

# Exploring for Clean Technology Metals in Québec

# Snapshot

#### January 9, 2012

Geomega Resources Inc. ("GéoMégA" or "the Company") is a young mineral exploration company focused on identifying economically viable deposits of clean technology metals<sup>†</sup> in Québec. The Company holds 20 properties (including one property option) targeted toward the discovery and production of rare earth elements (REE) and other minerals, such as niobium and graphite, which are necessary for 21<sup>st</sup> century technologies. In August 2011, GéoMégA received final assay results from a 10,000-meter, 20-hole Phase I drill campaign at its flagship REE property, the Montviel carbonatite. On September 29, 2011, GéoMégA announced its initial National Instrument 43-101compliant resource calculation, which totaled 183.9 million tonnes (Mt) of indicated resources averaging 1.45% total rare earth oxides (TREO) in addition to 66.7 Mt of inferred resources averaging 1.46% TREO. Considerable quantities of neodymium oxide, a key REE used in the manufacture of permanent magnets, were identified in the mineralized zone. The 43-101 calculation also demonstrated the presence of other critical rare earths and niobium. A Phase II drill program began in September 2011. The Company believes that Montviel has advantages over other rare earth deposits globally, including the presence of a sizable carbonatite that may translate into continuous REE supply for many years. At 32 km<sup>2</sup>, GéoMégA believes the Montviel carbonatite is among the largest in North America. As well, the property's road accessibility and proximity to services and infrastructure will likely reduce the time and costs of ramping up mining operations if an economical mineral deposit is confirmed.

# **Recent Financial Data**

Ticker (Exchange)	GMA (TSX.V)*
Recent Price (01/06/2012)	C\$1.15
52-week Range	C\$0.75 – C\$4.99
Shares Outstanding	~22.4 million
Market Capitalization	~C\$26 million
Average Volume (200-day)	45,197
Insider Owners +5%	6%
Institutional Owners	22%
EPS (Qtr. ended 08/31/2011)	(C\$0.02)
Employees	15



\* Share data in Canadian dollars (C\$). At 01/06/2012, C\$1.00 ≈ US\$0.98.

# Key Points

- Demand for rare earth metals is driven by high-tech and "green" industries, which use REEs in abundance for manufacturing products, such as super magnets in mobile phones, laptops, and high-efficiency appliances; batteries in hybrid and electric vehicles; thin-film semiconductors; wind turbines; and miniature electronic devices, such as iPods and iPads; among many others.
- REE demand was 120,000 tonnes in 2010, exceeding worldwide supply of 112,000 tonnes (Source: *Nature* 2011). This gap is amplified as China, which supplies 97% of rare earths globally, has begun systematically reducing REE exports, thereby creating opportunities for new suppliers.
- Carbonatites potentially contain greater rare earth concentrations than any other rock type. The world's most prolific known deposits of REEs and niobium—Bayan Obo (China), Mountain Pass (California), Mount Weld (Australia), and Araxá (Brazil)—are all hosted in carbonatites.
- From 2007 to 2010, public policy researcher, the Fraser Institute, named Québec the best region worldwide for mining investment. In 2011, the province was ranked fourth out of 79 jurisdictions. Québec offers **exploration tax credits** of ~40%, a skilled workforce, and secure mining titles.
- The Company is led by an experienced management team whose expertise and know-how may help distinguish GéoMégA within the exploration sector. At August 31, 2011, GéoMégA had cash and cash equivalents of over C\$1 million.



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# **Executive Overview**

Presented in Canadian dollars (C\$). At January 6, 2012, C $1.00 \approx US$ .

Geomega Resources Inc. ("GéoMégA" or "the Company") is a young Montréal-based mining exploration company focused on finding economically viable deposits of the clean technology metals needed by green technologies. The Company holds a portfolio of 20 properties in Québec (which includes one optioned property). These properties are targeted toward the discovery and production of rare earth elements (REE) and other minerals, such as niobium, that are key to 21<sup>st</sup> century applications.

REEs are not actually rare, as they entail some of the most abundant elements on earth. They are, however, often challenging to obtain, as they seldom exist in a pure form. Instead, these elements mix with other minerals underground, which can make them difficult to find and extract in economic concentrations. Rare earths have significant strategic importance in the 21<sup>st</sup> century as they are used in the production of electric vehicles, wind turbines, light-emitting diodes (LEDs), cell phones, fiber optics, lasers, hard disks, missile defense, and many other high-tech or "green" applications.

Demand for rare earths was 120,000 tonnes in 2010, up from approximately 30,000 tonnes annually in the 1980s (Source: *Nature* July 3, 2011). Demand, forecast to reach 200,000 tonnes per year by 2015, is anticipated to outpace supply over the next several decades. In contrast, current global REE production is only approximately 112,000 tonnes, creating opportunities for new suppliers.

At present, approximately 97% of rare earths worldwide are produced at mines in China; however, at the same time that global demand for these metals is dramatically increasing, China has begun setting stringent caps and increasing taxes on its REE exports. Such production quotas in China led to a 40% decrease in the country's REE exports in 2010. This contraction in supply combined with greater demand for REE has caused significant price increases in the REE market and is leading consumers of REE to reevaluate their supply chains. Thus, as China's output declines, new REE mine potential is being developed around the world, such as GéoMégA's Montviel deposit described below.

In terms of REE, there are five elements in particular deemed critical for 21<sup>st</sup> century technologies yet forecasted at a supply deficit—neodymium, dysprosium, terbium, europium, and yttrium (Source: U.S. Department of Energy's *Critical Materials Strategy*, December 2010). Via its Québec mining properties, GéoMégA seeks to develop economic quantities of these in addition to other strategic metal byproducts.

#### **Montviel Property**

GéoMégA's most advanced holding at present is its approximately 12,000-**hectare (ha)** (~49 mi<sup>2</sup>) Montviel REE property, at which the Company completed a Phase I drill campaign in April 2011. A Phase II drill program was initiated in September 2011. After completing its first drill campaign, GéoMégA acquired 100% ownership in the Montviel property in May 2011 under an agreement with NioGold Mining Corp. (NOX-TSX.V). As detailed on page 26, NioGold retains a 2% Net Output Return royalty. The property's location is illustrated in Figure 1 (page 4).

The Montviel property is located in proximity to Québec's Abitibi region, which is known for the Abitibi **greenstone belt**, one of the world's richest mining areas. Past production at Abitibi is thought to have exceeded 170 million ounces (oz) of gold as well as considerable quantities of copper, zinc, and silver, among other metals.

The property comprises a 32 km<sup>2</sup> carbonatite complex, a noteworthy feature as carbonatites potentially contain a larger concentration of REE than any other rock type (Source: *Lithos*, a petrology, mineralogy, and geochemistry journal, November 2008). Carbonatites, a type of geological rock formation, have hosted many of the world's most prolific known deposits of REE and niobium, including the Bayan Obo (Inner Mongolia, China), Mountain Pass (California), Mount Weld (Australia), and Araxá mines (Brazil). Moreover, GéoMégA's research suggests that roughly one in five carbonatites contains an economic deposit of ore.





GéoMégA believes that the Montviel carbonatite is one of the largest in North America. The size of the carbonatite combined with Montviel's road accessibility and proximity to services helped fuel the Company's decision of focusing exploration efforts on this project. Montviel is accessible via a network of logging roads, is close to hydropower, and is approximately 50 kilometers from rail lines. Heavy drill equipment can be mobilized directly to the property via existing infrastructure. As such, GéoMégA anticipates being able to accelerate near-term production if an economical ore deposit is identified.

#### Mineralization

An initial National Instrument (NI) 43-101-compliant resource calculation was recently completed for the Montviel property. The mineral resources were estimated using analytical results from 19 diamond drill holes totaling 8,856 meters completed by GéoMégA at the Montviel carbonatite in 2010 and 2011. The mineral resource estimate has been completed using three-dimensional wireframe modeling of geological contacts followed by block model interpolation methodology. The wireframe covers approximately 625 meters in the east-west direction, 725 meters in the north-south direction, and reaches a maximal depth of 625 meters below surface.

As announced by GéoMégA on September 29, 2011, Montviel's "Core Zone" base case resource estimate, using a total rare earth oxide (TREO) cut-off grade of 1.00%, hosts an indicated mineral resource of 183,900,000 tonnes grading 1.45% TREO in addition to an inferred mineral resource of 66,700,000 tonnes grading 1.46% TREO. Table 1 (page 5) shows highlights of the NI 43-101, noting the base case (in bold) at a 1.00% TREO cut-off grade.

Values displayed in Table 1 are "in-situ" and thus intended for illustrative purposes only. No mining scenario, milling, or metallurgical recovery has been estimated or applied to these values, and therefore they do not have demonstrated economic viability.

The mineralization remains open to the west, south, and at depth. The grade increases to the west with diamond drill hole MVL-11-18 returning 2.15% TREO over 250.65 meters from 133.55 meters between sections 5+00 west and 7+00 west. Phase II drilling is currently focusing on the definition of high-grade near surface resource with step out and infill holes west of section 5+00 west.

In addition to the results presented in Table 1 (page 5), GéoMégA has filed an NI 43-101 technical report titled *Montviel Core Zone REE Mineral Resource Estimate Technical Report, Québec* dated September 29, 2011. The report is available on SEDAR (<u>www.sedar.com</u>) and the Company's website (<u>www.ressourcesgeomega.ca</u>).



HIGHLIGHTS AT THE BASE CASE 1.00% TREO CUT-OFF GRADE									
Cut-off Grade TREO (%)	Resource Category	Tonnes	Average Bulk Density (t/m <sup>3</sup> )	TREO (%)	LREO (%)	IREO (%)	HREO (%)	Y <sub>2</sub> O <sub>3</sub> (%)	Nb <sub>2</sub> O <sub>5</sub> (%)
0.85	Indicated	196,200,000	2.91	1.420	1.372	0.037	0.004	0.01	0.123
1.00	Indicated	183,900,000	2.92	1.453	1.404	0.037	0.004	0.01	0.126
1.25	Indicated	136,000,000	2.92	1.562	1.511	0.039	0.004	0.01	0.135
1.50	Indicated	69,200,000	2.92	1.744	1.688	0.043	0.005	0.01	0.158

Table 1
Geomega Resources Inc.
HIGHLIGHTS AT THE BASE CASE 1.00% TREO CUT-OFF GRADE

Cut-off Grade TREO (%)	Resource Category	Tonnes	Average Bulk Density (t/m <sup>3</sup> )	TREO (%)	LREO (%)	IREO (%)	HREO (%)	Y <sub>2</sub> O <sub>3</sub> (%)	Nb <sub>2</sub> O <sub>5</sub> (%)
0.85	Inferred	72,600,000	2.89	1.417	1.366	0.038	0.005	0.01	0.136
1.00	Inferred	66,700,000	2.89	1.460	1.408	0.039	0.005	0.01	0.140
1.25	Inferred	48,100,000	2.88	1.587	1.533	0.041	0.005	0.01	0.153
1.50	Inferred	26,800,000	2.87	1.755	1.696	0.045	0.005	0.01	0.177

Category	Resource Tonnes	Nd₂O₃ (Kg in-situ)	Pr <sub>2</sub> O <sub>3</sub> (Kg in-situ)	Dy₂O₃ (Kg in-situ)	Eu <sub>2</sub> O <sub>3</sub> (Kg in-situ)	Y <sub>2</sub> O <sub>3</sub> (Kg in-situ)	Nb <sub>2</sub> O <sub>5</sub> (Kg in-situ)
Indicated	183,900,000	446,000,000	139,000,000	4,190,000	9,000,000	13,000,000	231,000,000
Inferred	66,700,000	160,000,000	50,000,000	1,650,000	3,000,000	5,000,000	94,000,000

Source: Geomega Resources Inc.

#### Neodymium Oxide

One of the most notable rare earths present at Montviel is neodymium oxide. With values averaging 2.3 kg/ton based on assays completed to date, GéoMégA believes that Montviel may represent one of the most significant known neodymium oxide deposits globally. While in 2009, neodymium—an REE that is essential for the manufacture of the advanced magnets used to make high-tech products, such as electric cars and wind turbines—was averaging \$18 to \$20 per kilogram, the element has recently reached \$420 per kilogram (Source: American Elements, a global manufacturer of engineered and advanced materials, August 30, 2011, Press Release). This is in line with pricing jumps for many other rare earths as well, which increased by as much as 300% to 700% during 2010 (Source: *Critical Materials Strategy*).

#### **Exploration Status**

An intensive exploration program composed of multiple stages is ongoing at Montviel. As Phase I drilling has been completed, GéoMégA's focus is now on project economics and Phase II definition and exploration drilling. The Company began the second drill program at Montviel on September 12, 2011, and released initial results during December 2011. Thus far, GéoMégA reports that data is confirming expectations of defining a significant NI 43-101 measured resource with an average grade closer to 2% TREO. Highlights of the drilling are provided on page 34.

Additional exploration progress at this property includes the following: (1) two mini-bulk samples of 300 kg for bench-scale **metallurgy** that have been sent to SGS Canada Lab in Lakefield, Ontario; and (2) a preliminary mineralogical evaluation by SGS, which already confirmed that the mineralized carbonatite mainly contains REE-bearing minerals of the Bastnasite-Synsychite family. These comparatively coarse-grained minerals are amenable to concentration and separation by recognized metallurgical processes.

GéoMégA anticipates that final metallurgical testing can be released by the end of the first quarter 2012. Going forward, the Company intends to proceed with economic assessments, a feasibility study, and an environmental study.



Additionally, in May 2011, GéoMégA initiated exploration and mapping activities at approximately half of its other projects in Québec, including at the Sydney, Oriana, Émilie, and Zaza properties, among others. Subsequently, in December 2011, the Company announced that it staked an additional 293 mining **claims** over 14 properties near Mont-Laurier, Québec. All claims are 100% owned. In line with the Company's focus on exploration for elements needed by clean technologies in Québec, these 14 properties were staked for their graphite potential. Global demand for graphite is being fueled by the emergence of green energy. These claims were identified using historical production and exploration data researched by GéoMégA's technical team.

#### Benefits to Mineral Exploration in Québec

Canada is rich in natural resources and seeks to develop these while preserving a commitment to the environment. The country is the world's largest exporter of minerals and metals, and fosters its mining and exploration sectors through supportive finance, tax, regulatory, investment, and export policies.

For the past decade, Québec has been named as one of the best jurisdictions worldwide for exploration and development by the Fraser Institute (<u>www.fraserinstitute.org</u>), a North American research and educational organization. In addition to its mineral potential, factors contributing to the province's global mining recognition include offering exploration tax credits of approximately 40%, the availability of an experienced workforce, and secure mining titles. Canadian mining and exploration enterprises are also able to deduct eligible exploration expenses from federal taxes. Mining exploration can be a high-risk industry; however, stable and clear mining laws, such as those that exist in Québec, are thought to help mitigate some of the risks common to mining and exploration enterprises in other parts of the world.

#### Corporate History, Headquarters, and Employees

GéoMégA was founded in June 2008 as a closely held company. At that time, GéoMégA raised C\$250,000 in order to drill a mass **sulfide** deposit in Québec that was subsequently determined not to be economic. The Company then entered a dormant period until May 2010, when it acquired the right to earn an interest in the Montviel and Pump Lake properties under an agreement with NioGold Mining Corp. The initial agreement required a payment from GéoMégA of C\$100,000, which the Company had as a result of its C\$250,000 financing during 2008. It also required the completion of an initial public offering (IPO), the issuance of 1.5 million shares of GéoMégA to NioGold over a three-year period following the IPO, and the responsibility for GéoMégA to incur a minimum of C\$3.35 million in exploration expenditures over a four-year period. Details of the agreement with NioGold, and subsequent amendments that resulted in GéoMégA obtaining 100% ownership of the Montviel property, are provided on page 26. As of September 2011, NioGold held approximately 10% of the Company.

GéoMégA completed an IPO within five months on September 30, 2010, on the Toronto Stock Exchange's Venture Exchange (TSX.V) for gross proceeds of over C\$2.9 million. The Company also rearranged its management and Board members, which included the appointments of current leadership as profiled on pages 9-11. Headquartered in Montréal, Québec, GéoMégA currently employs 15 individuals and is listed on the TSX.V under the trading symbol "GMA."



# Growth Strategy

#### Emphasize Exploration of 21<sup>st</sup> Century Clean Technology Metals in Québec

In 2010, GéoMégA shifted its focus from precious minerals to clean technology metals that have a greater use in the 21<sup>st</sup> century, specifically, rare earth elements (REE), graphite, and niobium. The Company's REE strategy entails focusing on carbonatites, as many of today's world-class REE and niobium deposits have been found in this geology.

Ultimately, the Company's exploration activities are targeted toward the identification of a large, open pit, carbonatite-hosted REE deposit. To date, GéoMégA believes that its Montviel property holds the greatest potential for such a deposit, given the size of the carbonatite complex at this property. As well, the property's road accessibility and proximity to services is likely to increase the feasibility of mining operations if an economical mineral deposit is confirmed. Thus, GéoMégA's present strategy includes continuing development at Montviel, through completing metallurgy and concluding its Phase II drill campaign, among other initiatives.

Beginning in mid-2011, the Company commenced preliminary exploration activities on additional properties in Québec that it believes may have potential for REE. Development at these properties is occurring as time and resources allow.

As well, to support its corporate activities going forward, GéoMégA has stated that it may pursue listing on a U.S. stock exchange.

