Independent Review of Phase One Lithium in Clay R&D Completed

-FOR IMMEDIATE RELEASE-

Montréal, July 24, 2019 – **St-Georges Eco-Mining Corp. (CSE: SX) (OTC: SXOOF) (FSE: 85G1)** is pleased inform its shareholders that it has received the Independent Review of its Phase I report titled "***Bonnie Claire Metallurgical Evaluation and Process Development.***" The Company has communicated this information to its client, Iconic Minerals (TSX-V: ICM).

In December 2017, the Company entered into an agreement with Iconic Minerals ltd that called for St-Georges to develop an extraction process that would allow Iconic to economically exploit the lithium resources discovered at Iconic's 100% owned Bonnie Claire lithium deposit. (For details, please refer to St-Georges' Press Release dated December 7, 2017). The agreement has three delivery milestones. The delivery of the current Independent Review Report constitutes the conclusion of the Stage 1 Benchmark and calls for the issuance of 2,000,000 of Iconic's common shares to St-Georges. Iconic has also met its other obligations derived from this agreement by participating in St-Georges' private placement in January 2019 for CAD $100,000.

St-Georges' Research & Development Vice-President, Enrico Di Cesare commented: "(…) The development team is looking forward to progressing the technology further (…) knowing that the process works and can be independently executed is very encouraging. We are currently able to leach between 99.97% and 100% of the lithium in solution (...) the only improvement possible at this stage is to reduce processing time and the size of the feedstock with improved concentration. significantly improve what was developed in Phase I, covered by this report. (…) We are designing the pilot plant to keep a maximum of flexibility to improve the initial steps of the process. (…) We are looking forward to the big challenge that putting a 25t/w pilot plant in place represents for us. (…) The reception we have had from the local communities approached is very positive. People understand the need to produce lithium at low costs, and they embrace our commitment to green technology. The government support we have received until now is beyond what we would have normally expected. (…) We are now at the stage to increase and formalize our relationships with higher-learning and public R&D entities. We are hopeful that it will allow for even more innovation down the road (…)"

Summary of the Report

The objective of the process development by St-Georges Eco-Mining ltd was to recover lithium from the Bonnie Claire deposit.

SGS Lakefield Laboratory performed an elemental analysis and crystalline analysis of the material that was received. The results indicated that the lithium was in a spodumene

($LiAlSi_2O_6$) crystal form, and no chlorides were present. This suggests that the lithium is not the residue of brines from a land-locked salt lake.

Recovery of lithium was tried with water, sulphuric acid, hydrochloric acid, and mixed acid leaching. All obtained poor results at room temperature and no pressure. Best results were at higher temperatures for sulphuric acid, indicating a high-pressure roasting was required for this material. This is standard for this mineral but not practical at these concentrations. Sulphuric acid with high temperature, pressure, and roasting at concentrations of 0.1% lithium or 0.2% lithium (after air classification) is not practical.

Nitric acid was tried for selective leaching with positive results. At low temperature and with no pressure, 100% of the lithium was put into solution while avoiding the leaching of metals and most of the other elements. Other leached materials were carbonates (1/2 of the present iron was found under carbonate form) and salts (Mg, Ca including sodium and lithium). With the expected mined volume of over 7 million tons annually for 20,000 tons of lithium hydroxide produced, this type of leaching strategy could help keep capital costs down by, amongst other things, allowing for the design of a low-cost leach tank.

Concentration methods were tested with early-stage results that call for further tweaking and calibration. The air classification trials were able to remove half of the gangue. The report delivered to Iconic contains a separate independent report in which these tests were independently performed and validated by Netzsch GmbH. The trials will be continued with a focus on optimizing de-agglomeration and on crystal form optimization. Flotation trials were not conclusive at this early stage. The selective leaching results allowed the Company to plan additional developments in Phase II. The use of resin for the purification of the lithium might be pursued on the resulting leached material and in a parallel extensive test with an electrolysis pilot plant to be set up to provide the industry with samples for market acceptance. The latter being a key to funding the project in the future.

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Testing Results

SGS Lakefield Laboratory was then approached for characterization and preliminary leaching trials to better determine the strategy for development and approach going forward, and to get a second opinion on the crystalline form of the lithium. An independent characterization report made by SGS Lakefield Laboratory is in Appendix A of the Phase I report delivered to Iconic.

Table 1: Crystalline Mineral Assemblage (SGS Lakefield)

Sample	Major (>30%Wt)	Moderate (10%-30%Wt)	Minor (2%-10%Wt)	Trace (<2%Wt)
Head Assay ***Bulk***	-	potassium-feldspar, plagioclase, quartz, analcime, calcite	I/M, illite, mica, heulandite, spodumene	*halite, *siderite, *magnetite, *chlorite
Clay Fraction	I/M	illite, (quartz), (potassium-feldspar)	(heulandite)	*chlorite

**tentative identification due to low concentrations, diffraction line overlap or poor crystallinity*
**I/M – illite-montmorillonite mixture*
Brackets indicate non-clay minerals present in the clay fraction.

