Mawson Reports Excellent Metallurgical Liberation Of Both Gold And Cobalt From Rajapalot, Finland

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VANCOUVER, September 11, 2019 - Mawson Resources Limited (“Mawson”) or (the “Company”) (TSX:MAW)(Frankfurt:MXR)(OTC PINK:MWSNF) reports on gold and cobalt liberation studies from five composite drill hole samples from the Raja and Palokas inferred mineral resource project areas.

The qualitative study aimed to liberate and concentrate gold and cobalt minerals via enhanced gravity recovery. Concentrates were subsequently analyzed by Mineral Liberation Analysis to establish the geochemical, textural and mineralogical variability within mineralized domains with a view to establish a viable metallurgical flow sheet. This is the first liberation study for cobalt from the project as well as the first project-wide liberation work for gold.

Key Results:

- Greater than 90% of gold and cobaltite were liberated and concentrated via enhanced gravity recovery into heavy concentrates, with only moderate grinding, indicating that mineralization is amenable to low-impact and energy efficient gravity pre-concentration;
- Gold is predominantly in the form of native gold and occurs as single coarse irregular shaped grains (95% of mass);
- Cobaltite is the dominant cobalt mineral. The high density and coarse grainsize of the cobaltite make it an ideal candidate for gravitational separation in a future process flowsheet;

Mr. Michael Hudson, CEO states: “The first stage of any metallurgical study is to assess the mineral liberation characteristics of the target minerals (gold and cobalt) so that processing methods to separate them from waste minerals can be designed. These initial qualitative results are very encouraging, and indicate native gold and cobaltite are amenable to low-impact and energy efficient liberation followed by gravity pre-concentration. Work under the BATCircle research program continues for the Rajapalot project with batch flotation and leach tests planned next.”

Five samples, one from Palokas and four from the Raja prospect, were selected based on representative gold and cobalt grade and host rock composition for qualitative mineral liberation test work. Qualitative liberation of gold and cobaltite into gravity concentrates was high, exceeding 90 per cent when ground to a median grain size of 50 micron (“µm”).

Simple mineralogy and the coarse grain size of gold and cobaltite support the liberation results. In the gravity concentrates, native gold occurs predominantly as single coarse irregular shape grains (95% of mass) and fine inclusions in other minerals (5% of mass). Gold forms both coarse (up to 365µm) and fine irregular grains. Analysis of the gold indicates >95% pure gold grains dominate with only a few recorded electrum grains amongst the 503,000 total grains of all mineral species counted for the study. Approximately 22,500 individual gold grains were counted in the heavy concentrate versus only 690 electrum grains matching the typical gold to silver ratios observed in bulk rock samples. Gold and cobalt grain sizes in the five samples are generally uniform. The gold results are encouraging with grain sizes at the at the 80th percentile, gold and cobalt grains in the heavy concentrates across the 5 samples averaged 62 microns and 67 microns respectively. Fine gold grains are numerous, but by volume make up less than 5 volume percent of the samples. Cobalt grain size also shows a positive correlation with cobalt grade.

Previously, a single campaign of mineral processing and metallurgical testing was conducted by SGS Minerals UK in late 2014. This campaign was limited to the recovery of gold from the Palokas resource area. Testwork was conducted prior to the discovery of the Raja deposit or inclusion of cobalt as a potentially

economic metal. The 2014 work demonstrated gold recovery is potentially amenable to conventional industry methods via a flowsheet that includes crushing and grinding, gravity recovery for gold and cobalt, and cyanide leaching with gold recovery via a carbon-in-pulp circuit for production of onsite gold doré. Gold extraction results of between 95% and 99% (average 97%) were obtained by a combination of gravity separation and conventional cyanidation. Gravity extraction from the four composites responded well with 26-48% gold extraction. Leaching was performed on the pulverised and blended tailings from the three size fractions after gravity recovery. The new gold results reported here from Raja and Palokas support this earlier work.

Cobaltite (CoAsS) is by far the most abundant cobalt mineral recovered from the five samples with minor cobalt pentlandite observed. The high density compared to the light silicate gangue and coarse grain size of the cobaltite make it an ideal candidate for gravity separation, and this work strongly supports that hypothesis. The mineral linnaeite (CoCo2S4) is recorded from other studies at Raja (Alan R Butcher, GTK pers. comm.), but was not observed in this program.

The work was completed by the Mintec Outokumpu mineralogical laboratory of the Geological Survey of Finland (“GTK”) under collaborative R&D funding provided by the BATCircle research project. As part of a broader program, Mawson and BATCircle will invest €500,000 (CAD$756k) on a 50:50 basis to conduct advanced exploration and metallurgical studies on the Rajapalot gold-cobalt project. The BATCircle research project was founded under the leadership of Aalto University to coordinate research on the battery metal circular economy from exploration to recycling. BATCircle includes 22 companies, four universities, two research institutes and two cities. The two year project has a total budget of over €20 million. The goal of the BATCircle project is to enable the creation of a market of least €5 billion in Finland.