#### **Responsible Exploration Development**

In its work as a mining exploration company, the Company's leadership has emphasized a commitment to meeting stringent industry standards and conducting operations in support and respect of local communities and the environment. GéoMégA voluntarily subscribes to a framework of eight guiding principles for responsible exploration established by the Prospectors and Developers Association of Canada (PDAC). The Company reports that it strives to incorporate these principles as much as possible in its exploration activities, in order to pursue strategic objectives while improving environmental, social, health, and safety performance. Key components to the PDAC's framework are outlined below.

- Adopt responsible governance and management
- Apply ethical business practices
- Respect human rights, including the work environment and concerns of local communities
- Commit to project due diligence and risk assessment
- Engage host communities and other affected and interested parties
- Contribute to community development and social well-being
- Protect the environment
- Safeguard the health and safety of workers and the local population



#### Pre-Development Agreement with the Grand Council of the Crees and the Cree First Nation of Waswanipi

On October 20, 2011, GéoMégA signed a Pre-Development Agreement (PDA) for the Montviel property with the Grand Council of the Crees (Eeyou Istchee)/Cree Regional Authority and the Cree **First Nation** of Waswanipi. As represented in Figure 2, the PDA has been developed on the principle of mutual respect between the parties, and the interests of all stakeholders in seeing the establishment of a successful mining venture at Montviel. It provides for business and employment opportunities for the Crees during the period of pre-development activities leading up to a potential production decision at the project, the completion of a comprehensive Business and Employment Capacity Study to assess the full potential for Cree business and employment opportunities from an eventual Montviel Rare Earths Mine, and the creation of a joint communication strategy. In addition, the PDA provides for Cree expertise in the preparation of an Environmental and Social Impact Assessment for Montviel, and any other relevant environmental and social assessment studies. The PDA builds upon good faith dialogue between the parties, and contemplates the completion of a subsequent Social and Economic Participation Agreement.



Source: Geomega Resources Inc.



# Company Leadership

#### Management

GéoMégA's expertise and know-how may help distinguish it within the junior mining sector. During 2011, the Company strengthened its technical personnel with the addition of new members, which included the June 2011 appointment of Mr. Jacquelin Gauthier (biography below) as vice president, exploration. Table 2 summarizes GéoMégA's key management, followed by biographies.

	Table 2				
	Geomega Resources Inc.				
	MANAGEMENT				
Simon Britt, CA	President, Chief Executive Officer, and Director				
René Lacroix, CA	Chief Financial Officer				
Jacquelin Gauthier, P. Eng. Geo.	Vice President, Exploration				
Alain Cayer, M.Sc., P. Geo.	Chief Geologist, Qualified Person for the Montviel Project				
Source: Geomega Resources Inc.					

Simon Britt, CA, President, Chief Executive Officer, and Director

Mr. Britt, a chartered accountant, has been involved with GéoMégA since 2009. From May 2005 to June 2010, he was an accounting and securities consultant for listed junior mining companies. During the period from January 2007 to August 2009, he served as chief financial officer (CFO) for Kinbauri Gold Corp., which was acquired by Orvana Minerals Corp. (ORV-TSX) in August 2009. From January 2000 to May 2005, Mr. Britt practiced auditing and corporate finance mainly with public companies for Deloitte Touche Tohmatsu Ltd. He is a member of the Ordre des Comptables Agréés du Québec.

#### René Lacroix, CA, Chief Financial Officer

Mr. Lacroix is a chartered accountant and has been a member of the Ordre des Comptables Agréés du Québec since 1982. He completed a Bachelor's of Commerce at the HEC of Montreal in 1980. Since April 1985, Mr. Lacroix has been a partner of Lacroix Frères Consultants Inc., an accounting, tax, and securities consultant firm acting for listed junior mining companies. Currently, he is CFO and director of Dios Exploration Inc. (DOS-TSX.V). He has been involved with GéoMégA since the beginning of the Company's IPO process in May 2010.

#### Jacquelin Gauthier, P. Eng. Geo., Vice President, Exploration

Mr. Gauthier has a degree in geological engineering and extensive expertise in geology and mining exploration. Over the years, he has served as an exploration manager for major corporations, such as Kinross Gold Corp. (KGC-NYSE), Bema Gold Corp. (acquired by Kinross), Cambior Inc. (now IAMGOLD Corp. [IAG-NYSE]), and Noranda Exploration Inc., and as president of Azimut Exploration Inc. (AZM-TSX.V).

#### Alain Cayer, M.Sc., P. Geo., Chief Geologist, Qualified Person for the Montviel Project

Mr. Cayer has a degree in geology and extensive expertise in exploration in the James-Bay area. Formerly with Virginia Mines Inc. (VGQ-TSX) for eight years, he was chief geologist at the Eleonore project. He is currently working as the **Qualified Person** on the Montviel project, seeking to ensure that all exploration activities are conducted under NI 43-101 guidelines.



#### **Board of Directors**

The Board of Directors oversees the conduct of and supervises the Company's management. Table 3 provides a summary of Board members, followed by detailed biographies.

	Table 3
	Geomega Resources Inc.
	BOARD OF DIRECTORS
Patrick Godin, P. Eng., ASC	Chairman
Jean-Charles Potvin, P. Geo., MBA	Director
Teo Dechev, P. Eng., MBA	Director
Mario Spino, M.Sc.	Director
Réjean Talbot	Director
Simon Britt, CA	President, Chief Executive Officer, and Director
Source: Geomega Resources Inc	

#### Patrick Godin, P. Eng., ASC, Chairman

Mr. Godin is currently and has been chief operating officer (COO) and vice president of Stornoway Diamond Corp. (SWY-TSX) since May 2010. As COO, Mr. Godin is directly responsible for the development of the feasibility stage of the Renard Diamond Project, located in north-central Québec, which has the potential to become Québec's first diamond mine. Prior to joining Stornoway, Mr. Godin acted as vice president, project development for G Mining Services, focused on the development of mining projects in the Americas and West Africa. Before that, he served as vice president of operations for Canadian Royalties, specifically heading the development of their nickel project in Northern Québec. He was also president and general manager of CBJ-CAIMAN S.A.S., a French subsidiary of Cambior/IAMGOLD, holder of the Camp Caïman gold mining project located in French Guiana. Mr. Godin holds a Bachelor's degree in mining engineering from Université Laval in Québec. Mr. Godin is a member of the "Ordre des Ingénieurs du Québec" and of the Certified Directors College. He sits on the Board of Orbit Garant Drilling Inc. (OGD-TSX).

#### Jean-Charles Potvin, P. Geo., MBA, Director

Mr. Potvin is currently chairman of Vaaldiam Mining Inc. (VAA-TSX) and president and chief executive officer (CEO) of Flemish Gold Corp., a company focusing on gold exploration in sub-Saharan Africa. He also serves as a director of Gold Reserve Corp. and Azimut Exploration Inc. Until January 1994, Mr. Potvin was a director and vice president of Burns Fry Limited (now BMO Nesbitt Burns), where he evaluated worldwide mining investment opportunities. He has also been involved in securing financing for a number of North American gold producers. He previously served as president and CEO of Pangea Goldfields. Mr. Potvin holds an honors B.S. in geology from Carleton University and an MBA from the University of Ottawa.

#### Teo Dechev, P. Eng., MBA, Director

Ms. Dechev is president (since 2008) and CEO (since 2009) of Mundoro Capital Inc. From 2006 to 2008, she was CFO and vice president of corporate development of Mundoro Mining Inc. She has extensive experience in the capital markets through positions held at investment banks in Canada. Throughout her investment banking career, she has participated in financings for over half a billion dollars to fund companies at various stages of exploration, development, and production. Her career has covered institutional equity research, corporate finance, and merger and acquisitions primarily focused on the resource sector. Prior to joining Mundoro Capital, she was vice president, investment banking, Desjardins Securities Inc. (2003 to 2006), investment banking at CIBC World Markets (2002), investment banking at National Bank Financial (2001), and equity research analyst at Loewen Ondaatje McCutcheon (1999 to 2001). Ms. Dechev holds an MBA from the Schulich School of Business at York University in Canada, a Bachelor's of Applied Science and Engineering in geological and mineral engineering from the University of Toronto, and is a licensed professional engineer in both British Colombia and Ontario.



#### Mario Spino, M.Sc., Director

Mr. Spino has held a senior advisor position (Advisory Services) at KPMG, where he advised asset managers and Canadian banks on financial risk management and derivative valuations best practices. From May 2004 to November 2008, Mr. Spino was a market risk management advisor at Caisse centrale Desjardins du Québec. He received a Bachelor's of Commerce and a Master's degree in financial engineering from HEC (Montréal).

#### Réjean Talbot, Director

Mr. Talbot has worked in the financial services community for almost 40 years. After 17 years at Desjardins as general manager, Mr. Talbot created an independent firm in 1991, which became, in 1999, Talbot, Olivier, Côté & Associés. Certified financial planner and life insurer title holder, Mr. Talbot was recognized throughout his career as part of the elite in Québec. During his association with DundeeWealth Inc., he was a member of the President's Club, which brings together the best 50 advisors to Canada.

#### Simon Britt, CA, President, Chief Executive Officer, and Director

Biography provided on page 9.

#### Advisory Board

#### Claude Britt, P. Geo., Geological Consultant

Mr. Britt is a geological consultant and sits on several Boards of Directors. From 1994 to 2001, he was vice president of Pangea Goldfields, which was purchased by Barrick Gold Corp. (ABX-NYSE) in 2000. He was director of Kinbauri Gold Corp. from October 2005 to November 2008. Currently, he is also a director of Manicouagan Minerals Inc. (MAM-TSX.V). Mr. Britt has been active in mineral exploration and production for over 35 years and has been instrumental in several mineral discoveries, including the Silidor mine in Rouyn Noranda (Québec), the Tulawaka and Buzwagi mines in Tanzania, and the Pukakaka Sur deposit in Peru. He serves as a geological consultant to GéoMégA's technical committee for all exploration and development work. Mr. Claude Britt is the father of Mr. Simon Britt, president and CEO of GéoMégA.

#### Gary H. K. Pearse, M.Sc., P. Eng., Metallurgical Consultant

Mr. Pearse is an engineer, economic geologist, and mineral economist with more than 40 years of experience, largely as a rare metals, rare earths, and industrial minerals consultant. He is the principal of Equapolar Consultants, which has been engaged to oversee GéoMégA's rare earth metallurgical tests commencing in September 2011 at the SGS Canada Lab in Lakefield, Ontario. Mr. Pearse supervised the selection of 600 kg of core for process development and crushability/grindability studies and for variability metallurgical testing.



# Core Story

Presented in Canadian dollars (C\$). At January 6, 2012, C\$1.00 ≈ US\$0.98.

Geomega Resources Inc. ("GéoMégA" or "the Company") is a Montréal-based mineral exploration company focused on the acquisition and development of mining properties in Québec. The Company's property portfolio to date is targeted to projects that exhibit the potential to host economic deposits of 21<sup>st</sup> century clean technology metals, especially rare earth elements (REE) used in high-tech and green technologies.

GéoMégA's mineral portfolio comprises 19 mining properties and one property option. Among these projects, the Company's lead initiative entails ongoing exploration at its wholly owned Montviel REE property in Québec. Following the completion of a Phase I drill campaign at Montviel in April 2011, GéoMégA acquired 100% of the property in May 2011 under an agreement with NioGold Mining Corp. (detailed on page 26). Subsequently, Phase II drilling was initiated on September 12, 2011.

GéoMégA reports that the initial National Instrument (NI) 43-101-compliant resource calculation at Montviel confirms that it is among the largest total rare earth oxides (TREO) deposits outside of China. The calculation identified 183.9 million tonnes (Mt) of indicated resources averaging 1.45% TREO in addition to 66.7 Mt of inferred resources averaging 1.46% TREO. The chief element of the Montviel deposit is its neodymium oxide content, for which the 43-101 resource calculation found an in-situ value of indicated and inferred resources totaling 606 million kilograms (kg) of neodymium oxide. GéoMégA is presently working to further define the resource and metallurgical tests on a 600 kg bulk sample from resplitted core before initiating a preliminary economic assessment.

#### **EXPLORATION AND MINING IN QUÉBEC**

Québec's mining industry began to accelerate in the 1920s and has since continued expanding. As of the second half of 2010, Québec was home to 16 active metallic ore mines and 150 exploration firms focused on over 30 minerals. Yet, it has been estimated that only a little more than 40% of Québec's mineral potential is now known (Source: the Gouvernement du Québec 2009).

More than 90% of the **substratum** in Québec is composed of **Precambrian** rock, a formation known for deposits of gold, iron, copper, and nickel. As such, the province is one of the top mineral producers in the world, which includes being an established producer of industrial minerals and construction materials in Canada. Precious metals (primarily gold) and **base metals** are Canada's leading mineral commodities, accounting for approximately 52% and 19%, respectively, of mining expenditures. However, expenditures for **chromite** and REE have increased by approximately 35% (Source: *MiningWeekly.com* July 22, 2011).

#### Favorable Policies Encouraging Mineral Investment in Québec

Mining exploration can be a high-risk industry; however, stable and clear mining laws, such as exist in Québec, are thought to help to mitigate some of the risks common to mining and exploration enterprises in other parts of the world. To this extent, in 2010, Canada was among the top destinations for global mineral exploration, capturing approximately 19% of worldwide exploration spending, up from 16% in 2009 (Source: *MiningWeekly.com* July 22, 2011).

In an October 2010 report, PricewaterhouseCoopers LLP ("PwC") reviewed the top 100 junior mining companies listed on the Toronto Stock Exchange's Venture Exchange (TSX.V). As commodity prices increased and an economic recovery took hold, PwC analysts reported that the junior mining sector was strengthened, as evidenced by a nearly 50% increase in market capitalization for the top 100 junior miners listed on the TSX.V from June 2009 to June 2010. This growth was expected to continue due to expanding demand for metals and minerals in emerging economies and a more favorable appetite for risk among investors. Of these 100 junior companies, 51% were in the exploration phase with only 15% in production. Approximately 56% were primarily focused on gold.



PwC believes that a key factor leading Canada to be recognized as one of the most popular headquarters globally for junior mining companies is the country's mining tax incentives (Source: PwC's *Junior mine - Trends in the TSX-V 2010* October 2010). Canadian mining and exploration enterprises are also able to deduct eligible exploration expenses from federal taxes.

As well, Québec's government offers a refundable tax credit for mineral exploration activities of up to 38.75% of exploration expenses and a non-taxable refundable credit for losses that is equal to 14% of 50% of the lesser of the following: (1) the amount of the annual loss; or (2) the eligible exploration, mineral deposit evaluation, and mine development expenses.

#### Québec Remains One of the Top Jurisdictions for Exploration and Mining Worldwide

Since 1997, the Fraser Institute (a North American research and educational organization) has conducted an annual survey of metal mining and exploration companies to assess how mineral endowments and public policy factors, such as taxation and regulation, affect exploration investment. In the Institute's most recent *2010/2011 Survey of Mining Companies*, which scored 79 international mining jurisdictions (representing every continent except Antarctica) in order of preferred locations for mining investment, Québec was ranked as the fourth best jurisdiction worldwide. Table 4 overviews the categories by which the jurisdictions were measured.

Table 4

# SAMPLE CRITERIA USED TO DETERMINE THE MOST PREFERRED MINING JURISDICTIONS WORLDWIDE: THE POLICY POTENTIAL INDEX

- Government policies including uncertainty over administration, interpretation, and enforcement of regulations
- Environmental regulations
- Regulatory duplication and inconsistencies
- Taxation
- Uncertainty concerning native land claims and protected areas
- Infrastructure and labor issues
- Socioeconomic agreements
- Political stability and trade barriers
- Geological database
- Legal processes that are fair, transparent, non-corrupt, timely, and efficiently administered

#### Sources: the Fraser Institute's 2010/2011 Survey of Mining Companies and Crystal Research Associates, LLC.

Every year since 2001, Québec has been ranked as one of the top 10 mining jurisdictions in the world for encouraging investment, in part due to attractive mining policies. From 2007 to 2010, the province was considered to be the number one locale globally for mining investment. In 2010/2011, only Alberta (Canada), Nevada (U.S.), and Saskatchewan (Canada) were ranked higher. The Fraser Institute noted that the decline of Québec's rankings from first to fourth (out of 79) was likely due to tax increases announced in the spring of 2010 and plans for a revised mining act; however, the province still received the most votes on a subscale of the "most favorable jurisdiction for mining" (Source: 2010/2011 Survey of *Mining Companies*).

#### Plan Nord

In May 2011, Québec launched an economic development plan to add C\$80 billion in new investments for energy, mining, and other projects in the province's northern regions over the next 25 years. Essentially, Québec's government seeks to open a vast area of northern Québec for the development of natural resources, particularly its mining potential as the province has already identified 11 new mining projects expected to attract C\$8.24 billion in investments (Source: *Wall Street Journal* May 10, 2011).



#### Mineral Potential and Exploration Budgets

With regard to evaluating mineral potential, the Fraser Institute asked executives to answer questions about whether a locale's mineral potential, under the current policy environment, encourages exploration. More than 60% of respondents stated that Québec's current mineral potential, assuming current regulations and land use restrictions, encouraged investment.

In 2009, Québec's mineral shipments (metallic and non-metallic) were valued at more than C\$6.2 billion (Source: Géologie Québec's *Report on mineral activities in Québec 2010*). The country as a whole had total mineral production of more than C\$41 billion in 2010, an increase of C\$11 billion over 2009. Exploration and deposit development expenditures were also reported to be increasing. Due to recent optimism in the mining sector, more than three quarters of mining companies surveyed by the Fraser Institute expected to increase exploration budgets in 2011 (Source: *Daily News* March 3, 2011).