The presence in clays of spodumene (the most common mineral form of lithium in hard rock lithium resources) may indicate that it has been collected over centuries in the dried lake by the erosion of lithium-bearing hard rock formations as fine clay-sized particles.

Table 2: XRD Crystal Structure (SGS Lakefield)

Mineral	Head Assay (wt %)
Orthoclase	25.8
Albite	16.6
Quartz	12.2
Analcime	12.1
Calcite	10.7
Illite-Montmorillonite	5.3
Phlogopite	4.1
Spodumene	3.2
Illite	3.1
Heulandite	2.8
Halite	1.3
Siderite	1.2
Magnetite	1.1
Clinochlore	0.6
Total	100

Spodumene represents approximately 3.2% by weight, and typical crystal form is $LiAlSi_2O_6$. Lithium in this crystal form represents 3.7% by total weight. This correlates closely to the 0.1% lithium readings that have been measured during resource estimates confirming the crystalline form.

A chemical element distribution was also performed to try to predict options to create an economical and environmentally viable solution for the recovery of the resource.

Table 3: Chemical Element Distribution (SGS Lakefield)

Name	Assay[1]	SQD[2]	Delta	Status
Oxygen	40.3	47.9	-7.55	Both
Silicon	25.1	26.2	-1.08	Both
Aluminum	6.35	7.09	-1.55	Both
Calcium	5.08	4.44	0.64	Both
Potassium	4.23	4.27	-0.03	Both
Sodium	3.41	3.28	0.13	Both
Iron	2.24	2.13	0.11	Both
Carbon	-	1.41	-1.41	SQD
Magnesium	1.13	1.15	-0.02	Both
Chlorine	-	0.76	-0.76	SQD
Hydrogen	-	0.27	0.27	SQD
Fluorine	-	0.18	0.18	SQD
Lithium	0.11	0.12	0.01	Both
Phosphorus	0.03	-	0.03	XRF
Titanium	0.22	-	0.22	XRF
Manganese	0.09	-	0.09	SRF

[1] *Values measured by chemical assay.*
[2] *Values calculated based on mineral/compound formulas and quantities identified by semi-quantitative XRD.*

The usual form of lithium present in typical brines is easy to dissolve in water. The common forms of lithium associated with hard rock resource are spodumene $LiAlSi_2O_6$ and lepidolite $K(Li,Al,Rb)_2(Al,Si)_4O_{10}(F,OH)_2$ which require aggressive leaching with high temperature and roasting. As the economic recovery of the lithium would be severely hampered, a leaching trial was performed at ambient temperature with conventional leaching options. Initial tests have shown that high temperature and roasting would be necessary with conventional leaching methods.

Table 4: Summary of Leach Tests

Test		**Lixiviant**	**Solids**	**Extractions (%)**		
Test	Sample	Temp	Lixiviant	Li	Ca	Mg
L-001	NV Clay Comp	Amb	Water	2	0	0
L-002	NV Clay Comp	Amb	H_2SO_4	11	15	8
L-003	NV Clay Comp	Amb	HCl	7	92	4
L-004	NV Clay Comp	80	H_2SO_4	15	14	9
L-005	NV Clay Comp	80	H_2SO_4 + [redacted]	40	16	40

Water Leach (L-001)

A lithium salt would normally be leached or dissolved in water. **L-001** test demonstrates that only 2% of the total lithium was recovered in solution, and a total of 11% weight loss of the solids occurred. This indicates that only actual salts were dissolved in the water. A typical brine would have allowed most of the lithium and salts to be recovered in water which is noticeably not the case here. A water wash could reduce the impurities in the solution simplifying the total purification steps by reducing sodium, for example. Saturated salt water may help with concentrating lithium fines during froth flotation and may be achieved by water recirculation.

Sulphuric Acid Leach (L-002, L-004, L-005)

At ambient temperature, test **L-002** leached 11% of the lithium. With the temperature at 80ºC test **L-004** with 15% of the lithium recovered provided the best results with sulphuric acid. This follows the logic of hard rock lithium minerals chemical recovering with high temperature pressurized leach after roasting with conventional methods. Purification and neutralization efforts are costly even with a 6% total lithium concentrate. At the concentrations being discussed, the chemical usage and sheer size of the process plant, it would doubtfully be economical.

Mixed acid was also tried with elements added to the sulphuric acid in test **L-005**. At 80ºC, this did improve the recovery of lithium to 40% but also increased other elements not targeted to be leached. Even with mixed acid, the testing trend indicated high-temperature pressure vessels would be needed. This would be very costly with low concentrations of lithium in addition to leaching many impurities that would complicate the purification steps. The main advantage with sulphuric acid is that calcium is precipitated as gypsum, thus eliminating one of the impurities.

