MGX Minerals Inc. Taps Into Canada’s Potentially Largest High-Grade Lithium Resources

Today, MGX Minerals Inc. announced the acquisition of large properties encompassing 96,000 hectares in the Province of Alberta, Canada, based on compilation of historic oil and gas well data and known geology. Lithium, potassium and magnesium rich brines have been identified with historic levels of lithium reported up to 140 mg/L. This is the highest levels of lithium for existing wells in Alberta as reported in the industry database.

Today’s transaction is in line with MGX’s business model to be engaged in the acquisition and development of industrial mineral deposits that offer near-term production potential, minimal barriers to entry and low initial capital expenditures (“CAPEX”).

The acquired 12 Metallic & Industrial Mineral Permits surround existing wells that have provided the initial historic lithium assays. The properties are generally associated with past producing oil fields that are fully serviced with nearby roads, power and wellheads in place.
6 of the acquired Permits are located in Alberta’s Fox Creek District and include wells with reported historic lithium values ranging from 115-140 mg/L in the lithium-bearing Leduc and San Hills Formations.

Additional 6 Permit Applications cover various locations throughout Alberta including the Keg River, Winterburn and Woodbend Group Formations, with reported historic lithium values ranging from 95-140 mg/L.

Assessment of exploration and production requirements at all 12 sites will commence shortly with assay confirmation, wellhead pumping and pressure tests, as well as initial infrastructure scoping studies. Evaluation of de-watering technologies is underway, including evaporation, drying and filtration options with a focus on low-cost solutions that leverage the existing oil field services industry and infrastructure, as well as being suitable to the climate of Alberta.

MGX’s President and CEO, Jared Lazerson, commented:

“MGX has acquired these Permits with the long-term strategic goal of turning Alberta’s barren oil fields into producers of lithium compounds used in the new energy industry. We believe Alberta offers a significant advantage over traditional lithium locations globally with an extensive infrastructure including roads, equipment, skilled labor and capital. Large lithium resources have traditionally been associated with remote locations and long development times. We may have solved this problem.”

A decrease in lithium content in Nevada’s brines is prompting mining companies to look elsewhere in North America for exploitable resources of lithium. According to “Industrial Minerals and Rocks: Commodities, Markets, and Uses – 7th Addition”: Clayton Valley’s formation waters in Nevada contained an average of 400 mg lithium per litre (“L”) in 1966. In 2006, those same brines tested at an average of 160 mg/L. Nevada’s leading lithium developer, Pure Energy Minerals Ltd., reported in July 2015 that its Clayton Valley South inferred resource contains 816,000 tonnes of lithium carbonate equivalents, whereas almost half of this resource contains a lithium grade of 37 mg/L, 30% of the total resource contains 102 mg/L, 20% contains 194 mg/L, 4% contains 370 mg/L, and 1% contains 102 mg/L (total of 5 lithium bearing zones or aquifer systems). Soon after the release of this maiden NI43-101 resource estimate, the company signed an offtake agreement with Tesla Motors Inc. on September 15, 2015, whereafter Pure Energy’s share price soared to $1 on the TSX.V.

Rockstone opines Western Alberta being a prime candidate to fill the lithium resource gap in North America because it is an oil and gas rich area with proven levels of lithium in the groundwater. As more than 20,000 wells have been drilled into Alberta’s acquifers, the opportunities to produce lithium are substantial and partly advantageous to other North American brine resources because mature infrastructure exists in Alberta. The Province’s brines represent one of the largest untapped lithium resources and production potentials in North America.

Alberta’s lithium brines remind of the province’s oil sands, which were originally considered uneconomically and not feasible, yet with higher oil prices – coupled with new technologies – Alberta’s oil sands were profitable a few years back. With lithium spot prices having increased from $6,000 to almost $14,000 per tonne since 2015, previously undeveloped lithium resources, such as in Alberta, have the potential to be developed into production wells rather quickly and with relatively low initial CAPEX requirements (thanks to fully serviced infrastructure of past and current oil and gas production wells in the area).