#### **Market Demand for Strategic Metals**

Rare earth elements (REE), or rare earth metals, include 17 elements found in the earth's crust. They are not rare in quantity, as REE entail some of the most abundant elements on earth; however, they are often challenging to obtain, as they rarely exist in a pure form. These 17 elements mix with other minerals underground, which can make them difficult to find and extract in economic concentrations.

Despite the potential challenges of procuring these metals, many companies, including GéoMégA, seek to develop an economic REE deposit due to considerable market demand. REE have significant strategic importance in the 21<sup>st</sup> century and are employed in a number of high-tech technologies and clean energies that can further industrial development and national defense. REE and two other metals, niobium and tantalum, have uses in electric vehicles, wind turbines, light-emitting diodes (LEDs), cell phones, fiber optics, lasers, hard disks, and numerous defense applications, including missile technologies. Table 5 lists each of the 17 rare earths and summarizes a few of their many uses today. As summarized on pages 28-29, GéoMégA recently completed a resource calculation at its Montviel possession to identify the type of rare earth mineralization that may be found on the property.

	Table 5
	RARE EARTHS AND A SELECTION OF THEIR COMMON USES
Scandium	Mercury vapor lamps to make light look more like sunlight; athletic equipment, e.g., aluminum baseball bats, bicycle frames, and lacrosse sticks; fuel cells
Yttrium	Produces color in many TV picture tubes; conducts microwaves and acoustic energy; simulates diamond gemstones; strengthens ceramics, glass, aluminum alloys, and magnesium alloys
Lanthanum	Carbon arc lamps for studio and projector lights; batteries for hybrid vehicles, computers, and electronic devices; hydrogen fuel storage cells; cigarette-lighter flints; specialized glass; camera lenses
Cerium	Solar panels; LEDs; catalytic converters; diesel fuels; carbon arc lights; glass polishers; and self-cleaning ovens
Praseodymium	Alloying agent with magnesium to make high-strength metals for aircraft engines; super magnets; signal amplifier in fiber-optic cables; creates the hard glass of welder's goggles
Neodymium	Magnets for computer hard disks, wind and tidal turbines, hybrid and electric cars, industrial motors, elevators, AC units, headphones, and microphones; colors glass; lighter flints; incandescent lights; welder's goggles
Promethium	Produced via uranium fission; luminous paint and nuclear-powered microbatteries; potentially portable X-ray devices
Samarium	Building "smart" missiles; carbon arc lamps; lighter flints; some types of glass; cancer treatment
Europium	Red phosphor in TV sets, computer monitors, fluorescent lamps, and lasers
Gadolinium	Control rods at nuclear power plants; MRIs; improves the workability of iron, chromium, and other metals
Terbium	Solid-state technology from advanced sonar systems to small electronic sensors; fuel cells designed to operate at high temperatures; laser light and green phosphors in TV tubes
Dysprosium	Control rods at nuclear power plants; certain lasers; high-intensity lighting; to raise the coercivity of high-powered permanent magnets, such as those in hybrid vehicles
Holmium	Industrial magnets; nuclear control rods; solid-state lasers; to color cubic zirconia and certain glass
Erbium	Photographic filter; signal amplifier in fiber-optic cables; nuclear control rods; metallic alloys; to color specialized glass and porcelain in sunglasses and cheap jewelry
Thulium	Scientific experimentation; some surgical lasers; portable X-ray technology
Ytterbium	Some solar cells; certain lasers and X-ray devices; stress gauges for earthquakes; doping agent in fiber-optic cables
Lutetium	Calculating the age of meteorites; performing positron emission tomography (PET) scans; catalyst for "cracking" petroleum products at oil refineries; organic LEDs; possible cancer treatments; computer memory
Source: Crystal	Research Associates 11C



#### **Growing Demand for Strategic Metals**

In the 1980s, demand for rare earth metals was approximately 30,000 tonnes annually. Since then, demand has soared to an estimated 120,000 tonnes as of 2010 (Source: *Nature* July 3, 2011). However, global yearly REE production is only approximately 112,000 tonnes, creating a gap in supply that may enable opportunities for new suppliers. Much of the appeal of REEs is due to their key properties—high thermal and electrical conductivity, magnetism, luminosity, catalytic and optical properties—that make these elements critical to the manufacture of nearly all technological gadgets today, including Apple Inc.'s (AAPL-NASDAQ) iPods and iPads.

By 2015, demand for rare earths is forecast to reach 200,000 tonnes annually, continuously outpacing supply over the next several decades (Sources: *Nature* April 6, 2011, and the U.S. Department of Energy [DOE] December 2010). The primary factor driving demand is growth of products and industries that rely on these strategic metals. In its December 2010 report, *Critical Materials Strategy*, the DOE identified four areas in particular that are expected to fuel increasing global REE sales:

- Permanent magnets, as used in wind turbines and electric vehicles;
- Advanced batteries, such as in electric vehicles;
- Thin-film semiconductors for photovoltaic (solar) power systems; and
- Phosphors used in high-efficiency lighting systems.

"Super magnets" made of REE, such as neodymium, are at the core of mobile phones, laptops, and highefficiency appliances, as well as have an instrumental role in the development of green technologies due to their combination of light weight, high magnetic strength, low toxicity, and heat resistance. Because they can be miniaturized in electronic devices, rare earth magnets have enabled innovations like jump drives and DVD drives. As well, today's hybrid and electric vehicles employ motors with neodymium-ironboron (NdFeB) magnets.

#### Green Technologies Capitalize on REE

As adoption of clean energy and other green technologies increases, demand for the REE materials used in their manufacture is also expected to expand. For example, global wind turbine capacity reached 196,630 MW in 2010, representing annual growth of 23.6% (Source: the World Wind Energy Association [WWEA] April 2011). For a 3 MW wind turbine, approximately one tonne of REE is needed. By 2020, the WWEA forecasts possible global wind power of over 1,900,000 MW. Moreover, other forms of clean energy, such as solar panels which commonly employ rare earth metals, are also expanding as industry and governments alike devote resources to the development of cleaner, more efficient fuels and renewable technologies that produce less carbon dioxide and present fewer safety risks.

The need for safer and cleaner energy technologies has been made apparent in recent years due to global events, including BP plc's (BP-NYSE) April 20, 2010, Deepwater Horizon oil spill in the Gulf of Mexico and Japan's nuclear meltdown following an 8.9-magnitude earthquake and 23-foot tsunami in March 2011. In the wake of these disasters and other global market forces, renewable energy has become one of the fastest growing sources of energy in the world (Source: European Bank for Reconstruction and Development).

An estimated 20% of global consumption of the most critical rare earths—dysprosium, neodymium, terbium, europium, and yttrium—come from clean energy technologies, such as wind turbines, electric vehicles, photovoltaic cells, and fluorescent lighting (Source: *Critical Materials Strategy* December 2010). As characterized by the DOE, "critical rare earths" are those that are both important to the clean energy economy and at risk of supply disruptions in the short term. Ultimately, GéoMégA seeks to supply all five critical elements from its mining holdings in Québec. At present, the Company's lead initiative is performing economic assessments at its Montviel REE property, where an NI 43-101 resource calculation has identified considerable neodymium oxide (Nd<sub>2</sub>O<sub>3</sub>) content, among other REEs, and Phase II drilling is ongoing. Details of Montviel's REE potential and drill results to date are provided on pages 20-34.



#### Niobium and Tantalum

While not considered part of the REE family, both niobium and tantalum are additional strategic metals for the 21<sup>st</sup> century. Niobium is used worldwide as an alloying element in steels and superalloys, such as for jet engine components, rocket subassemblies, and heat-resisting and combustion equipment. Likewise, tantalum can be used in the production of superalloys for jet engines and as a metal alloy for making carbide tools for metalworking equipment. It is also used to produce electronic components for portable telephones, computers, and automotive electronics. In 2010, tantalum consumption in the U.S. alone was estimated to increase approximately 150% (Source: U.S. Geological Survey January 2011). Significant niobium content has been identified at GéoMégA's Montviel property that may become a valuable byproduct of the Company's REE mining.

#### Market Opportunities for New REE Deposits

At present, the majority of the world's REE supply comes from China, which is responsible for as much as 97% of global REE production (Source: *Nature* July 3, 2011). At the same time that global demand for these metals is dramatically increasing, China has begun hiking export taxes and setting stringent caps on REE exports. China recently limited REE production amid disputes with Japan, environmental concerns over the safety of mining for such elements, and the country's need for resource conservation. In July 2010, China imposed export quotas on all rare earths that led to a 40% decrease in its REE exports in 2010 versus 2009 (Source: *Critical Materials Strategy*). As described on the accompanying pages, this contraction in supply combined with greater demand for REE has caused significant price increases in the REE market and is leading consumers of REE to reevaluate their supply chains.

As depicted in Figure 3, the U.S. imports approximately 92% of its REE from Chinese mines, though this percentage may decrease going forward with the addition of new suppliers worldwide. Approximately 36% of global rare earth reserves are held by China and roughly 13% are located in the U.S. (Source: *Critical Materials Strategy*).



\* Processing stockpiled ore at Molycorp, Inc.'s Mountain Pass, California, mine led to ~2,150 tonnes of rare earth oxide (REO) in 2009 \*\* CIS = Commonwealth of Independent States, a regional organization of former Soviet Republic countries

Sources: Mother Nature Network's data from the U.S. Geological Survey (USGS) <www.mnn.com> and U.S. Department of Energy.



#### REE Have Become More Valuable

During 2010, the price of many rare earths increased by as much as 300% to 700%, which on occasion significantly impacted the price of the final product (Source: *Critical Materials Strategy*). China has also consolidated 11 REE mines under state control, building strategic reserves of the metals in a move that many analysts believe could further drive price increases (Source: AFP February 28, 2011). However, an influx of new REE producers, such as at Mountain Pass and Mount Weld (described on page 19), could put downward pressure on the price of these metals.

Figure 4 illustrates rising price trends for key REEs, noting that the jumps from 2009 to 2010 are likely attributable to China's export restrictions. Escalating export quotas from the country dating back to the late 1990s have primarily affected the heavy rare earth oxides (HREO)—dysprosium, terbium, and europium—while the latest 2010 export regulations affected total rare earth exports, resulting in higher prices for all REO exports.



Source: the U.S. Department of Energy's Critical Materials Strategy, December 2010, Figure 3-4 (page 45).

Neodymium oxide is one of the key elements identified at GéoMégA's Montviel deposit. With values averaging 2.3 kg/ton based on assays from Phase I drilling, GéoMégA believes that Montviel may represent one of the most significant known neodymium oxide deposits globally. While in 2009, neodymium—an REE that is essential for the manufacture of the advanced magnets used to make high-tech products, such as electric cars and wind turbines—was averaging \$18 to \$20 per kilogram, the element has recently reached \$420 per kilogram today (Source: American Elements, a global manufacture of engineered and advanced materials, August 30, 2011, Press Release).

#### New REE Deposits are Generating Interest

Despite rising demand for REEs, worldwide mine capacity and production have not kept pace, leading to tightened supply and potentially creating a shortage for many key metals in the coming years. China has been the leading REE producer since 1996 due to low production costs and its ability to coproduce iron ore at its principal Bayan Obo REE mine in Inner Mongolia; however, the country's recent manipulation of the REE market has created an opportunity for new suppliers to come on-stream. Thus, as China's output declines, new REE mines are being developed around the world in locations that have not traditionally dominated REE production, including in California, Canada, and Australia (Source: *Nature* July 3, 2011).



#### Mountain Pass Mine, California

The U.S. recently resumed REE production in an attempt to manage supply risk. The country previously exported rare earths from Molycorp Minerals, LLC's (MCP-NYSE) mine in Mountain Pass, California, for 50 years until the mine was closed in 2002 amid economic and environmental pressures. The Mountain Pass mine was reopened in April 2011, and Molycorp has obtained permission to deepen its pit at Mountain Pass by 300 feet over the next 30 years. Mining operations are underway, with a US\$500 million renovation and construction project scheduled to be complete in July 2012 (Source: CNET April 22, 2011). Mountain Pass is estimated to hold one of the largest rare earth deposits outside of China. Production here has the potential to increase global REE supply by 10% annually.

As part of its strategy to resolve REE shortages, the U.S. government is emphasizing diversified global supply chains, creating further opportunities for new REE sources, such as potentially from GéoMégA. In *Critical Materials Strategy* (December 2010), the DOE stated plans to encourage other nations to expedite alternative supplies while performing ore extraction and processing in an environmentally sound manner.

#### Mount Weld Mine, Australia

The second sizeable REE deposit outside of China is Australia's Mount Weld mine, which came online in 2011. Ore from the Mount Weld mine is sent to Malaysia for separation and refining. Lynas Corporation Ltd (LYC-ASX), which operates Mount Weld, approximates that it could hold a total resource of approximately 1.4 million tonnes of REO (Source: Lynas). The company has already secured contracts to supply customers, such as Siemens AG (SI-NYSE), with rare earths, and believes that it could be selling to China within a decade (Source: AFP October 2, 2010).

The activities and operations of both Molycorp and Lynas at the Mountain Pass and Mount Weld mines are further described on page 38 of the Competition section. As well, a number of additional REE deposits could become producing mines before 2015, including Hoidas Lake (Saskatchewan, Canada), Dubbo Zirconia (Australia), Dong Pao (Vietnam), and Nolans Bore (Australia), which are marked in Figure 13 (page 37) of the Competition section and described thereafter.

#### Niobium and Tantalum Production

The major producers of strategic niobium and tantalum products are Brazil, Canada, and Australia. The U.S. does not have an active niobium or tantalum mining industry (Source: U.S. Geological Survey). Table 6 summarizes global niobium production and reserves.

To date, most of the world's niobium deposits have been found in carbonatites, a type of geological rock formation composed of **igneous** rocks containing over 50% by volume of **carbonate** (CO<sub>3</sub>) minerals (Source: U.S. Geological Survey, January 2011). The foremost niobium mine today is the Araxá deposit in Brazil operated by Companhia Brasileira de Metalurgia e Mineração. Araxá entails a carbonatite complex that is being produced through open-pit mining.

Table 6 WORLD PRODUCTION/RESERVES: NIOBIUM				
	Mine Pro	Reserves		
	2009	2010 est.		
U.S.	_	_	_	
Brazil	58,000	58,000	2,900,000	
Canada	4,330	4,400	46,000	
Other countries	530	600	NA	
World total (rounded)	62,900	63,000	2,900,000	
Source: U.S. Geological Survey, Mineral Commodity				

Summaries, January 2011.

Carbonatites, which have hosted many of the world's most prolific known deposits of REE and niobium, are further detailed on pages 21-23. GéoMégA may have a competitive advantage geologically over other REE and niobium deposits because the Montviel property encompasses a 32 km<sup>2</sup> carbonatite complex that the Company believes is one of the largest in North America.



# **Montviel Property**

GéoMégA's wholly owned Montviel property is located within Québec's Abitibi region, which is recognized as a rich mining area. Figure 5 marks the location of Montviel, which is approximately 200 kilometers north of Val-d'Or, a city of over 31,000 people as of Canada's 2006 census. The property receives services and labor from the town of Lebel-sur-Quévillon and is accessible via a network of logging roads built to connect Val d'Or and Chibougamau. Heavy equipment, such as drills, can be mobilized directly to the property via existing road infrastructure. As well, Montviel is close to hydropower and is approximately 50 kilometers from rail lines.

The Montviel property is composed of approximately 216 mining claims, for a combined total area of approximately 12,000 hectares (ha) (~49 mi<sup>2</sup>). As is characteristic of the mineral exploration industry, GéoMégA may be periodically required to incur certain exploration expenditures or fees in order to keep mining claims in good standing. To the Company's knowledge, Montviel is not presently subject to any environmental liabilities or litigation affecting the land, and the only permit required for exploration is a forestry management permit. In September 2011, GéoMégA commenced its second drill campaign at the property.



Source: Geomega Resources Inc.



#### Québec's Abitibi Region

The Montviel property is located on a part of the continental crust known as the Superior province, which lies in the heart of the Canadian Shield (a plateau occupying more than two-fifths of the land area of Canada). Within the Superior province, the property is situated between the Opatica and Abitibi sub-provinces. This region is known for the Abitibi greenstone belt (depicted in Figure 6), one of the world's richest mining areas where past production is thought to have exceeded 170 million ounces (oz) of gold as well as considerable quantities of copper, zinc, and silver, among other metals.



Sources: Wikimedia Commons, Yorbeau Resources, Inc., and Crystal Research Associates, LLC.

#### CARBONATITE COMPLEX

GéoMégA's primary motivation for accelerating work at Montviel is to explore the property's 32 km<sup>2</sup> carbonatite complex. Carbonatites are a type of geological rock formation composed of igneous (volcanic) rocks containing over 50% by volume of carbonate minerals. Carbonatites potentially contain a larger concentration of REE than any other rock type (Source: *Lithos* November 2008). The world's most prolific known deposits of REE and niobium—Bayan Obo (Inner Mongolia, China), Mountain Pass (California), Mount Weld (Australia), and the Araxá niobium mine (Brazil)—are all hosted in carbonatites. Moreover, GéoMégA's research suggests that roughly one in five carbonatites contains an economic deposit of ore.

To GéoMégA's knowledge, the carbonatite complex at Montviel is one of the largest in North America. The size of the carbonatite combined with Montviel's road accessibility helped fuel the Company's decision of focusing its initial exploration efforts on this project.

