects were divided in order to option Pomme. The Pomme property comprises 43 mining claims totalling 2,386 hectares as at February 28, 2023.

On February 22, 2023, the Corporation concluded an agreement with Mt Monger Resources Limited (ASX:MTM, “Mt Monger”) to option out the Pomme property. Refer to section 2.5 for more information on this transaction.

4.3 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 Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

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 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.

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. 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 2.3 above.

4.4 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.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

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

4.5 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

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

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

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

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.

4.6 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.

Geomega Resources Inc.

Management Discussion & Analysis – Quarterly Highlights

Nine months ended February 28, 2023

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

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)

April 28, 2023

(s) Kiril Mugerma

Kiril Mugerma
President and CEO

(s) Mathieu Bourdeau

Mathieu Bourdeau
CFO

Geomega Resources Inc.

Management Discussion & Analysis- Quarterly Highlights

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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
Matt Silvestro ¹⁾
Nick Nickoletopoulos ¹⁾
Kiril Mugerman

Notes:

1) Member of the Audit Committee

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