As Chris Berry recently wrote in “Forecasting Lithium in 2016: What are the Salient Issues?”:

“If recent mainstream media, sell side, and newsletter writer coverage wasn’t enough to convince you, it is all but obvious that lithium has emerged as an investible asset class for 2016 and beyond as the broader commodity sector continues to struggle with overcapacity and slack demand. While the excitement is born of strong growth in technologies requiring lithium (mainly electric vehicles and energy storage), the real reason for investor excitement boils down to one issue: price. As The Economist shows, the lithium carbonate spot price has gone parabolic.”

According to “Geological Introduction to Lithium-Rich Formation Water with Emphasis on the Fox Creek Area of West-Central Alberta” (2011):

“The idea of a green mining operation – one that extracts minerals from waste oil-field water for ecofriendly products – is appealing. Devonian formation waters associated with producing oil and gas wells in the Fox Creek area of west-central Alberta contain up to 140 mg/L lithium. This value is significant considering the average and median values of lithium in Alberta formation waters are 10 mg/L and 0.2 mg/L, respectively (based on 1511 analyses).

The high-lithium brines also contain elevated potassium (up to 8000 mg/L), boron (up to 270 mg/L) and bromine (up to 410 mg/L), such that industry is considering the feasibility of a multi-commodity extraction plant. In the Fox Creek area, viable lithium-source models should invoke direct mobilization of silicate-bearing fluids from either the crystalline basement or the immature siliciclastics deposited above the basement (basal Cambrian sandstone, Granite Wash or the Gilwood Member), to the Devonian Swan Hills, Leduc and Beaverhill Lake formation waters. A number of thermal, potential-field and tectonic features in west-central Alberta are reviewed in this introductory investigation of lithium-rich oil-field waters that may one day become an economically viable resource for Alberta.”
Figure 1 (source): Shaded contour map of lithium-bearing formation waters in west-central Alberta. The map is generated from a dataset totalling 1511 analyses (Eccles and Jean, 2010). Nineteen analyses with >100 mg/L Li (up to 140 mg/L) occur within the Middle to Late Devonian Leduc (Woodbend Group) and Swan Hills (Beaverhill Lake Group) carbonate complexes in west-central Alberta. Abbreviations for selected west-central Alberta tectonic features: KIA, Kimiwan isotopic anomaly; PRA, boundary of the Devonian Peace River Arch; SAZ, Snowbird Anomaly Zone. White solid line represents the boundary of the Swan Hills (Beaverhill Lake Group) carbonate complex (Oldale et al., 1994). White, semitransparent polygons represent Leduc (Woodbend Group) carbonate complexes (Switzer et al., 1994).

Figure 2 (source): A schematic model to illustrate mobilization of fluids along immature siliciclastics deposited above the basement and entry into the Fox Creek aquifers via fault and fracture systems ("PRA" = Peace River Arch, "KIA" = Kimiwan Isotopic Anomaly). Potential associations between tectonic features and lithium accumulation in aquifers of the Leduc and Beaverhill Lake reef complexes, west-central Alberta.

About MGX Minerals Inc.

MGX Minerals Inc. is a diversified Canadian mining company engaged in the acquisition and development of industrial mineral deposits that offer near-term production potential, minimal barriers to entry and low initial capital expenditures. MGX’s flagship property is the Driftwood Creek Magnesium Deposit, which is being rapidly advanced towards production. MGX has also consolidated key mining claims throughout the Driftwood district and now controls the majority of known magnesite occurrences in British Columbia, Canada.

- Located in historic Brisco-Driftwood Mining District of southeastern British Columbia;
- Mineralization traced over strike length of 1,900m; remains open in both directions and at depth;
- Excellent infrastructure including access to rails, road, labor and electricity;
- Potentially amenable to low-cost, open pit mining methods.