Globally, mineralization in carbonatite complexes such as Montviel includes the following (continued onto page 22):

- niobium (Nb);
- rare earth elements (REE);
- phosphates (P<sub>2</sub>O<sub>5</sub>);
- iron (Fe);
- nickel (Ni);
- vermiculite;



- copper (Cu);
- gold (Au); and
- platinum group elements (PGE).

Montviel's "Core Zone" base case resource estimate, using a TREO cut-off grade of 1.00%, hosts an indicated mineral resource of *183,900,000 tonnes grading 1.45% TREO* in addition to an inferred mineral resource of *66,700,000 tonnes grading 1.46% TREO*. The feasibility and economic potential of extracting any identified elements has not yet been determined.

Two other carbonate complexes are also located in Québec, for which niobium (Nb<sub>2</sub>O<sub>5</sub>) and tantalum (Ta<sub>2</sub>O<sub>5</sub>) resource measurements have been completed, as summarized in Table 7.

Table 7 OTHER CARBONATITE COMPLEXES IN QUÉBEC: RESOURCES				
Name	Resource Type	Tonnage (million tonnes) and Grade		
IAMGOLD Corp.'s Niobec Niobium Mine in St-Honoré, Québec	Proven and probable reserves Measured and indicated resource Inferred resource	32 MT @ 0.56% Nb <sub>2</sub> O <sub>5</sub> 32 MT @ 0.57% Nb <sub>2</sub> O <sub>5</sub> 37.9 MT @ 0.58% Nb <sub>2</sub> O <sub>5</sub>		
Crevier deposit in Crevier Township, Québec, jointly owned by MDN Inc. and IAMGOLD	Measured and indicated resource Inferred resource	25.4 MT @ 0.196% Nb <sub>2</sub> O <sub>5</sub> , 234 ppm Ta <sub>2</sub> O <sub>5</sub> 15.4 MT @ 0.17% Nb <sub>2</sub> O <sub>5</sub> , 252 ppm Ta <sub>2</sub> O <sub>5</sub>		

Sources: Geomega's Montviel Property: Abitibi area, Montviel township, NTS 32/F15, 32F/16 Technical Report, May 10, 2010, and MDN Inc.'s Updated Mineral Resource (43-101) June 2010 <<a href="https://www.mdn-mines.com">www.mdn-mines.com</a>>.

Montviel's 32 km<sup>2</sup> carbonatite complex (also called an "**alkaline intrusion**") includes a 3.1 km<sup>2</sup> carbonate Core Zone composed of carbonates and **silicocarbonates**. All mineralization identified through historical drilling (overviewed on pages 23-25) has been observed within the carbonate core. Geologists also theorize that the **residual** soil above the core may show mineralization as well.

Figure 7 (page 23) illustrates Montviel's claims, with a circle around the Core Zone and its drill holes.



Figure 7 Geomega Resources Inc. MONTVIEL CLAIMS OUTLINE



Source: Geomega Resources Inc.

#### Advantages of Developing a Carbonatite Deposit

GéoMégA estimates that approximately 90% of all REE historically produced have come out of carbonatites similar to Montviel. In addition to validating the potential of this geology, a history of mining in carbonatites has led to established processes for recovering the mineralization. As such, the Company believes that extracting minerals from carbonatites can be performed on an economic scale, as has been previously proven at the Mountain Pass and Bayan Obo mines.

#### HISTORICAL BASIS FOR PRESENT EXPLORATION

This section overviews the exploration work completed by previous owners of Montviel's mining claims. GéoMégA believes that past development on this property has not provided sufficient information on the potential of Montviel's carbonatite complex as it did not target the correct minerals (e.g., base metals or gold instead of REE) and geological anomalies. As well, assays for rare earth mineralization were not conducted throughout the entire drill cores. In the Company's view, the most reliable historical drilling was conducted in 2002 by Nomans Resources (overviewed on page 24).

The Montviel property was recorded by the Geological Survey of Canada (GSC) in the early 20<sup>th</sup> century, but it was not explored by a mining corporation until the late 1950s. While geophysical surveys revealed several anomalies and three drill holes totaling 588 meters intersected carbonates, no assays were reported and the property remained dormant until the 1970s.



In 1973, Duval International Corp. initiated exploration activities, including an airborne survey, ground work, and re-assaying the existing drill core. These assays showed values of up to 0.27% niobium oxide  $(Nb_2O_5)$  over a three-meter core length. Subsequently, Duval formed a joint venture and drilled 20 holes for over 2,580 meters at Montviel, two of which did not hit **bedrock** due to thick **overburden** filled with large boulders. The overburden entails the top layers of rock and soil that are often cleared away before mining. The best value reported from this drill program was 0.68% Nb<sub>2</sub>O<sub>5</sub> over 1.5 meters.

#### 2002 Drilling by Nomans Resources

Very little significant exploration was performed at Montviel from the 1980s until 2002, at which time Nomans Resources resumed ground surveying and drilled eight shallow holes for 1,245 meters. As a result of the area's overburden, which was up to 78 meters thick in places, three of these drill holes did not reach bedrock. However, the remaining holes intersected Nb<sub>2</sub>O<sub>5</sub>, phosphate (P<sub>2</sub>O<sub>5</sub>), and REE mineralization. Key values included 0.41% Nb<sub>2</sub>O<sub>5</sub> over seven meters, 6.35% P<sub>2</sub>O<sub>5</sub> over 107 meters, and 1.1% REE over 10.8 meters. These results were verified in February 2010 by Mr. Donald Théberge, Eng., MBA, who prepared a National Instrument (NI) 43-101-compliant technical report on Montviel in May 2010. Mr. Théberge was able to examine the drill core from Nomans' drilling, as illustrated in Figures 8 and 9. GéoMégA has directed its efforts in part based on Nomans' drill results from 2002, which the Company interpreted as revealing considerable potential for strategic mineralization.



Source: Montviel Property: Abitibi area, Montviel township, NTS 32/F15, 32F/16 Technical Report, May 10, 2010.

Figure 9 SAMPLE DRILL CORE (EXTRACTED DURING NOMANS' DRILLING AT MONTVIEL)



Source: Montviel Property: Abitibi area, Montviel township, NTS 32/F15, 32F/16 Technical Report, May 10, 2010.

Because Nomans drilled shallow holes and the carbonate core covers a larger area than was drilled, GéoMégA believed that there were considerable possibilities for additional work, as evidenced by the Company's Phase I drill campaign, detailed on pages 27-33.



In 2002, NioGold Mining Corp. acquired the property from Nomans and followed up with a series of exploration activities. NioGold completed airborne electromagnetic, magnetic, and **radiometric surveys**, limited geological mapping, prospecting, and an orientation **Mobile Metal Ion (MMI) soil survey** before optioning the property to GéoMégA in 2010. The Company believes that NioGold sought to option these properties because it was focused on gold production rather than REE deposits. Systematic mapping in 2005 clearly established the outline of the alkaline intrusion (carbonatite complex). Ultimately, results of this work included marking the carbonatite area and delineating four unstudied anomalous zones.

Altogether, prior drilling in the vicinity of Montviel (before the property's purchase by GéoMégA) entailed 34 holes for a total of roughly 4,420 meters, of which eight did not reach bedrock. Table 8 summarizes key dates in the property's development history, with a more complete description of past exploration activities provided in Table 17 (page 50) in the Appendix.

	Table 8
	Geomega Resources Inc.
	BRIEF OVERVIEW OF THE TYPE OF HISTORICAL WORK PERFORMED AT MONTVIEL
1895-1949	Visits from the Geological Survey of Canada (GSC) and the Québec Bureau of Mines
1949	Mapped on behalf of the Québec Bureau of Mines
1958	Jowsey Mining Co. begins an exploration campaign; three holes drilled
1973	Duval International Corp. initiates exploration
1977-1979	Duval's joint venture drills 20 holes
1979	A geological assessment report is prepared for Shell Canada Ltd.
1988	Corona Corp. stakes 55 claims over the center of the Montviel carbonatite and searches for the core previously drilled by Duval
2002	Nomans Resources surveys and drills eight holes
2002	NioGold options the property from Nomans and undertakes airborne electromagnetic, magnetic, and radiometric surveys, geological mapping, prospecting, and a soil survey
2010	GéoMégA options the property from NioGold
2010-2011	GéoMégA acquires 100% ownership of the property and completes 20 diamond drill holes (DDHs)
Source: Mont	viel Property: Abitibi area Montviel township NTS 32/E15_32E/16 Technical Report_May 10_2010

For greater information on the Montviel property and historical assays, consult the reference technical report, "Montviel Property: Abitibi area, Montviel township, NTS 32/F15, 32F/16," dated May 10, 2010, amended August 17, 2010. This report was prepared by Mr. Donald Théberge, Eng., MBA, in accordance with NI 43-101, which governs standards of disclosure for mineral projects in Canada. It is available on Canada's System for Electronic Document Analysis and Retrieval (SEDAR) at <u>www.sedar.com</u>.



#### MONTVIEL AND PUMP LAKE AGREEMENTS WITH NIOGOLD MINING CORP.

#### Initial Options for up to 75% Interest in Both Properties

In May 2010, GéoMégA entered into an agreement with NioGold Mining Corp. for an interest in NioGold's Montviel and Pump Lake properties. The Pump Lake property is further described on page 36. The agreement required GéoMégA to make a cash payment of C\$100,000 as well as undertake an initial public offering (IPO) and issue to NioGold 1.5 million shares over a three-year period. Lastly, GéoMégA agreed to incur a minimum of C\$3.35 million in exploration expenditures on the properties over a four-year period.

GéoMégA finalized its arrangement with NioGold into a definitive Option and Joint Venture Agreement dated September 24, 2010. Per this transaction and after its IPO in September 2010, GéoMégA acquired the right to earn up to a 75% interest in both Montviel and Pump Lake on the assumption that it could finance exploration expenditures of C\$3.35 million and issue NioGold 1.5 million Common Shares within the timelines specified in the agreement. As well, GéoMégA retained an option for the future acquisition of the remaining 25% interest in these properties, which could be executed within seven years at a price of C\$9 million for Montviel and C\$7.5 million for Pump Lake, or a combined payment of C\$13.5 million for both. Additional stipulations, such as the possibility of negotiating a combination of cash and Treasury Common Shares for the 25% interests, were also outlined in this agreement. Further, the agreement entailed a 2% Net Output Return royalty for NioGold with a 1% right for GéoMégA.

#### Amended Agreement for 100% Ownership of the Montviel Property

In May 2011, GéoMégA amended its agreement with NioGold in order to acquire 100% ownership of the Montviel property. Under the revised agreement, GéoMégA issued 1.525 million Common Shares to NioGold, and NioGold retained a 2% Net Output Return royalty on Montviel with no buyback right for GéoMégA. Additional terms of the amendment require GéoMégA to pay C\$4.5 million to NioGold in cash or Common Shares (NioGold's preference) as an advance on NioGold's royalty once GéoMégA secures 70% of the capital requirements for commercial production as specified in a feasibility study for the Montviel property.

GéoMégA continues to hold an option to acquire up to 100% of the Pump Lake property. In order to exercise this option, the Company must incur C\$400,000 in exploration expenditures prior to September 30, 2014. After reaching this figure, GéoMégA can either abandon the property or form a joint venture with NioGold, at which point GéoMégA would hold 75% of Pump Lake per the agreement. The Company can claim the remaining 25% of the property on or before August 31, 2017, in exchange for C\$7.5 million in cash or Common Shares to NioGold and granting NioGold a 1% Net Output Return royalty, of which GéoMégA may buy back 0.5% for C\$500,000. As well, GéoMégA would be expected to reimburse NioGold for contributions to the joint venture, together with a non-cumulative 20% premium payable in cash or Common Shares at the election of NioGold.



# GéoMégA's Phase I Drill Program at Montviel

In terms of REE, there are five elements in particular deemed critical for 21<sup>st</sup> century technologies yet forecasted at a supply deficit—neodymium, dysprosium, terbium, europium, and yttrium (Source: U.S. Department of Energy's *Critical Materials Strategy* December 2010). GéoMégA seeks to identify economic quantities of these in addition to other clean technology metals.

GéoMégA initiated a 10,000-meter Phase I diamond drill program at Montviel in December 2010 in order to explore the Montviel carbonatite complex for REE and niobium. Diamond drilling entails the use of a diamond-studded drill bit to cut a circular, columnar section of rock from hundreds of meters below ground, called the drill core. This program was focused on section drilling through the 3.1 km<sup>2</sup> core of the property's ferrocarbonatite zone as well as testing other satellite targets that had been previously outlined from geophysical and geochemical surveys.

From December 2010 through April 2011, GéoMégA drilled 20 holes at Montviel (18 into the Core Zone). The program ended in April in time for spring breakup, which is a seasonal period of thaw and ice melt at northern latitudes. Figure 10 shows photos taken during drilling at Montviel.



Source: Geomega Resources Inc.

#### Property Accessibility

Montviel is characterized by long, cold winters and short, cool summers, with a period of thawing in early April ("spring breakup") and freezing in November ("freeze-up"). There is no **permafrost** and exploration work can typically be conducted year round. GéoMégA believes that accessibility is a differentiating factor distinguishing Montviel from other REE projects, which are not located as far south as Montviel. Thus, other properties may not be accessible year round. As well, the property is divided by a road and the Company reports that it is able to drive directly to drill holes.

#### Exploration Status: Metallurgy Ongoing and Phase II Drilling Begun

Having completed the first stage of drilling and having released the initial 43-101 resource calculation, GéoMégA's focus is now on project economics and Phase II definition and exploration drilling. As summarized in Table 9 (page 28), the Company is presently working on metallurgy, which is key to any REE production, scheduled for completion in the first quarter 2012. SGS Geostat Ltd. (www.met.sgs.com/sgs-geostat), a global metallurgy provider, is performing the resource estimate. SGS Geostat has over 25 years of experience supplying the mining industry with computer-assisted ore reserve estimation services using geostatistical techniques (Source: SGS SA [SGSN-VTX]). As well, in August 2011, GéoMégA sent two 300-kilogram representative samples from re-split core to the SGS Canada laboratory in Lakefield, Ontario, for bench-scale metallurgical testing. SGS is presently performing mineral processing tests.



	Table 9					
Geomega Resources Inc.						
	EXPLORATION CALENDAR					
April 2011	Phase I drilling totaling 10,065 meters is completed					
Spring 2011	Initiate environmental baseline study					
Summer 2011	Commenced Phase II drilling					
Summer 2011 - First Quarter 2012	Mineralogical and metallurgical tests					
September 2011	Received initial NI 43-101 resource calculation					
Second Quarter 2012	Preliminary economic assessment study					
Source: Geomega Resources Inc.						

In August 2011, a preliminary mineralogical evaluation by SGS confirmed that Montviel's mineralized carbonatite mainly contains REE-bearing minerals of the Bastnasite-Synsychite family, which are amenable to concentration and separation by recognized metallurgical processes. As well, the two main REE minerals are huanghoite and cebaite, which the Company reports are also two of the main minerals at China's Bayan Obo Mine. Once metallurgy is complete, GéoMégA intends to proceed with economic assessments and a feasibility study, which could require 12 months during which time an environmental study is ongoing. Phase II definition and exploration drilling began in September 2011 (detailed on page 34).

#### Phase I Drill Results

In August 2011, the Company received the final assay results for its Phase I drill campaign. Assays were performed by ALS Global (<u>www.alsglobal.com</u>) and GéoMégA's drill campaigns were supervised by qualified geologist, Mrs. Kateri Marchand, M.Sc., P. Geo.

GéoMégA observed significant REE potential (Total Rare Earth Oxides plus yttrium oxide [TREO +  $Y_2O_3$ ]) as well as a developing phosphate ( $P_2O_5$ ) and niobium ( $Nb_2O_5$ ) potential that may add value to Montviel. Per SGS's preliminary evaluation in August 2011, the **apatite** in the phosphate zone may be recoverable for use in phosphate fertilizer manufacturing. It is estimated the phosphate zone represents 14% of the total volume of the mineralized ore body. Among the key elements identified at the deposit is neodymium oxide ( $Nd_2O_3$ ), for which the Company reports that values have averaged 2.3 kg/ton. Based on assays to date, GéoMégA believes that Montviel may represent one of the most significant known neodymium oxide deposits globally. If shown to be economic, GéoMégA expects that it could develop the neodymium oxide potential quickly, given the property's proximity to local infrastructure (e.g., road access, rail service, and hydroelectric amenities) although there is no mining infrastructure currently on-site.

#### NI 43-101-Compliant Resource Calculation

An initial NI 43-101-compliant resource calculation has been recently completed for the Montviel property. The mineral resources were estimated using analytical results from 19 diamond drill holes totaling 8,856 meters completed by GéoMégA at the Montviel carbonatite in 2010 and 2011. The mineral resource estimate has been completed using three-dimensional wireframe modeling of geological contacts followed by block model interpolation methodology. The wireframe covers approximately 625 meters in the east-west direction, 725 meters in the north-south direction, and reaches a maximal depth of 625 meters below surface.

As announced by GéoMégA on September 29, 2011, Montviel's "Core Zone" base case resource estimate, using a total rare earth oxide (TREO) cut-off grade of 1.00%, hosts an indicated mineral resource of *183,900,000 tonnes grading 1.45% TREO* in addition to an inferred mineral resource of *66,700,000 tonnes grading 1.46% TREO*. Table 10 (page 29) shows highlights at the base case 1.00% TREO cut-off grade.