Hydrochloric Acid Leach (L-003)

Test **L-003** was only a little better than water leach (**L-001**) with 7% of the total lithium recovered and almost all the calcium. In this case, it is expected that increasing the temperature would improve results, but more impurities would probably be leached at the same time. Mg and Ca leached at the highest rate with HCl (Ca remains in solution with HCl).

Magnesium (Mg) and Calcium (Ca) cause problems for the recovery of lithium with resins and organics. Conventional resins with brines typically have a ratio of 6 to 1 for Magnesium to Lithium before efficiency is severely diminished. This has led to the development of new resins to operate in less favorable ratios. In the case of using acids, the chemical costs can become prohibitive even if a resin for purification is found with unfavorable ratios.

St-Georges' Process: Selective Leaching with Nitric Acid

Leaching with a passivating acid normally used to clean steel and passivate the welds of stainless steel was performed in the hope of selectively removing the magnesium (Mg) and all the salt metals like sodium (Na), calcium (Ca), lithium (Li) and magnesium (Mg).

The initial results with a 4-hour leach showed that all the salt metals and carbonate formations leached easily. This follows the logic of cleaning acid and leaves most of the other elements behind, such as silica (Si), alumina (Ai), potassium (K).

Multiple 1-hour leach tests confirmed the leaching of 100% of the lithium leaving behind most of the leachable elements from other acids such as potassium (K). The only loss of lithium that occurred during some of these tests was due to the water in the filter with the solids and represented less than 0.03% of the total lithium value. It also corresponds directly to the water retained with this type of fine material. Additional trials are being performed with reduced time of contact and temperature to optimize the lithium-bearing fines leaching.

The lithium in the super fines leached completely in each test performed with nitric acid. The trials to selectively optimize leaching the lithium with less calcium and magnesium are expected to be performed in the third quarter of 2019. It is expected that calcium can be reduced partially by filtering the coarser calcium formation as per SGS results and partially with less contact time with the acid. The same for magnesium. New samples will be treated once received.

Considering the results obtained, St-Georges is working on strategic partnerships for new organics mediums and resins that can work with nitric acid to selectively collect the lithium, as well as for electrolysis with nitric acid mediums. The Company also started to work on optimizing a new technology related to filter presses to reduce the facility size and environmental footprint, and to decrease chemicals usage and waste disposal. The new filter press design will be completed and available for viewing within two months. It is too early to know if this development initiative will result in intellectual property that can be patented.

Yves Caron P.Geo. (OGQ #548) a Qualified Person under the National Instrument 43-101 has reviewed and approved the technical content of the current press release

ON BEHALF OF THE BOARD OF DIRECTORS

"Vilhjalmur Thor Vilhjalmson"

VILHJALMUR THOR VILHJALMSON, PRESIDENT

About St-Georges

St-Georges is developing new technologies to solve some of the most common environmental problems in the mining industry.

The Company controls directly or indirectly, through rights of first refusal, all of the active mineral tenures in Iceland. It also explores for nickel on the Julie Nickel Project & for industrial minerals on Quebec's North Shore and for lithium and rare metals in Northern Quebec and in the Abitibi region. Headquartered in Montreal, St-Georges' stock is listed on the CSE under the symbol SX, on the US OTC under the Symbol SXOOF, and on the Frankfurt Stock Exchange under the symbol 85G1.

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Certain statements included herein may constitute "forward-looking statements." All statements included in this press release that address future events, conditions, or results, including in connection with the prefeasibility study, its financing, job creation, the investments to complete the project and the potential performance, production, and environmental footprint of the ferrosilicon plant, are forward-looking statements. These forward-looking statements can be identified by the use of words such as "may", "must", "plan", "believe", "expect", "estimate", "think", "continue", "should", "will", "could", "intend", "anticipate", or "future", or the negative forms thereof or similar variations. These forward-looking statements are based on certain assumptions and analyses made by management in light of their experiences and their perception of historical trends, current conditions, and expected future developments, as well as other factors they believe are appropriate in the circumstances. These statements are subject to risks, uncertainties, and assumptions, including those mentioned in the Corporation's continuous disclosure documents, which can be found under its profile on SEDAR (www.sedar.com). Many of such risks and uncertainties are outside the control of the Corporation and could cause actual results to differ materially from those expressed or implied by such forward-looking statements. In making such forward-looking statements, management has relied upon a number of material factors and assumptions, on the basis of currently available information, for which there is no insurance that such information will prove accurate. All forward-looking statements are expressly qualified in their entirety by the cautionary statements set forth above. The Corporation is under no obligation, and expressly disclaims any intention or obligation, to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by applicable law.

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