MGX Minerals Inc. Processes High Magnesium Content Lithium Brine of 76,000mg/L Mg

16.10.2017 | The Newswire

Nears Completion of First Commercial Rapid Lithium Extraction System

VANCOUVER, October 16, 2017 / MGX Minerals Inc. ("MGX" or the "Company") (CSE: XMG / FKT: 1MG / OTCQB: MGXMF) and engineering partner PurLucid Treatment Solutions ("PurLucid") are pleased to announce advancement in magnesium extraction. The pretreatment removed all of the 76,000 mg/L of magnesium, reducing the post treatment concentration to non-detect levels (<1 mg/L) from lithium brine bulk samples shipped from a U.S. site currently under evaluation.

The recent optimization focused on addressing complex brines with very high magnesium levels as well as extraction to a common marketable form of magnesium compound. The magnesium was extracted in the form of magnesium hydroxide. Magnesium hydroxide is a commonly used industrial mineral with primary use in environmental applications such as municipal wastewater treatment and desulphurization of flue gases from power plants. The ratio of magnesium to lithium has long been a major issue in traditional lithium brine extraction and high magnesium has often been prohibitive in the traditional extraction of lithium from brine using solar evaporation / conventional processing as well as selective lithium extraction technologies due to the similarity of molecular properties of lithium and magnesium ions. Work was completed at the PurLucid facility in Calgary, Alberta with independent assay completed by EDS at GR Petrology Calgary, Alberta. The extraction technology continues to rely on previously developed low energy, low cost nanofiltration and is currently covered under patent and patent pending applications.

"Magnesium in brine, often referred to as hardness in water, has traditionally been one of the major issues in processing of lithium concentrate. The lithium magnesium ratio was traditionally one of the primary factors in consideration of the viability of lithium brine projects. One of the major factors in development of South American brine sources was the relatively low magnesium content. Alternatively, high magnesium content brine sources have been slow to develop such as those in the United States, China, and the Middle East for this reason," stated MGX Minerals CEO Jared Lazerson. Adding, "Removal of very high levels of magnesium opens up a large number of global lithium brine sources for consideration that were previously considered too high in magnesium. This represents a triumph of technology over perceived resource quality, in particular, that the magnesium has been extracted in a common form of widely used industrial mineral compound."

Magnesium Hydroxide Product

Magnesium was recovered primarily as a hydroxide. The recovered magnesium solids contained potassium, sodium and sulfur due to retention of fluid in the pore matrix. The total amount of these other components was estimated at 22% by weight as hydroxides and oxides. EDS analysis of the solids confirmed that the solids were 71% Mg(OH)2 with 18% NaCl (Table 1) consistent with the entrapment of brine in the mineral matrix. The NaCl can be removed and purity of the magnesium hydroxide product improved by rinsing the product during recovery. Rinsing requires use of fresh water which will be evaluated against the tradeoff of a magnesium product with the above noted contaminants upon evaluation of samples by MGX's industrial mineral distribution partner.

Table 1: Mineral composition interpreted from EDS analysis of recovered Mg(OH)2 solids

Mineral	Percent by weight	Comments
Mg(OH)2	71%	Solid dewatered in process
NaCl	18%	Reduction possible with rinsing

SO2 +4	2.7%	Reduction possible with rinsing
NaOH	1.6%	Reduction possible with rinsing
KOH	1.7%	Reduction possible with rinsing

Petrolithium(TM) Commercial System Completed

Buildout of the first commercial brine treatment system for rapid lithium recovery is near completion. The NFLi5 (120 cubic meter per day / 750 bwpd) unit will be ready for deployment in November. Utilizing a recent investment by MGX, PurLucid has opened a new commissioning facility in Sherwood Park, Alberta. The facility will be utilized to assemble and commission units as well as in-house ongoing research and development activities.

Wastewater Treatment Units

Water treatment only units for deployment into the Alberta oilfields are currently being fabricated. Three additional commercial units are now being built. PurLucid expects to deploy the first unit in late 2017 with subsequent units being deployed in early 2018. Final implementation and planning of commercial system deployment with these operators remains ongoing. Cross applications of technology in water treatment with and without mineral extraction / desalinization continue to be pursued throughout North America with strong interest from oil and gas as well as environmental companies.

Optimization of Lithium Extraction

MGX and PurLucid continue to upgrade the brine filtration and pre-treatment cleanup process with a focus on optimizing the final lithium product and upgrading potential by-products including the previously referenced magnesium, as well as boron and potassium concentrates.

Commercial Offtake Agreement Status

Lithium chloride recovered from brine has been tested and accepted for upgrade to lithium hydroxide based on previously shipped samples to MGX's UK based upgrader. Lithium hydroxide is the primary form of lithium used in lithium-ion batteries as an electrolyte. Additional samples were shipped this week to a major consumer of lithium feedstock for evaluation. Negotiations remain ongoing for large volume off take.

Qualified Person

The technical portions of this press release were prepared and reviewed by Andris Kikauka (P. Geo.), Vice President of Exploration for MGX Minerals. Mr. Kikauka is a non-independent Qualified Person within the meaning of National Instrument (N.I.) 43-101 Standards.

About PurLucid

PurLucid's exclusively licensed and patented nanoflotation technology was designed specifically for oilfield environments. The technology separates impurities from oil and gas wastewater and produces clean water as a final product. This allows for the recycling or controlled release of oilfield wastewater and reduces or eliminates downhole and associated transportation costs. Water handling costs are one of the largest operating costs in the oilfield and oilsands operations today.

About MGX Minerals

MGX Minerals is a diversified Canadian resource and technology company with interests in lithium,

magnesium and silicon assets throughout North America. MGX currently owns 34% of PurLucid and has the exclusive right to acquire a 100% interest as well as owning the global rights to recently developed lithium and mineral extraction technologies co-operatively developed by PurLucid and MGX. Learn more at www.mgxminerals.com.

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This press release contains forward-looking information or forward-looking statements (collectively "forward-looking information") within the meaning of applicable securities laws. Forward-looking information is typically identified by words such as: "believe", "expect", "anticipate", "intend", "estimate", "potentially" and similar expressions, or are those, which, by their nature, refer to future events. The Company cautions investors that any forward-looking information provided by the Company is not a guarantee of future results or performance, and that actual results may differ materially from those in forward-looking information as a result of various factors. The reader is referred to the Company's public filings for a more complete discussion of such risk factors and their potential effects which may be accessed through the Company's profile on SEDAR at www.sedar.com.