Values displayed in Table 10 are "in-situ" and thus intended for illustrative purposes only. No mining scenario, milling, or metallurgical recovery has been estimated or applied to these values, and therefore they do not have demonstrated economic viability.

Geomega Resources Inc.									
	HIGHLIGHTS AT THE BASE CASE 1.00% TREO CUT-OFF GRADE								
Cut-off Grade	Cut-off Grade Resource Tonnes Average Bulk TREO (%) LREO (%) IREO (%) HREO (%) Y <sub>2</sub> O <sub>3</sub> Nb <sub>2</sub> O								Nb <sub>2</sub> O <sub>5</sub>
TREO (%)	Category		Density (t/m <sup>3</sup> )					(%)	(%)
0.85	Indicated	196,200,000	2.91	1.420	1.372	0.037	0.004	0.01	0.123
1.00	Indicated	183,900,000	2.92	1.453	1.404	0.037	0.004	0.01	0.126
1.25	Indicated	136,000,000	2.92	1.562	1.511	0.039	0.004	0.01	0.135
1.50	Indicated	69,200,000	2.92	1.744	1.688	0.043	0.005	0.01	0.158

Geomega Resources Inc.	
HIGHLIGHTS AT THE BASE CASE 1.00% TREO CUT-OFF	GRADE

Table 10

Cut-off Grade TREO (%)	Resource Category	Tonnes	Average Bulk Density (t/m <sup>3</sup> )	TREO (%)	LREO (%)	IREO (%)	HREO (%)	Y <sub>2</sub> O <sub>3</sub> (%)	Nb <sub>2</sub> O <sub>5</sub> (%)
0.85	Inferred	72,600,000	2.89	1.417	1.366	0.038	0.005	0.01	0.136
1.00	Inferred	66,700,000	2.89	1.460	1.408	0.039	0.005	0.01	0.140
1.25	Inferred	48,100,000	2.88	1.587	1.533	0.041	0.005	0.01	0.153
1.50	Inferred	26,800,000	2.87	1.755	1.696	0.045	0.005	0.01	0.177

Category	Resource Tonnes	Nd <sub>2</sub> O <sub>3</sub> (Kg in-situ)	Pr <sub>2</sub> O <sub>3</sub> (Kg in-situ)	Dy₂O₃ (Kg in-situ)	Eu <sub>2</sub> O <sub>3</sub> (Kg in-situ)	Y <sub>2</sub> O <sub>3</sub> (Kg in-situ)	Nb <sub>2</sub> O <sub>5</sub> (Kg in-situ)
Indicated	183,900,000	446,000,000	139,000,000	4,190,000	9,000,000	13,000,000	231,000,000
Inferred	66,700,000	160,000,000	50,000,000	1,650,000	3,000,000	5,000,000	94,000,000

Source: Geomega Resources Inc.

The mineralization remains open to the west, south, and at depth. The grade increases to the west with diamond drill hole MVL-11-18 returning 2.15% TREO over 250.65 meters from 133.55 meters between sections 5+00 west and 7+00 west. Phase II drilling is currently focusing on the definition of high-grade near surface resource with step out and infill holes west of section 5+00 west.

In addition to the results presented in Table 10, GéoMégA has filed an NI 43-101 technical report titled Montviel Core Zone REE Mineral Resource Estimate Technical Report, Québec dated September 29, 2011. The report is available on SEDAR (www.sedar.com) and the Company's website.

Table 11 (pages 30-31) summarizes significant rare earth values for each of the 20 drill holes, emphasizing TREO and neodymium oxide content. Table 11 also includes two exploration holes outside of the Core Zone. Following, Table 12 (pages 31-32) highlights the niobium and phosphate values of each hole, as this mineralization could ultimately be produced as valuable byproducts for GéoMégA. Figures 11 and 12 (page 33) depict the Montviel surface plan as well as illustrate drill core obtained during Phase I drilling.

Table 11
Geomega Resources Inc.
SIGNIFICANT RARE EARTHS ASSAY RESULTS:
2010-2011 MONTVIEL PHASE I DRILLING PROGRAM

								Core			Ratio
Drill Hole	Dip°	Az°	UTM	Coord.	Drill	From	То	Length*	TREO**	Nd <sub>2</sub> O <sub>3</sub> ***	M-HREO
NO.	- TP		Easting	Northing	Section	(m)	(m)	(m)	(%)	(%)	TREO
					Drilled in the	e Core Zo	one				
MVL-10-01	60	220	200404	5500000	2+00 144	21	501	480	1.24	0.220	3.5%
incl.	-00	აა∠	390184	0020388	∠+00 W	266.6	306	39.4	2.03	0.321	
MVL-10-03	55	300	380033	5520226	5+00 \//	21.3	534	512.7	1.38	0.236	4.2%
incl.	-00	520	J03332	5520220	5+00 W	132	183.8	51.8	2.28	0.340	
MVL-11-04A	-53	327	390090	5520550	2+00 W	70.4	236.35	165.95	1.17	0.209	3.8%
MVL-11-05	-67	326	390090	5520549	2+00 W	33.5	429	395.5	1.19	0.190	3.7%
incl.						299.45	361.5	62.05	2.10	0.307	
MVL-11-06	-55	323	390005	5520114	5+00 W	33.55	519	485.45	1.44	0.231	3.9%◀
Incl.						368.3	479.45	111.15	2.09	0.296	
MVL-11-07	-55	330	390013	5520280	4+00 W	29.4	519	489.6	1.29	0.231	4.0%
					-	151.9	193.3	41.4	1.91	0.318	-
MVL-11-08	-55	320	390111	5520327	3+00 W	20.1	501	480.9	1.38	0.229	2.5%◀
						348.6	421.7	/3.1	2.00	0.315	
MVL-11-09	-54	327	389762	5520062	7+00 W	27	154.55	127.55	1.51	0.216	3.6%
						54.2	/1.45	17.25	2.00	0.255	0 70/ /
MVL-11-10	-55	324	390146	5520146	3+50 W	22.4	567	544.6	1.41	0.246	3.7%◀
						421.5	513	91.5	2.00	0.305	1 60/ -
IVIVL-11-11	-54	327	390311	5520277	1+00 W	329.8 579	/ ۵۲ ۲۰۶	257.2	1.04 1.69	0.208	4.0%◀
						010	100	11	1.08	0.310	
IVIVL-11-12	60	220	300.200	5520445	1+00 \4/	9.10 4 122	400.1 211 7	400.8 10.2	1.13	0.194	4.5%
inci.	-00	JJU	<u> </u>	5520415	ITUU VV	305 0	344.1 105 0	10.3	2.00	0.3/3	_
M/L 11 10A						18 1	950 950	222 E 9.9	2.10 0 02	0.413	5.0%
incl	-55	333	390232	5520512	1+00 W	164 45	202	200.0 60 7	0.92 1 32	0.100 A 272	J.U /0
MVI _11 14						20 5	220.10 <u>/</u> 52	422 5	1.52	0.212	3 0% -
incl	-53	330	390050	5520419	3+00 W	29.0 404 G	400 ⊿52	-120.0 ∆Q /	1.20 2 ∩Ω	0.200 0.200	J.U /0 ◄
						28 35	-+JJ 540	520 65	2.00 1 51	0.007	3.0% ◄
incl	-83	302	390112	5520326	3+00 \//	244 3	270 7	26.05	2 16	0.270	
incl.	00	502	550115	0020020	5.00 00	467 25	482 1	20. <del>4</del> 48 7	2.10	0.325	_
MN/I _ 11 16						27.5	621	593.5	1.31	0.241	3.6%
incl.	-55	330	390073	5520166	4+00 W	413 1	428	14.9	2.19	0.369	
incl.		200	2000/0	0020100		497.5	517.7	20.2	1.94	0.267	
MVI -11-18						28.55	384.2	355.65	1.92	0.299	3.0%
incl.	-54	287	389942	5520211	5+00 W	133.55	384.2	250.65	2.15	0.320	
MVL-11-19	-55	325	389876	5520335	5+00 W	50.75	334.75	284	1.40	0.239	2.8%
MVL-11-20						22	507	485	1.02	0.171	4.4%
incl.	-65	328	390035	5520042	5+00 W	36.05	53.2	17.15	2.14	0.303	_

\*True widths represent 70% to 100% of core lengths

\*\*\*0.1% = 1 kg/ton

= Ended in mineralization

\*\*TREO = Total Rare Earth Oxides + Y<sub>2</sub>O<sub>3</sub> (cerium, lanthanum, neodymium, and praseodymium are the most abundant rare earths) Source: Geomega Resources Inc.



# Table 11 (continued) Geomega Resources Inc. SIGNIFICANT RARE EARTHS ASSAY RESULTS: 2010-2011 MONTVIEL PHASE I DRILLING PROGRAM

								Core			Ratio		
Drill Hole	Drill Hole No. Dip° Az	Dip° Az °	。UTM Coord.		Drill	From	То	Length*	TREO**	Nd <sub>2</sub> O <sub>3</sub> ***	M-HREO		
No.			Easting	Northing	Section	(m)	(m)	(m)	(%)	(%)	TREO		
					Explorati	on Holes							
MVL-10-02	-46	340	389166	5519482		42	284.9	242.9	0.30	0.035	11.4%		
MVL-11-17	FC	220	222	220	200405	5520200		329.35	388.3	58.95	0.93	0.117	6.8%
incl.	-50	330	390495	5520390		360	388.3	28.3	1.34	0.157			
*True widths represent 70% to 100% of core lengths ***0.1% = 1 kg/ton <													
**TREO = Tota	al Rare	Earth	Oxides + $Y_2$	O3 (cerium, la	anthanum, n	eodymium,	and pras	eodymium	are the mo	st abundant	rare earths)		

Source: Geomega Resources Inc.

Table 12
Geomega Resources Inc.
SIGNIFICANT NIOBIUM AND PHOSPHATE ASSAY RESULTS:
2010-2011 MONTVIEL PHASE I DRILLING PROGRAM

			Niobium			Phosphate			
Drill Hole No.	From	То	Core Length	Nb <sub>2</sub> O <sub>5</sub>	From	То	Core Length	$P_2O_5$	
	(m)	(m)	(m)	(%)	(m)	(m)	(m)	(%)	
MVL-10-01	280.95	306	25.05	0.251					
incl.	424.5	457.55	33.05	0.163					
MVL-10-03	246	513	267	0.210	21.2	70.7	59 A	5 41	
incl.	475.35	510	34.65	0.354	21.5	19.1	56.4	5.41	
MVL-11-04a	203.65	241.95	38.3	0.179					
MVL-11-05	243	268.3	25.3	0.256					
incl.	310.4	412.5	102.1	0.230					
Incl.	338.95	361.5	22.55	0.450					
	318	428.8	108.8	0.208					
MVL-11-06	398.4	482.55	84.15	0.241	35.0	206.1	171.1	6.58	
IIICI.	398.4	427.5	29.1	0.401					
MVL-11-07	324.9	395	70.1	0.246	20.4	72.05	42.95	F 21	
incl.	501.1	519	17.9	0.538	29.4	73.23	43.03	5.51	
MVL-11-08	351	377.8	26.8	0.285	90 G	01 5	10.0	9 57	
incl.	455.4	501	45.6	0.132	00.0	91.5	10.9	0.57	
MVL-11-09	129.9	169.25	39.35	0.227	460.9	478	17.1	18.4	
MVL-11-10	186.4	327.95	141.55	0.180					
incl.	224.4	306	81.6	0.224	22.4	197.3	174.9	7.35	
incl.	403.4	439.35	35.95	0.188					
MVL-11-11	292	455.7	163.7	0.152	34.6	129.4	94.8	4.27	
incl.	393	455.7	62.7	0.233	178.9	205.4	26.5	5.33	
Source: Geomega	a Resources	Inc.							

# Table 12 (continued) Geomega Resources Inc. SIGNIFICANT NIOBIUM AND PHOSPHATE ASSAY RESULTS: 2010-2011 MONTVIEL PHASE I DRILLING PROGRAM

	Niobium				Phosphate			
Drill Hole No.	From	То	Core Length	Nb <sub>2</sub> O <sub>5</sub>	From	То	Core Length	P <sub>2</sub> O <sub>5</sub>
	(m)	(m)	(m)	(%)	(m)	(m)	(m)	(%)
MVL-11-12	229.5	493.6	264.1	0.179				
incl.	304.5	344.7	40.2	0.162				
incl.	382.1	487.35	105.25	0.260				
incl.	458.15	468.7	10.55	0.511				
	129	147.35	18.35	0.172				
MVL-11-13A	166.9	237.75	70.85	0.180				
incl.	175.8	199.5	23.7	0.290				
incl.	175.8	189.55	13.75	0.414				
IIICI.	219.55	237.75	18.2	0.199				
	150.2	165.7	15.5	0.121				
MVL-11-14	237.55	298.9	61.35	0.153	106	162.8	56.8	5.24
incl.	338.45	429.65	91.2	0.206				
	373.3	416.75	43.45	0.285				
MVL-11-15	171	549	378	0.151				
incl.	243	276.8	33.8	0.202	91.05	119.3	28.25	7.05
incl.	477.2	549	71.8	0.242				
MVL-11-16	60.9	434.95	374.05	0.131				
incl.	317.45	37.7	30.25	0.201	27 5	13/ 2	106.7	6.09
incl.	366.7	434.95	68.25	0.210	21.5	104.2	100.7	0.09
incl.	413.1	434.95	21.85	0.344				
MVL-11-17	272.5	282	9.5	0.181	329.35	388.3	58.95	5.40
MVL-11-18	117.95	430.6	312.65	0.270				
incl.	205.35	390.3	184.95	0.346	28 55	80.3	60.75	6.05
incl.	237.65	270.8	33.15	0.606	20.00	03.5	00.75	0.05
incl.	346	385.65	39.65	0.441				
	116.15	144.4	28.25	0.196				
MVL-11-19	177.7	205.1	27.4	0.194				
incl.	267.9	419	151.1	0.138				
	267.9	282	14.1	0.269				
	46.5	77.8	31.3	0.126				
MV/L_11_20	112.25	134.4	22.15	0.151	164.35	272.05	107.7	4.42
	316.55	329	12.45	0.147				
	439.65	505.85	66.2	0.151				
Source: Geomea	a Resources	Inc						



Figure 11 illustrates the Montviel surface plan.



Source: Geomega Resources Inc.

Figure 12 illustrates some of the drill core taken from drill hole MVL-10-03.

Figure 12 Geomega Resources Inc. DRILL CORE FROM HOLE MVL-11-03



Source: Geomega Resources Inc.



# GéoMégA's Phase II Drill Program at Montviel

#### Phase II Definition and Exploration Drilling

As part of its intensive advanced exploration program on the Montviel property, GéoMégA launched a second stage of drilling at Montviel in September 2011. During Phase II, the Company plans to define and explore further the Core Zone of Montviel's carbonatite complex as well as a number of satellite targets. The Company released initial results from Phase II drilling during December 2011, which confirmed expectations of defining a significant NI 43-101 measured resource with an average grade closer to 2% TREO. As reported, highlights of the drilling included identifying 2% TREO over 327 meters and 0.75% niobium (Nb<sub>2</sub>O<sub>5</sub>) over 32.9 meters in hole MVL-11-26. Notably, the Company announced on December 15, 2011, that Nb<sub>2</sub>O<sub>5</sub> was valued at approximately US63/kg as of December 13, 2011.

#### Core Zone

At present, the Phase II diamond drill program is targeted to Montviel's Core Zone. The Company is using two rigs to complete a drill pattern of at least 100 meters by 100 meters in the Core Zone. Definition and exploration drilling aims to accomplish the following: (1) exploring the southwest Core Zone; (2) drilling step-out holes to confirm Core Zone boundaries; and (3) deepening a prior drill hole, MVL-11-15.

The Phase II program is initially focusing on the southwest portion of the mineralized zone (as identified in Phase I drilling). Previous favorable results in this area have included 2.15% TREO over more than 250 meters in drill hole MVL-11-18.

As well, GéoMégA intends to drill step-out holes to delineate the limits of the Core Zone. The zone is also open to the northeast, although an airborne magnetic survey has previously suggested that this area could be offset by a fault.

Lastly, in Phase I drilling, DDH MVL-11-15 ended in mineralization at a depth of 549 meters. GéoMégA plans to deepen this hole in an attempt to define the ultimate depth of the REE-enriched ferrocarbonatite.

#### Satellite Targets

GéoMégA intends to use one of the two drill rigs to test over half a dozen satellite targets at Montviel. Satellite areas have been identified by previous exploration work. Drilling is planned for exploring the southwest extension of a polygenetic breccia (a type of sedimentary rock composed of sharp-angled fragments cemented together) that roughly defines the northwest contact between the REE-rich ferrocarbonatite and the silicocarbonatite. Although TREO content of this breccia is lower than in the Core Zone, it has exhibited an enrichment of mid to heavy rare earth oxides (M-HREO) toward the west. Prior drill hole MVL-11-09 intersected a M-HREO/TREO ratio of 28% over 17 meters, in comparison to M-HREO/TREO ratios of between 4% and 6% in a drill hole to the northeast. MVL-11-09 also averaged 210 ppm of dysprosium oxide.

In August 2011, GéoMégA conducted limited trenching work that revealed similar breccias over 30 meters approximately one kilometer southwest of MVL-11-09.