The Driftwood Creek project is hosted by the Precambrian-aged Mount Nelson Formation. This sedimentary formation is approximately 1,300 meters thick and intruded by younger felsic and mafic igneous dykes. Magnesite mineralization occurs in the upper half of the formation and is well exposed at surface along as an isolated topographic ridge. Magnesite has been traced over a strike length of 1,900 meters and to a maximum width of 220 meters. Mineralization occurs in two discrete zones that are believed to have been remobilized and enriched during a period of metamorphic recrystallization.

Analyst Coverage:

Research #3 “MGX Minerals Receives Mining Lease for 20 years (in British Columbia)!”

Research #2 “MGX Minerals Accelerates Towards Production”

Research #1 “MGX Minerals Plans To Enter The Magnesium Market in 2016”
Disclaimer and Information on Forward Looking Statements:
All statements in this report, other than statements of historical fact should be considered forward-looking statements. Much of this report is comprised of statements of projection. Statements in this report that are forward looking include that magnesium, lithium and metal prices are expected to increase; that MGX Minerals Inc. or its partner(s) can and will start exploring further; that exploration has or will discover a mineable deposit; that the company can raise sufficient funds for exploration or development; that any of the mentioned mineralization indications or estimates are valid or economic. Such statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in these forward-looking statements. Risks and uncertainties respecting mineral exploration and mining companies are generally disclosed in the annual financial or other filing documents of MGX Minerals Inc. and similar companies as filed with the relevant securities commissions, and should be reviewed by any reader of this report. In addition, with respect to MGX Minerals Inc., a number of risks relate to any statement of projection or forward statements, including among other risks: the receipt of all necessary approvals and permits; the ability to conclude a transaction to start or continue development; uncertainty of future magnesium, lithium and metal prices, capital expenditures and other costs; financings and additional capital requirements for exploration, development, construction, and operating of a mine; the receipt in a timely fashion of further permitting for its legislative, political, social or economic developments in the jurisdictions in which MGX Minerals Inc. carries on business; operating or technical difficulties in connection with mining or development activities; the ability to keep key employees, joint-venture partner(s), and operations financed. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. Rockstone and the author of this report do not undertake any obligation to update any statements made in this report.

Disclosure of Interest and Advisory Cautions:
Nothing in this report should be construed as a solicitation to buy or sell any securities mentioned. Rockstone, its owners and the author of this report are not registered broker-dealers or financial advisors. Before investing in any securities, you should consult with your financial advisor and a registered broker-dealer. Never make an investment based solely on what you read in an online or printed report, including Rockstone’s report, especially if the investment involves a small, thinly-traded company that isn’t well known. The author of this report is paid by Zimtu Capital Corp., a TSX Venture Exchange listed investment company. Part of the author’s responsibilities at Zimtu is to research and report on companies in which Zimtu has an investment. So while the author of this report is not paid directly by MGX Minerals Inc., the author’s employer Zimtu will benefit from appreciation of MGX Minerals Inc.’s stock price. In addition, the author owns shares of MGX Minerals Inc. and would also benefit from volume and price appreciation of its stock. MGX Minerals Inc. may have one or more common directors with Zimtu Capital Corp. Thus, multiple conflicts of interests exist. Therefore, the information provided herewithin should not be construed as a financial analysis but rather as advertisement. The author’s views and opinions regarding the companies featured in reports are his own views and are based on information that he has researched independently and has received, which the author assumes to be reliable. Rockstone and the author of this report do not guarantee the accuracy, completeness, or usefulness of any content of this report, nor its fitness for any particular purpose. Lastly, the author does not guarantee that any of the companies mentioned will perform as expected, and any comparisons made to other companies may not be valid or come into effect. Please read the entire Disclaimer carefully. If you do not agree to all of the Disclaimer, do not access this website or any of its pages including this report in form of a PDF. By using this website and/or report, and whether or not you actually read the Disclaimer, you are deemed to have accepted it. Information provided is educational and general in nature.