Technical Background

Four samples from the Raja prospect and one from Palokas prospect were collected from quarter core or coarse rejects from the PAL1000 gold assay preparation technique. Samples were chosen following detailed geologic logging, structural character of the mineralization, mineralogy, gold and whole rock geochemical assays and consideration of the volumes comprising the maiden inferred mineral resource. Samples range from high gold-cobalt ratios to samples with high cobalt and little gold.

Samples were prepared in Rovaniemi by Mawson staff from coarse crush rejects and quarter core based on mineralogical and geochemical characteristics that also correspond to inferred mineral resource volumes from Raja and Palokas. They were submitted to the GTK’s (Geological Survey of Finland) Mintec Outokumpu mineralogical research laboratory, and combined. From each of 5 feed composite samples one aliquot of about 115 grams was taken. The aliquots were sent to NATI Research Oy for grinding, sieving and high sensitivity gravity separation with pre-calculated losses. Grinding was done by stages on laboratory scale disc grinding machine without overgrinding. Grinding continued until 95% of the material were under 125µm. The sieve fractions were chosen as such: -63µm, 63-125µm and +125µm.

Each of two fine fractions were processed by “Makharay 3”© (NATI Research Oy) high gradient gravity concentration equipment with parallel extraction of sulphide (“-1hc”), sulphide-oxide (“-2hc”) and pyrrhotite-heavy silicate (“Po+Sil”) concentrates. Concentration was carried out in accordance with strict metrology and losses of free gold grains are less than 10%.

A heavy mineral concentrate (HC) is the main product from this form of processing, where all minerals greater than 9 g/cm3 density report. The second product is the “-1hc” sulphide concentrate (SC) where all sulphides and sulphur-arsenides report. The third middling is “-2hc” where all oxides such as magnetite-chromite and sulphides report. As some samples could contain linnaeite-polydymite series minerals as flake like inclusions in pyrrhotite, the “-2hc” fractions were recombined together (to form PoC). The Po+Sil fractions were collected for quality purposes, but were not measured.

From each HC sample, one monolayer polished section was prepared. From part of the SC material one monolayer polished section per size fraction was prepared. Additionally, one per each sample normal polished section was prepared from PoC material (five in total).

The qualified person for Mawson's Finnish projects, Dr. Nick Cook, President for Mawson and a Fellow of the Australasian Institute of Mining Metallurgy has reviewed and verified the contents of this release.

NI 43-101 Technical Report

On December 19, 2018, Mawson filed an independent National Instrument 43-101 Technical Report (the “NI 43-101 Technical Report”) on the Mineral Resource Estimate for the Raja and Palokas Prospects, at the 100% owned Rajapalot Project in Finland, (the “NI 43-101 Technical Report”), in support of the Company’s news release dated December 17, 2018. The NI 43-101 Technical Report was authorized by Mr. Rod Webster of AMC Consultants Pty Ltd (“AMC”) of Melbourne, Australia, and Dr. Kurt Simon Forrester of Arn Perspective of Surrey, England. Each of Mr. Webster and Dr. Forrester are independent “qualified persons” as defined by National Instrument 43-101. The NI 43-101 Technical Report may be found on the Company’s website at www.mawsonresources.com or under the Company’s profile on SEDAR at www.sedar.com.

The inferred resource calculation defined a pit and underground Constrained Inferred Mineral Resource of 424,000 ounces of gold at 3.1 g/t AuEq (4.3 million tonnes at 2.3 g/t Au, 430 ppm Co) at 0.37 g/t AuEq cut-off open pit and 2 g/t AuEq underground was calculated, within a combined Unconstrained Inferred Mineral Inventory for the Palokas and Raja prospects of 482,000 ounces gold equivalent (“AuEq”) at a grade of 2.4 g/t AuEq (6.2 million tonnes at 1.7 g/t Au, 410 ppm Co) at 0.4 g/t AuEq cut-off.

About Mawson Resources Limited (TSX:MAW, FRANKFURT:MXR, PINKSHEETS:MWSNF)

Mawson Resources Ltd. is a sustainable and ethical exploration and development company. Mawson has distinguished itself as a leading Nordic Arctic exploration company with a focus on the flagship Rajapalot gold-cobalt project in Finland, a significant and strategic gold-cobalt resource for Finland with the maiden resource positioned as one of Finland's current top three gold resources by grade and contained ounces and one of a small group of cobalt resources prepared in accordance with NI 43-101 policy within Europe.

On behalf of the Board,

"Michael Hudson"

Michael Hudson, Chairman & CEO

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Forward-Looking Statement

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estimate, postulate, and similar expressions, or are those, which, by their nature, refer to future events. Mawson cautions investors that any forward-looking statements are not guarantees of future results or performance, and that actual results may differ materially from those in forward-looking statements as a result of various factors, including, but not limited to, capital and other costs varying significantly from estimates, changes in world metal markets, changes in equity markets, planned drill programs and results varying from expectations, delays in obtaining results, equipment failure, unexpected geological conditions, local community relations, dealings with non-governmental organizations, delays in operations due to permit grants, environmental and safety risks, and other risks and uncertainties disclosed under the heading "Risk Factors" in Mawson's most recent Annual Information Form filed on www.sedar.com. Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, Mawson disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise.

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