# GéoMégA's Additional Holdings

Over time, GéoMégA has acquired 100% of a number of additional properties and mining claims in Québec that are perceived to be in line with the Company's REE and strategic metals mission. Similar to Montviel, these acquired properties also comprise carbonatites and other alkaline complexes, thereby supporting the Company's strategy of pursuing potential REE and niobium deposits. As described on pages 21-23, many known world-class REE and niobium deposits occur in carbonatites. Ultimately, GéoMégA seeks to supply all five critical elements—neodymium, dysprosium, terbium, europium, and yttrium—through a portfolio of properties, with Montviel focused primarily on neodymium. Additional holdings may serve to strengthen GéoMégA's position in the Canadian junior exploration sector and diversify its interests.

To date, GéoMégA has directed the majority of its resources to the drill campaigns at Montviel. However, one of the Company's objectives during summer 2011 was to complete initial exploration and mapping activities on approximately half of its additional holdings (as summarized in the exploration plan in Table 13). Accordingly, in May 2011, GéoMégA initiated exploration campaigns at the Émilie, Zaza, Oriana, Sydney, and Pump Lake properties (overviewed on page 36), among others.

More recently, in late 2011, the Company staked an additional 293 mining claims over 14 properties near Mont-Laurier, Québec. These new claims support GéoMégA's focus on exploration for elements needed by clean technologies in Québec, as each of the 14 properties was staked for its graphite potential. Global demand for graphite is being fueled by the emergence of green energy. These claims were identified using historical production and exploration data researched by GéoMégA's technical team.

	Geomega R	lesources Inc.								
SUMMARY OF PLANNED EXPLORATION PROGRAMS FOR 2012										
Property	Works Planned	Terms	Following Works							
Montviel	Prospecting, sampling, and mapping First 43-101 resources estimate Phase 2 drilling (20,000 m) First metallurgical test: 600kg Scooping study	Summer 2011 Fall 2011 Fall 2011 to Spring 2012 Fall 2011 to Winter 2012 Winter to Spring 2012	Feasibility study							
Pump Lake Émilie Julie Anik Nord Anik Zaza 109 Pokacik Clément	Prospecting, sampling, and mapping	Summer 2011	Geophysics and drilling (according to the results)							
Sydney	Mag-spectrometer campaign Prospecting, sampling, and mapping	Fall 2011 Winter 2012	Prospecting, sampling, and mapping							
Zaza Oriana Émilie	Drilling	Winter 2012	Drilling (according to the results)							
Source: Geomeg	a Resources Inc.									



#### Émilie

GéoMégA acquired the Émilie property (also in the northern Abitibi area of Québec) during August 2010 in consideration of a payment of C\$2,080. It is located near the Montviel property and comprises 61 mining claims totaling 3,127 ha (31 km<sup>2</sup>). While recognized, the size and extent of the carbonatite complex at Émilie remains to be determined. GéoMégA does not believe that these claims have ever been explored for an REE, niobium, or tantalum potential. As such, the Company intends to undertake such investigations.

#### Zaza

GéoMégA wholly owns the Zaza property approximately 800 kilometers north of Montréal in the northern Abitibi area of Québec. The property is road accessible and totals 173 mining claims for over 9,170 ha (91.7 km<sup>2</sup>). In May 2011, a team of six geologists and students completed a 18-day prospecting and mapping survey of Zaza, primarily observing tonalites, diorites, and gabbro, with minor copper mineralization as well as potential indicators of an alkaline complex on the property.

#### Oriana

The Oriana property, which includes 270 claims over 15,000 ha (150 km<sup>2</sup>), was purchased by GéoMégA in August 2010 in exchange for C\$15,960 and 200,000 Common Shares. Similar to Montviel, Oriana is located in the northeastern Abitibi area of Québec, approximately 60 km west of the town of Chibougamau. To the Company's knowledge, government records do not indicate that Oriana was ever explored for its REE, niobium, or tantalum potential, which GéoMégA intends to do. This property is believed to host an **Archean** Dolodau carbonatite, which is a rare carbonatite of Archean age. To the Company's knowledge, there are only eight known Archean carbonatites worldwide.

#### Sydney

In May 2010, GéoMégA acquired 200 mining claims comprising the roughly 11,600 ha (116 km<sup>2</sup>) of the Sydney property in exchange for C\$10,400 in cash. This property is located in Québec's Lanaudière region and is road accessible. To GéoMégA's knowledge, the property is free of royalty, environmental, or permit obligations, with the exception of the usual forestry management permit. Historical exploration by mining companies has not been reported at the Sydney property, although geological and geochemistry surveys (which outlined REE anomalies) have been performed on behalf of the Geological Survey of Canada (GSC) and Québec Ministry of Natural Resources (Source: Mr. Théberge's NI 43-101-compliant *Sydney Property – Kempt Lake Area, NTS 310/08* Technical Report dated June 23, 2010).

#### Pump Lake

Under an agreement with NioGold Mining Corp. (as described on page 26), GéoMégA holds an option to acquire up to a 75% ownership position in the Pump Lake property. Pump Lake, which is road accessible, is located approximately 110 km north of the town of Mont-Laurier, Québec. It covers an area of nearly 23,870 ha (238 km<sup>2</sup>).

NioGold acquired Pump Lake from Ressources Maxima Inc. in 2007. As such, the property is subject to a 2% **Net Smelter Return (NSR)**, of which 1% can be bought back for C\$1 million. To the Company's knowledge, there are no environmental liabilities pertaining to the property and the only permit required for exploration work is a forestry management permit.

Prior exploration at Pump Lake identified potential mineralization ranging from precious and base metals (gold, silver, copper, and nickel) to iron (**magnetite**), phosphates, uranium, thorium, niobium, and REE (Source: NI 43-101-compliant *Pump Lake Property – Lesueur Lake Area, NTS 310/06, 310/11* Technical Report dated June 18, 2010, and amended August 17, 2010). These discoveries were obtained through historical drilling in 1971, exploration under a third-party joint venture from 1998 to 2003, work conducted by Ressources Maxima, and further exploration by NioGold. NioGold performed possibly the most intensive exploration, which entailed geophysical airborne and ground surveys, soil sampling, prospecting, satellite imagery, mineralogical studies, and an airborne gravity survey.



# Competition

Approximately 6.2% (10.3 million ha) of the total surface area of Québec was covered by an active exploration title as of December 31, 2010, indicating that a number of entities are capitalizing upon local labor and resources (Source: Géologie Québec's *Report on mineral activities in Québec 2010*). Moreover, as a result of the contraction in supply of rare earths from China, development of REE deposits in the U.S., Canada, Australia, India, and Brazil, among other places, are being accelerated as companies worldwide compete to secure strategic metal contracts and meet the gap in demand. Altogether, GéoMégA estimates that there may be up to 60 REE projects that are economic. In particular, Lynas Corp. Ltd.'s Mount Weld mine in Australia and Molycorp Inc.'s site in Mountain Pass, California, are advanced REE projects that are facing significant pressure to become economic in order to reduce global reliance on China's REE supply. Presently, Molycorp is working to increase annual production to 19,000 tonnes by year-end 2012 and eventually to 40,000 tonnes (Source: *The New York Times* July 27, 2011).

Unlike gold and other precious minerals, the mining and sale of rare earth metals often requires that a supply agreement with a specified buyer is in place before mine production occurs, in order to guarantee the economic feasibility of extracting the minerals. The buyer then manufactures its products using the rare earths purchased directly from the miner. While there are many current and potential REE sites available outside of China, as highlighted in Figure 13, the availability of customer contracts will likely ultimately define which projects advance into production.



 Lynas Corp., (2) Molycorp Minerals, (3) (4) Great Western Minerals, (5) Alkane Resources, (6) Vietnamese government/Toyota Tsusho/Sojitz, (7) Arafura Resources, (8) Avalon Rare Metals, (9) Kazatomprom/Sumitomo, (10) Stans Energy, (11) Greenland Minerals and Energy, (12) Rare Element Resources, (13) Pele Mountain Resources, (14) Quest Rare Minerals, (15) Ucore Uranium, (16) US Rare Earths, (17) Matamec Explorations, (18) Etruscan Resources, (19) Montero Mining, (20) Tasman Metals, (21) Neo Material Technologies/Mitsubishi

Source: the U.S. Department of Energy's Critical Materials Strategy, December 2010, Figure 7-1 (page 74).

Pages 38-40 summarize several of the notable REE or niobium projects ongoing globally and in Canada at present. These are not intended to be an exhaustive collection of GéoMégA's potential competition but are believed to be representative of the type of competitors that the Company may encounter as it develops its REE projects in Québec.



#### Lynas Corporation Ltd (LYC-ASX)

Headquartered in Sydney, Australia, Lynas (www.lynascorp.com) and its subsidiaries engage in the exploration, procurement, processing, and supply of rare earths, with the goal of creating a reliable, fully integrated source of REE supply for its customers. The company's flagship project is an REE mine at Mount Weld in Western Australia, which is believed to be one of the richest known REE deposits worldwide with a total resource of 1.416 million tonnes rare earth oxides (REOs). Currently producing, the Mount Weld mine is a US\$100 million project developed over the past decade. Current reserves were calculated in 2003 as 2.1 million tonnes at 15.5% REO containing 321,000 tonnes REO. Lynas expects that further metallurgical test work and the inclusion of lower-grade ore can result in a mine life in excess of 20 years, ultimately producing an estimated 33,000 tonnes annually of rare earth concentrates. As of June 2011, Lynas had entered into agreements with nine customers, including seven supply contracts and two Letters of Intent. The partnership with Siemens entails the sustainable production of neodymium-based rare earths magnets to meet Siemens' requirements for energy-efficient drive applications and wind-turbine generators. Lynas has also acquired rare earth resources of 107,000 tons REO at an average grade of 4.24%.

#### Molycorp Inc. (MCP-NYSE)

Molycorp (www.molycorp.com) is an REE producer headquartered in Colorado. The company produces over 3,000 tonnes of commercial rare earth materials annually. Molycorp currently sells products to customers across Europe, the Americas, and Asia. Its lead project is a rare earth mine and processing facility in Mountain Pass, California. As of February 2010, Molycorp and SRK Consulting (U.S.), Inc. estimated that the Mountain Pass mine had proven reserves of 88 million pounds of REO (9.38% average grade) and probable reserves of 2.12 billion pounds of REO (8.2% average grade). The Mountain Pass facility is being expanded and could produce approximately 19,050 tonnes of REO per year by late 2012, and roughly 40,000 tonnes by the end of 2013. In June 2011, Molycorp finalized funding for its US\$781 million expansion project with the completion of a US\$230 million capital raise. The company expects to produce REE for more than 30 years at 19,050 tonnes per year or roughly 15 years if production is ramped up to 40,000 tonnes per year. Molycorp also has a controlling interest in Molycorp Silmet AS, which is a REE asset located in Estonia (Europe).

#### Matamec Explorations Inc. (MAT-TSX.V)

Matamec (<u>www.matamec.com</u>) is a junior mining exploration company with headquarters in Montréal, Québec. In Québec, the company holds 100% interest in five properties—Zeus, Sakami, Vulcain, Tansim, and Valmont. Zeus includes the Kipawa deposit and six other REE showings. The company is primarily focused on developing the Kipawa deposit as well as exploring the potential for REEs across 35 km of strike length in the Kipawa Alkalic Complex (also part of the Zeus property). Mineral resource estimates for the Kipawa deposit include indicated REO of 2.5 million tons (4.7 million tons inferred) and indicated yttrium oxide of nearly 3.4 million tons (6.5 million tons inferred). In July 2011, Matamec announced that it developed a proprietary leaching process to reduce the operating cost of the Kipawa deposit project by producing a pre-concentrate containing 90% of the contained yttrium in only 35% of the original ore mass. In seven tests, Matamec's leaching method produced 88% REE recovery and 89% recovery of heavy REE and yttrium. The company also explores for gold, base metals, and platinum group metals in Québec with Northern Superior Resources Inc. and in Ontario with Goldcorp Canada Ltd.

#### Pele Mountain Resources Inc. (GEM-TSX.V; GOLDF-OTC)

Headquartered in Toronto, Ontario, Pele (<u>www.pelemountain.com</u>) emphasizes sustainable development and production of rare earths and uranium. The company's chief project is its wholly owned Eco Ridge Mine Rare Earths and Uranium Project in Elliot Lake, Ontario. Eco Ridge has produced over 300 million pounds of uranium oxide ( $U_3O_8$ ). Pele has completed an NI 43-101 preliminary economic assessment for Eco Ridge, which is located in what Pele reports is the only Canadian mining camp to have ever achieved commercial REO production. Site assessments suggest that the property could produce up to 51.9 million pounds of REO and 15.2 million pounds of  $U_3O_8$ . As well, a preliminary assessment estimated that an Eco Ridge Mine may operate for 14 years. Pele is focused on advancing Eco Ridge into feasibility studies and pursuing licensing agreements. Pele also has an interest in several Northern Ontario gold properties.



#### Commerce Resources Corp. (CCE-TSX.V; CMRZF-OTC)

Vancouver-based Commerce Resources (www.commerceresources.com) is an REE exploration and development company. One of its lead assets is the Blue River Tantalum-Niobium Project in British Columbia. Blue River includes the Upper Fir Tantalum and Niobium deposits, which are in the advanced stages of preliminary economic assessment. Based on estimates from an analysis of 183 drill holes, the Upper Fir deposit has indicated mineral resources of 36.35 million tons, including 195 grams per ton (gpt) of tantalum and 1,700 gpt of niobium, in addition to inferred resources of 6.4 million tons with 199 gpt of tantalum and 1,890 gpt of niobium. Commerce also wholly owns the Eldor Rare Earth Project in Québec, which entails the Ashram Rare Earth Zone-a glacially dispersed boulder train discovered in 2009where significant REEs, tantalum, niobium, and phosphate mineralization have been assayed. An initial NI 43-101-compliant resource estimate for Ashram inferred 117.34 million tons of rare earths averaging 1.74% total REO based on 12 drill holes. Subsequently, in August 2011, Commerce completed a winter drill program at Eldor and reported results suggesting that the extent of the Ashram deposit surpasses the initial estimate. The program included eight holes (seven at Ashram) covering 3,656 meters, with one drill hole eliciting 2.06% total REO from 39.6 meters to 344.5 meters in depth. In addition, from 6.81 to 39.56 meters, analysis demonstrated 12.4% middle and heavy REOs and 21.1% neodymium oxide. Based on the results, Commerce is expanding REE mineralization at Ashram and continuing exploration and drilling. A third project, Carbo, is ongoing in the Wicheeda rare earth carbonatite camp near Prince George, British Columbia. Commerce entered into an agreement with Canadian International Minerals Inc. (CIN-TSX.V) under which Canadian International has an option to earn up to a 75% interest in Carbo.

#### Forum Uranium Corp. (FDC-TSX.V)

Headquartered in Vancouver, British Columbia, Forum (<u>www.forumuranium.com</u>) is an energy company focused on Canadian uranium and rare earth projects. Its rare earth initiatives include a wholly owned Nutaaq project (less a 2% net smelter royalty), where Forum has identified alkaline intrusive rocks in a 10 km by 10 km area. In a 255-sample survey of the area, 155 samples were graded 0.1% to 3.8% for total REO, in addition to elevated levels of zirconium, niobium, and tantalum. In a subsequent survey, 55 samples were collected, 29 of which graded from 0.1% to 2.7% total REO. In July 2011, Forum entered into an option agreement with Aurizon Mines Ltd. (ARZ-TSX), enabling Forum to earn up to a 65% interest in Aurizon's REE property in southwestern Québec (which adjoins Matamec's Zeus project overviewed on page 38). Aurizon's analysis to date has suggested REE mineralization similar to Matamec's Kipawa deposit, with boulder samples demonstrating 1.34% to 16.77% total REO as well as 0.8% to 57% total H-REO in certain areas. Forum plans to identify the source of the boulders and initiate a drill program. The company also has projects in Saskatchewan and Nunavut.

#### IAMGOLD Corporation (IMG-TSX; IAG-NYSE)

IAMGOLD (www.iamgold.com) is a mining company focused primarily on gold, with headquarters in Toronto. The company produces nearly one million ounces of gold annually. In addition to its eight gold mines (including joint ventures and investments), the company is also developing the Niobec underground niobium mine near Québec City, Québec, which covers 1,735 ha and produced 4.4 million kg of niobium in 2010. At December 31, 2010, IAMGOLD had 45.7 million tons of proven and probable niobium reserves. IAMGOLD has reported that the mine supplies 7% to 8% of niobium consumption globally and has a 30-year history demonstrating sufficient mineral reserve renewal. In June 2011, IAMGOLD filed an NI 43-101-compliant preliminary economic assessment for the Niobec mine, which showed that the location has 1.93 billion kg of measured and indicated niobium pentoxide (Nb<sub>2</sub>O<sub>5</sub>). The data also showed that niobium production could increase to 15 million kg per year with 40 years of remaining life at the expanded production rate. IAMGOLD plans to continue exporting and testing the area to locate additional REE zones.



#### MDN Inc. (MDN-TSX)

Headquartered in Montréal, MDN (<u>www.mdn-mines.com</u>) is an exploration and development company. While the company primarily focuses on its gold assets in Québec and Tanzania, MDN also holds a 72.5% interest in Crevier Minerals Inc., which owns an NI 43-101 niobium-tantalum resource in Québec called Crevier. The remaining portion of the joint venture is owned by IAMGOLD, and the company has an option to increase its ownership to a maximum of 87.5%. Crevier possesses niobium and tantalum mineralization estimated at 25.8 million tonnes of ore. A feasibility study is ongoing and was expected to be completed in late 2011. Southeast of the Crevier niobium-tantalum project, MDN acquired 175 claims, designated "Samaqua," covering 98 km<sup>2</sup> in an area that has a magnetic geophysical response similar to the Niobec niobium mine (overviewed under IAMGOLD on page 39).

#### Elissa Resources Ltd. (ELI-TSX.V)

With headquarters in Vancouver, Elissa (<u>www.elissaresources.com</u>) is a mining exploration company focused on projects in the U.S. The company's wholly owned Thor REE project is located in the eastern Mojave Desert region of Nevada near Molycorp's Mountain Pass property. The Thor project contains both heavy and light REEs, including dysprosium, neodymium, yttrium, and terbium. In July 2011, the company increased the area of its Thor project by 12% to 1,805 ha. Substantial REE mineralization had been observed in nine separate prospect localities in three discovery zones. In November 2011, Elissa received the required permits to drill at Thor. The program was scheduled to begin in December 2011. As well, the company is also analyzing and pursuing other REE projects in the U.S. Elissa further holds drill-ready gold projects in Idaho and Nevada.

#### Quantum Rare Earth Developments Corp. (QRE-TSX.V; QREDF-OTC)

Headquartered in Vancouver, Quantum (www.quantumrareearth.com) is an exploration company focused on niobium and REEs. The company's projects include the Elk Creek Carbonatite, which is located in Nebraska and is a resource for niobium and other REEs. Per an NI 43-101-compliant resource estimate, Elk Creek is believed to possess 80.1 million tonnes at 0.62% Nb<sub>2</sub>O<sub>5</sub> for just under 500 million kg of niobium, with the deposit open in three directions. As well, significant drill hole intersections have included 155 meters of 2.7% REE, including 54.9 meters of 3.3% REE and 211 meters of 1.12% REE. In July 2011, Quantum announced results from one of five drill holes as part of a spring/summer 2011 exploration program that returned 235.22 meters of 0.73% niobium and 0.43% total REO as well as 54.13 meters of 1.17% niobium and 0.46% total REO. As well, the company has completed a sampling program for its Archie Lake REE property near Uranium City, Saskatchewan, and mobilized field crews for a fall 2011 drill program. Historic government reports analyzing the site yielded assays up to 15.7% REO and 2.31% thorium.

#### Wings Enterprises, Inc. and Glencore Ltd.

In late 2010, St. Louis, Missouri-based mining company Wings Enterprises and Glencore entered into an agreement to jointly develop a rare earth mine in Washington County, Missouri. Glencore is a branch of Glencore AG, a closely held diversified natural resources company operating as a subsidiary of Glencore International AG (a global supplier of commodities and raw materials). Formerly called the Pea Ridge Iron Ore, the deposit operated for 38 years to produce iron oxides, ending in 1991 when it was sold to the president of Wings Enterprises, Mr. James Kennedy. The Pea Ridge mine, which could continue to produce specialty iron oxides (with over 150 million tonnes of high-grade magnetite iron ore reserves), is also expected to produce pig iron, REEs, and other byproducts. Advancement of the project is dependent upon feasibility studies as well as the availability of financing. Pending positive feasibility study results, Wings and Glencore anticipate rare earth and iron ore production from a tailings lake 12 to 14 months after reopening the mine, with underground production expected to begin in 2012. Under the agreement, Glencore holds exclusive rights to market any resulting commodities or products.



# Milestones

Since reinitiating mining and exploration activities in 2010, GéoMégA has made considerable progress achieving corporate milestones to position the Company for further growth, including closing a C\$2.9 million IPO in late 2010. Several of GéoMégA's key milestones are noted below.

- Staked 293 mining claims for their graphite potential—all of which are 100% owned by GéoMégA over 14 properties near Mont-Laurier, Québec
- Completed an NI 43-101-compliant resource calculation for the Montviel deposit based on 18 holes in the Core Zone from the Phase I drill program
- Entered into a Pre-Development Agreement (PDA) with the Cree First Nation of Waswanipi
- Initiated Phase II definition and exploration drilling at Montviel, with initial results released in December 2011 that confirmed the Company's expectations of defining a significant NI 43-101 measured resource with an average grade closer to 2% TREO
- Received a high-definition mineralogy report from SGS Canada Lab (Lakefield, Ontario), describing the REE mineralogy of seven composite samples from drilled core from Montviel—the report found that the REE-bearing minerals are fluoro-carbonates of the Bastnasite-Synchysite family, which are amenable to metallurgical concentrating processes
- Acquired 100% ownership in the Montviel property and completed an approximately 10,000-meter Phase I drill program at Montviel, for which a number of assays have returned evidence of significant mineralization
- Acquired additional mining claims strategically located near several of the Company's existing properties, including Montviel and Émilie, which increased the holdings of these properties
- Completed an IPO within five months and received a listing on the Toronto Stock Exchange's Venture Exchange (TSX.V) under the symbol "GMA"
- Raised approximately C\$6 million through private placements during 2011 for which the most recent proceeds were earmarked to finance the following initiatives at the Montviel project:
  - the Phase II drill program
  - the initial resource calculation in compliance with NI 43-101 reporting standards
  - metallurgical tests and
  - o a preliminary economic assessment

#### **Potential Milestones**

Going forward, GéoMégA is working toward achieving several additional key corporate and exploration milestones in the near term, which include, but are not limited to, those listed below.

- Receive the results of ongoing metallurgy studies for Montviel
- Complete the Phase II drill program at Montviel
- Continue to conduct preliminary exploration activities on additional properties
- Augment the Company's technical team by adding new members
- Pursue a listing on a U.S. stock exchange



# Key Points to Consider

Presented in Canadian dollars (C\$). At January 6, 2012, C $1.00 \approx US$ .

- GéoMégA is a mineral exploration company focused on properties in Québec, Canada, that it believes have the potential for economically viable deposits of clean technology minerals.
- Rare earths are critical for many 21<sup>st</sup> century applications, including high-tech and green technologies, such as electric vehicles, wind turbines, light-emitting diodes (LEDs), cell phones, fiber optics, lasers, hard disks, and missile defenses. As these sectors grow, REE demand also increases. As of 2010, global REE need was 120,000 tonnes, forecast to reach 200,000 tonnes yearly by 2015.
- However, REE supply has not kept pace with demand, as worldwide rare earths mine production is only approximately 112,000 tonnes at present. China, which has been responsible for up to 97% of global REE supply, recently set stringent caps on its rare earth exports, effectively decreasing its annual REE exports by 40% in 2010. This contraction in supply combined with greater demand has caused significant price increases in the REE market and is leading consumers of REE to reevaluate their supply chains, creating opportunities for new suppliers.
- GéoMégA completed a 10,000-meter, 20-hole, diamond drill campaign in April 2011 at Montviel, and is now working on project economics. An NI 43-101-compliant initial resource calculation was released in September 2011, which reported 183.9 million tonnes (Mt) of indicated resources averaging 1.45% total rare earth oxides (TREO) in addition to 66.7 Mt of inferred resources averaging 1.46% TREO at Montviel. A Phase II drill program is currently progressing as planned.
  - GéoMégA's NI 43-101 resource calculation also identified considerable quantities of neodymium oxide in the mineralized zone at Montviel. While in 2009, neodymium averaged \$18 to \$20 per kilogram, the element has recently reached \$420 per kilogram.
- The Company believes that Montviel may have several competitive advantages over many other rare earth deposits globally, including the presence of a sizable carbonatite (which GéoMégA anticipates is the largest in North America) that may translate into continuous REE supply for many years. As well, Montviel's road accessibility and proximity to services and infrastructure may reduce the cost and time of mining operations if an economical mineral deposit is confirmed.
  - Carbonatites potentially contain a larger concentration of rare earths than any other rock type. The world's most prolific known deposits of REEs and niobium—Bayan Obo (Inner Mongolia, China), Mountain Pass (California), Mount Weld (Australia), and the Araxá niobium mine (Brazil)—are all hosted in carbonatites.
- Canada is rich in natural resources and mining/mineral exploration has become a major industry for the country. For the past decade, Québec has been named among the top jurisdictions worldwide for exploration and development by the Fraser Institute. The province, which was ranked the fourth most attractive place globally for mining investment in 2010/2011, offers an encouraging mineral potential, exploration tax credits of approximately 40%, an experienced workforce, and secure mining titles.
- GéoMégA is led by a skilled management team whose expertise and know-how may help distinguish it within the junior mining sector. Leaderships' backgrounds include serving in a range of capacities, such as accounting and consulting for listed junior mining companies as well as managing exploration for major corporations, such as Kinross Gold, Cambior (now IAMGOLD), and Azimut Exploration.
  - In order to pursue its objectives while emphasizing environmental, social, health, and safety performance, GéoMégA voluntarily subscribes to a framework for responsible exploration established by the Prospectors and Developers Association of Canada (PDAC).
- At August 31, 2011, GéoMégA had cash and cash equivalents of over C\$1 million.



# **Historical Financial Results**

Tables 14, 15, and 16 provide a summary of GéoMégA's key historical financial statements—Interim Statements of Earnings and Comprehensive Loss, Financial Position, and Cash Flows.

Presented in Ca	anadian dollars	(C\$). As	of August 31	1, 2011,	C\$1 ≈ US\$1.02.
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Table 14
Geomega Resources Inc. (an exploration-stage company)
INTERIM STATEMENT OF EARNINGS AND COMPREHENSIVE LOSS (UNAUDITED)

(Canadian dolla	ars)	
	Three-month period e	nded August 31
	2011	2010
	\$	\$
EXPENSES		
Publicity, travel, and promotion	123 944	746
Salaries and employee benefits expense	104 274	19 687
Professional fees	42 411	25 606
Trustees, registration fees, and shareholders relations	16 129	850
Offices expenses	13 014	2 737
Rent	6 473	-
Insurance, taxes, and permits	2 171	-
Bad debts	11 425	-
Bank charges	938	126
Depreciation of property and equipment	5 017	204
OPERATING LOSS	325 796	49 956
OTHER REVENUES AND EXPENSES		
Finance income	10 713	-
Interest on obligations under capital leases	(2 074)	-
	8 639	-
NET LOSS AND COMPREHENSIVE LOSS	(317 157)	(49 956)
NET LOSS PER SHARE		
Basic and diluted loss per share	(0.02)	(0.02)
Source: Geomega Resources Inc.		

Presented in Canadian dollar	s (C\$). As of August 31	, 2011, C\$1 ≈ US\$1.02.
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	Table 15		
Geomega Resources Inc	c. (an exploration-stage	e company)	
INTERIM STATEMENT OF F	INANCIAL POSITION	(UNAUDITED)	
(Can	adian dollars)		
	August 31, 2011	May 31, 2011	June 1, 2010
	\$	\$	\$
ASSETS			
Current			
Cash and cash equivalents	1 082 276	46 952	89 854
Investments	4 006 679	1 816 776	_
Other receivable	309 293	287 954	1 762
Tax credit and credit on duties receivable	1 249 340	893 516	-
Prepaid expenses and deposit	43 819	100 670	3 500
	6 691 407	3 145 868	95 116
Non ourront			
Evolution and evoluation assots	0 206 540	8 782 602	116 053
Property and equipment	9 390 319	50 687	110 955
	445 111	53 015	_
Other assets	0.945.620	9 997 204	116.052
	9 845 630	0 007 294	110 955
Total assets	16 537 037	12 033 162	212 069
LIABILITIES			
Current			
Trade and other payables	377 555	383 377	12 865
Current portion of obligations under capital leases	192 581	-	_
	570 136	383 377	12 865
Non-current			
Obligations under capital leases	139 073		
Total liabilities	709 209	383 377	12 865
EQUITY			
Share capital	15 803 245	11 870 947	330 002
Contributed surplus	1 330 556	767 654	0
Deficit	(1 305 973)	(988 816)	(130 798)
Total equity	15 827 828	11 649 785	199 204
Total liabilities and equity	16 537 037	12 033 162	212 069
Source: Geomega Resources Inc.			



Presented in Canadian dollars (C\$). As of August 31, 2011, C\$	\$1 ≈ US\$1.02.
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Table 16
Geomega Resources Inc. (an exploration-stage company)
INTERIM STATEMENT OF CASH FLOWS (UNAUDITED)

(Canadian dollars)

	Three-month period ended August 31	
	2011	2010
	\$	\$
OPERATING ACTIVITIES		
Net loss	(317 157)	(49 956)
Adjustments		
Share-based payments	32 417	_
Depreciation of property and equipment	5 017	204
Changes in working capital items	29 690	(57 834)
Cash flows from operating activities	(250 033)	(107 586)
INVESTING ACTIVITIES		
Investments redeemed	1 820 810	_
Investments	(4 010 713)	_
Additions of property and equipment	(19 959)	(1 235)
Additions to exploration and evaluation assets	(936 482)	(83 253)
Cash flows from investing activities	(3 146 344)	(84 488)
FINANCING ACTIVITIES		
Issuance of units by private placement	4 999 999	124 250
Issuance cost of shares	(564 992)	_
Exercise of Warrants	68 725	_
Payments on obligations under capital leases	(72 031)	-
Cash flows from financing activities	4 431 701	124 250
Net change in cash and cash equivalents	1 035 324	(67 824)
Cash and cash equivalents, beginning of period	46 952	89 854
Cash and cash equivalents, end of period	1 082 276	22 030
Cash transactions:		
Interest received (investing activities)	7 817	-
Interest paid (financing activities)	2 074	-
Source: Geomega Resources Inc.		



# Risks

Some information in this report relates to future events or future business and financial performance. Such statements can only be predictions and the actual events or results may differ from those discussed due to, among other things, the risks described in GéoMégA's reports, press releases, and other forms filed from time to time. The content of this report with respect to GéoMégA has been compiled primarily from information available to the public and released by the Company through news releases and SEDAR filings. GéoMégA is solely responsible for the accuracy of that information. Information about other companies has been prepared from publicly available documents and has not been independently verified by GéoMégA. For more complete information about GéoMégA, refer to the Company's website at www.ressourcesgeomega.ca.

One should carefully consider the risks and the information about GéoMégA's business described below. One should not interpret the order in which these considerations are presented as an indication of their relative importance. The risks and uncertainties described below are not the only ones the Company faces. Additional risks and uncertainties not presently known or those it currently considers immaterial may also have an adverse effect on its business. If any of the matters discussed in the accompanying risk factors were to occur, GéoMégA's business, financial condition, results of operations, cash flows, or prospects could be materially adversely affected.

#### **Risks Inherent in the Nature of Mineral Exploration and Development**

Mineral exploration and development involves several risks that experience, knowledge, and careful evaluation may not be sufficient to overcome. Large capital expenditures are required in advance of anticipated revenues from operations. Many exploration programs do not result in the discovery of mineralization; moreover, mineralization discovered may not be of sufficient quantity or quality to be profitably mined. Unusual or unexpected formations, formation pressures, fires, power outages, labor disruptions, flooding, explosions, tailings impoundment failures, cave-ins, landslides and the inability to obtain adequate machinery, equipment, or labor are some of the risks involved in the conduct of exploration programs and the operation of mines. The commercial viability of exploiting any precious metal deposit is dependent on a number of factors, including infrastructure and governmental regulations, in particular those respecting the environment, price, taxes, and royalties. No assurance can be given that minerals of sufficient quantity, quality, size, and grade will be discovered on any of the Company's properties to justify commercial operation. Numerous external factors influence and may have significant impacts on the operations of the Company and its financing needs.

#### Dependence on Key Personnel

The development of the Company's business is and will continue to be dependent on its ability to attract and retain highly qualified management and mining personnel. The Company faces competition for personnel from other employers.

#### **Financial Risks**

The Company is an exploration company. It will periodically have to raise additional funds to continue operations, and while it has been successful in doing so in the past, there can be no assurance that it will be able to do so in the future. Given that the Company has not yet determined whether its mineral properties contain mineral deposits that are economically recoverable, the Company has not yet generated income nor cash flows from its operations. As of August 31, 2011, the Company had a negative cumulated retained deficit of C\$1,305,973 (C\$988,816 as at May 31, 2011). These material uncertainties cast significant doubt regarding the Company's ability to continue as a going concern.

The Company's ability to continue as a going concern is dependent upon its ability to raise additional financing to further explore its mineral properties. Even if the Company has been successful in the past in doing so, there is no assurance that it will manage to obtain additional financing in the future.

In July 2011, the Company completed a private placement for a total amount of C\$5 million.



#### **Territories and First Nations Claims**

Although the Company has the rights to explore its mining properties, it must consider the potential claims of the First Nations communities surrounding its properties. The Company strives to maintain good relations with the First Nations communities.

#### Тах

No assurance can be made that the Canada Revenue Agency or Québec Minister of Revenue will agree with Company's characterization of expenditures as Canadian exploration expenses or Canadian development expenses.

#### **Conflicts of Interest**

Certain directors of the Company are also directors, officers, or shareholders of other companies that are similarly engaged in the business of acquiring, developing, and exploiting natural resource properties. Such associations may give rise to conflicts of interest from time to time. The directors of the Company are required by law to act honestly and in good faith of view to the best interests of the Company and to disclose any interest, which they may have on any project or opportunity of the Company. If a conflict arises at a meeting of the Board of Directors, any director in a conflict will disclose his/her interest and abstain from voting on such matter.

#### **Environmental Risks**

The Company is subject to various environmental incidents that can occur during exploration work. The Company maintains an environmental management system, including operational plans and practices.



# **Recent Events**

Presented in Canadian dollars (C\$). At January 6, 2012, C\$1.00  $\approx$  US\$0.98.

**12/15/2011**—Geomega Resources Inc. announced initial results of the Phase II drill program on its Montviel rare earth elements (REE) project. Highlights included 2% total rare earth oxides (TREO) over 327 meters and 0.75% niobium oxide (Nb<sub>2</sub>O<sub>5</sub>) over 32.9 meters in hole MVL-11-26.

**12/07/2011**—Announced the map designation (staking) of 293 mining titles rights (claims) over 14 properties. All claims are 100% owned and located near Mont-Laurier, Québec. Each claim was staked at a price of C\$53 for a total cost of C\$15,529. All 14 properties were staked for their graphite potential and identified using historical production and exploration data researched by the Company's technical team.

**11/14/2011**—Announced that, further to its news release of September 29, 2011, GéoMégA filed its National Instrument (NI) 43-101 technical report titled *Montviel Core Zone REE Mineral Resource Estimate Technical Report, Québec* dated September 29, 2011, on SEDAR at <u>www.sedar.com</u>.

**11/08/2011**—Provided an update on its Montviel fast-tracked rare earth project, located 97 km north of Lebel-sur-Quévillon, Québec. Phase II drilling started as scheduled on September 12, 2011, with the second drill rig arriving onsite on October 15, 2011. As of October 30, 2011, 10 diamond drill holes totaling 5,140 meters were drilled in the southwest part of the Montviel Core Zone. In addition, metallurgical work on 600 kg of re-splitted core was underway at SGS Canada, Lakefield, Ontario.

**10/20/2011**—Announced that it signed a Pre-Development Agreement for its Montviel Rare Earths Project with the Grand Council of the Crees (Eeyou Istchee)/Cree Regional Authority and the Cree First Nation of Waswanipi.

**09/30/2011**—Announced that Patrick Godin, Eng., Asc., was nominated chairman of the Board of Directors of GéoMégA.

**09/29/2011**—Announced the initial NI 43-101-compliant mineral resource estimate of the Core Zone at its wholly owned Montviel carbonatite REE property in Abitibi, Québec. The resource estimate was prepared by Claude Duplessis, P. Eng., and Guy Desharnais, Ph.D., P.Geo., independent Qualified Persons of SGS Canada Inc. - Geostat of Blainville, Québec.

**09/07/2011**—Announced the beginning of the Phase II definition and exploration drilling on its rare earth elements (REE) Montviel property located in Abitibi, Québec. This new milestone was part of an update on the current intensive exploration program.

**08/24/2011**—Announced that a high-definition mineralogy report was received from SGS Canada Lab in Lakefield, Ontario, describing the REE mineralogy of seven composite samples from drilled core at Montviel. This work included use of QEMSCAN technology, which maps the individual mineral grains and identifies the fineness of grind required to liberate the valuable minerals—a prerequisite in the development of a metallurgical concentration process.

**08/02/2011**—Reported the final assay results from its Phase I diamond drill program at Montviel. The Phase I drill program consisted of 20 holes (18 in the Core Zone) totaling 10,065 meters.

**07/08/2011**—Closed the C\$5 million private placement previously announced by the Company on June 30, 2011. The offering was completed by a syndicate of agents led by Mackie Research Capital Corp. and included Global Hunter Securities LLC, Jacob Securities Inc., and Versant Partners Inc. Pursuant to the offering, 2,127,659 units at a price of C\$2.35 were issued for total gross proceeds of C\$4,999,999. Each unit consisted of one Common Share and one Common Share Purchase Warrant. Each Warrant is exercisable at any time for one Common Share at a price of C\$2.85 until July 8, 2013.

**06/30/2011**—Announced that it changed the terms of the private placement, as first announced on June 13, 2011. The final terms were 2,127,659 units at a price of C\$2.35 per unit for total gross proceeds of C\$5,000,000 before commissions and fees.



**06/22/2011**—Announced results from its Phase I drill program at Montviel, which included assay results from diamond drill holes (DDHs) MVL-11-09 and MVL-11-10. The Company further announced the appointment of Mr. Jacquelin Gauthier as vice president, exploration.

**05/05/2011**—GéoMégA and NioGold Mining Corp. jointly announced that they entered into an amending agreement with respect to the Montviel and Pump Lake Option Agreement (per GéoMégA's news release dated November 11, 2010). Under the amendment, GéoMégA acquired a 100% interest in the Montviel Property by issuing 1,525,000 Common Shares to NioGold, with NioGold retaining a 2% Net Output Return royalty on the Montviel Property with no buyback right for GéoMégA.

**04/28/2011**—Reported assay results from drill holes MVL-11-07 and MVL-11-08, proving the continuity of REE mineralization between section 2+00 W and 5+00 W in the ferrocarbonatite Core Zone at Montviel.

**03/31/2011**—Reported assay results from three drill holes extending the REE mineralization in the Core Zone to the north on section 2+00 West and to the south on section 5+00 West.

**03/21/2011**—Announced that GéoMégA acquired 57 additional claims adjacent south to the Montviel property.

**02/14/2011**—Announced results of hole MVL-10-03, which intersected 1.38% TREO over the entire 512.7-meter core length from 21.3 meters to 534 meters, including 2.28% TREO over 51.8 meters from 132 meters to 183.8 meters.

**02/08/2011**—Announced the first drill results from the Phase I drill program. Hole MVL-10-01 started and ended in mineralized carbonatite intersecting 1.24% TREO over its 480-meter core length, including a high-grade section of 2.03% TREO over 39.4 meters from 266.6 meters to 306 meters.

**02/03/2011**—Announced that it completed five drill holes in the core of the carbonatite complex.

**02/03/2011**—Announced the closing of an additional tranche of a non-brokered private placement of units for proceeds of C\$100,000 with an institutional fund. GéoMégA issued 111,111 units at a price of C\$0.90 for a total placement of 1,111,110 units. Each unit consists of one Common Share and one-half Warrant entitling the holder to purchase, during a period of 18 months from the date of closing, one Common Share at an exercise price of C\$1.35 per share.

**01/28/2011**—Announced the closing of the first tranche of a non-brokered private placement of units for proceeds of C\$900,000 with private investors and institutional funds.

**01/04/2011**—Announced that drilling resumed on the Montviel property. The drill program had been stopped on December 21, 2010, for the holiday period.

**12/07/2010**—Announced it initiated a 10,000-meter drill program at Montviel. The winter program included section drilling through the 3.1 km<sup>2</sup> core of the carbonatite complex, as well as testing other satellite targets outlined from geophysical and geochemical surveys completed in previous years.

**11/24/2010**—Announced that Mr. Jean-Charles Potvin joined GéoMégA's Board of Directors.

**11/11/2010**—Announced the signing of the Option and Joint Venture agreement between GéoMégA and NioGold.

**10/07/2010**—Announced that it closed the second tranche of its initial public offering (IPO) by prospectus for gross proceeds of C\$201,250. The Common Shares of GéoMégA commenced trading on Toronto Stock Exchange's Venture Exchange (TSX.V) under the symbol "GMA" on September 30, 2010. At the closing of the first tranche of the IPO, GéoMégA issued 7,725,000 units at a price of C\$0.35, while 575,000 units were issued at the second tranche for a total of 8,300,000 units. Each unit consists of one Common Share and one-half Warrant. Each full Warrant entitles the holder to purchase, during a period of 18 months from the date of the closing, one Common Share at an exercise price of C\$0.55 per share.

**09/30/2010**—Announced that it closed the first tranche of its IPO by prospectus.



# Appendix

# Table 17 Geomega Resources Inc. MONTVIEL EXPLORATION HISTORY

Year	Company	Exploration	Results
1895-	GSC and MRNQ	Visit of the area by Bell, Bancr	oft, Cooke, Lang, Norman and Freeman.
1938	Quebec Department of	Mapping of the area at the scale of	Montriel carbonatite not observed (lack of
1940	Mines RG 20	1 mile = 1 inch	outcrops?)
1958	F.H. Jowsey Ltd GM 07548-A	18 miles of Turam survey	
1958	F.H. Jowsey Ltd GM 07548-B	6 DDH totalling 588.7 m	Iron formation and recrystallized limestone intersected. Turam conductor explained by
1958	Ouebec Department of	Report by Maurice Latulippe, resident	Pyrite-pyrmotite, and graphite.
1350	Mines GM 08956	geologist	holes position indicated on location map.
1973	Duval International Corp. GM 29954	Dighem Mag and EM airborne survey.	
1975	Duval International Corp. GM 31071	Ground EM and Mag survey, basal till sampling and assaying of core drilled	Best assay of 0.27% Nb <sub>2</sub> O <sub>5</sub> over 3 m in Hole 3B.
1977	Duval / SDBJ GM 33767	10 drill holes totalling 1,063.7 m	Best results of 0.26% Nb <sub>2</sub> O <sub>5</sub> over 13.4 m in Hole 77-1
1979	Duval / SDBJ GM 34761	10 drill holes totalling 1,525.6 m	Best results of 0.68% Nb <sub>2</sub> O <sub>5</sub> over 1.5 m in Hole 79-1 and 0.1% Nb <sub>2</sub> O <sub>5</sub> over 91.4 m in Hole 79-3
1979	Shell Canada Ltée GM 39043	Reconnaissance (evaluation ) report on the Montviel carbonatite	At this time, Shell considered U-Th to be the most promising target on the property.
1989	Corona Corporation GM	Staking of 55 claims to cover the	Geological compilation and search for old drill
0001	48820	central part of the carbonatite	CORE.
2001	GM 59681	Evaluation report	Drilling recommended
2002	Nomans Resources GM 59646	13.3 km of line cutting and 13.9 km of MaxMin survey	Conductive zones identified at a depth of less than 25 m.
2002	Nomans Resources GM 59647	1,245.5 m drilled in 8 holes	Results shown in Table 4
2005	MRNFQ RG 2005-05	Mapping of the area and description of the Montviel carbonatite complex	Extensive geological and potential description of the Montviel carbonatite complex.
2006	MRNFQ	Several datings completed in the area	Montviel carbonatite complex dated at 1,894.2
	RP 2006-04	covered by the geological survey reported in RG 2005-05	±3.5 Ma
2008	MRNFQ RP 2008-02	3 datings in the area covered by the geological survey reported in RG 2005-05	Dating of the Nomans tonalite, which contains the Montviel carbonatite complex, at 2,708.9 ± 1.2 Ma
2002	NioGold Mining Corp.	Technical report on the Montviel carbonatite complex	Not filed with the MRNFQ
2003	NioGold Mining Corp	Technical report on the Montviel carbonatite complex	Not filed with the MRNFQ
2003	NioGold Mining Corp	Technical report on the Montviel carbonatite complex	Not filed with the MRNFQ
2003	NioGold Mining Corp GM 61778	Fugro airborne EM, Mag and radiometric survey	
2004	NioGold Mining Corp	NI 43-101 Technical Report	
2004	NioGold Mining Corp	Report on the Fugro Airborne survey	
2005	NioGold Mining Corp	Re-processing of the Fugro data to aid geological interpretation	
2005	NioGold Mining Corp	Geochemical orientation surveys,	4 anomalous areas were discovered, and 4 drill
	GM 62424	geological mapping, prospecting and sampling program	holes recommended
2005	NioGold Mining Corp GM 62438	Mineralogical study on samples from the Nomans drill holes	

Source: Montviel Property: Abitibi area, Montviel township, NTS 32/F15, 32F/16 Technical Report, May 10, 2010.



# Glossary

**Alkaline Intrusion**—An intrusion (rock of undetermined size that is formed under the earth surface) characterized by content that is undersaturated in silica. A carbonatite is an alkaline rock.

**Apatite**—The green mineral that contains phosphorus.

Archean—A geological era occurring before 2.5 billion years ago.

**Base Metals**—The group of metals that are widely used in industry, such as copper (Cu), zinc (Zn), lead (Pb), and nickel (Ni).

Bedrock—Relatively hard, solid rock that commonly underlies softer rock, sediment, or soil.

Carbonate—A family of minerals composed of carbon and oxygen.

**Chromite**—A brownish-black mineral that consists of a mixed oxide of chromium and iron and is the principal ore of chromium.

**Claims**—Areas of between approximately 50 and 60 hectares registered to an owner wishing to conduct mineral exploration. A property is usually constituted of several claims.

**Clean Technology Metals**—Metals used in the production of clean technology products or components. Clean technologies are those that are economically competitive and productive while using less material and/or energy, generating less waste, and causing less environmental damage than alternatives.

**Exploration Tax Credits**—Québec's government offers a refundable tax credit for mineral exploration activities of up to 38.75% of exploration expenses and a non-taxable refundable credit for losses that is equal to 14% of 50% of the lesser of the following: (1) the amount of the annual loss; or (2) the eligible exploration, mineral deposit evaluation, and mine development expenses.

**First Nation**—This term, preferred by many Aboriginal peoples and the Assembly of First Nations, refers to the various governments of the first peoples of Canada. "First Nations" is preferred to "Indians," "Tribes," or "Bands." There are over 600 First Nations across Canada.

**Graphite**—A gray, crystalline, allotropic form of carbon that occurs as a mineral. It is used as a solid lubricant, in pencils, and as a moderator in nuclear reactors.

**Greenstone Belt**—A zone of metamorphosed volcanic and sedimentary rock that can stretch several dozen to several thousand kilometers.

**Hectare (ha)**—Metric unit of area equal to 10,000 m<sup>2</sup> or 2.471 acres.

**Igneous**—Relating to or involving volcanic processes.

**Indicated Resources**—Resources where size and grade have been estimated from sampling at places spaced closely enough that the continuity can be reasonably assumed.

**Inferred Resources**—The concentration of naturally occurring minerals, based on limited drill information, in such a form that economic extraction is currently or potentially feasible.

Magnetite—The mineral composed of iron and oxygen and referred to as Fe<sub>3</sub>O<sub>4</sub>.



**Metallurgy**—The science of extracting metals from ore, and purifying, alloying, and using metals. Metallurgical testing is critical to any successful mining and/or processing operation. Mineral deposit samples undergo chemical analysis to determine exactly what is present underground followed by an assessment to confirm how much of the valuable mineral can be economically recovered into marketable products, and then determining the quality of these products. The ultimate objectives of metallurgy are to define geology, mineralogy, chemical, and metallurgy information associated with a mineral deposit; define the best treatment scheme for extracting and refining the mineral products; define the characteristics of the mineral products; develop the production schedule for the project; and develop criteria for the commercial treatment plant.

**Mobile Metal Ion (MMI) Soil Survey**—A patented assaying technology capable of distinguishing metal ions that are mobile from those associated with the leaching horizon.

**Montviel Carbonatite**—A carbonatite is a rock that contains at least 50% of carbonates (a family of minerals composed of carbon and oxygen). Montviel is the name of GéoMégA's property holding in Québec that contains a sizable carbonatite geology.

**National Instrument 43-101 (NI 43-101)**—(Standards of Disclosure for Mineral Projects) A mineral resource classification used for the public disclosure of information relating to mineral properties in Canada. The Instrument is a codified set of rules and guidelines for reporting and displaying information related to mineral properties owned or explored by companies that report these results on stock exchanges within Canada.

**Neodymium Oxide**—The commercial feedstock from which neodymium metal is refined and neodymiumiron-boron (NdFeB) magnets are fabricated.

Net Smelter Return (NSR)—A royalty paid by a producing mine.

**Niobium**—The chemical element of atomic number 41, a silver-gray metal of the transition series, used in superconducting alloys.

**Overburden**—Rock or soil overlying a mineral deposit, archaeological site, or other underground feature. It is cleared away before mining.

**Permafrost**—A thick subsurface layer of soil that remains frozen throughout the year, occurring chiefly in polar regions.

**Platinum Group Elements (PGE)**—A group that includes platinum (Pt), ruthenium (Ru), rhodium (Rh), palladium (Pd), osmium (Os), and iridium (Ir).

**Precambrian**—The eon following the Hadean time and preceding the Phanerozoic eon from about 3,800 million years ago until 544 million years ago.

**Property Option**—A contract to purchase the right for a certain time, by election, to buy property at a stated price. An option may be a right to purchase property or require another to perform agreed-upon terms. By purchasing an option, the purchaser pays for the opportunity to exercise the right for the property to be purchased. GéoMégA's property option is for the right to earn up to a 75% interest in a property in Québec called Pump Lake.

**Qualified Person**—Defined in NI 43-101 as an individual who is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member in good standing of a professional association.

Radiometric Surveys—Surveys that pick up radiations emitted by surrounding rocks.



**Rare Earth Elements (REE)**—A series of 17 elements in the Periodic Table that comprise the lanthanides—lanthanum (La), cerium (Ce), praseodymium (Pr), neodymium (Nd), promethium (Pm), samarium (Sm), europium (Eu), gadolinium (Gd), terbium (Tb), dysprosium (Dy), holmium (Ho), erbium (Er), thulium (Tm), ytterbium (Yb), and lutetium (Lu)—with the addition of scandium (Sc) and yttrium (Y).

**Residual**—An ore deposit usually formed in the overburden. It covers the bedrock by soil enrichment processes.

**Silicocarbonates**—Rocks composed of carbonates and silicates (feldspar, pyroxene and other dark minerals) with carbonates between 10 and 50%. This rock is usually encountered within the carbonatite complex.

**Substratum**—An underlying layer or substance, in particular a layer of rock or soil beneath the surface of the ground.

**Sulfide**—A mineral consisting of a metal atom bonded to a sulfur atom.

**Tonnes**—(tonne) Metric ton: a unit of weight equivalent to 1,000 kilograms.

**Vermiculite**—The soft mineral formed by the weathering of mica.



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# Crystal & Research

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