First Phosphate Receives Report from Queen's University Pufahl Research Group Suggesting that the Lac à l'Orignal Deposit is a Unique and Highly Probable ESG-Compliant Source of North American Phosphate for the LFP Battery Industry

Saguenay, Quebec--(Newsfile Corp. - March 14, 2023) - First Phosphate Corp. (CSE: PHOS) (FSE: KD0) ("**First Phosphate**" or the "**Company**") is pleased to announce that it has received the final research report from Queen's University Pufahl Research Group completed by Dr. Sandeep Banerjee, Postdoctoral Researcher and dated March 13, 2023:

The report is titled: "Characterization of First Phosphate's Lac à l'Orignal Phosphate Deposit, Lac-Saint-Jean Anorthosite (LSJA) Complex, Quebec, Canada: Implications for Supplying Lithium Ferro (Iron) Phosphate (LFP) Batteries" (the "Report") and is available on the Company's website at: https://firstphosphate.com/partners/#queens

"Collectively, the attributes indicate that First Phosphate's Lac à l'Orignal deposit is a source of North American phosphorus for the LFP battery industry that has a high probability of being ESG-compliant," attests Dr. Peir Pufahl, Co-Director, Queen's University Facility for Isotope Research. Report conclusions follow below:

- 1. The host-rock of First Phosphate's Lac à l'Orignal deposit is a gabbronorite composed of plagioclase, orthopyroxene, clinopyroxene, biotite, fluorapatite, ilmenite, and magnetite. Fluorapatite is the primary mineralization and ilmenite and magnetite are potentially important secondary commodities for the production of titanium oxide and iron.
- 2. The P₂O₅ concentration of apatite using in situ analytical methods is 41.7 ±0.26 wt.%, which is just slightly higher than values (40.5-41.2 wt.%) obtained by whole-rock analyses of the apatite concentrate produced by SGS Canada Inc.
- 3. The Lac à l'Orignal deposit is a promising viable source of P for the LFP battery market. P₂O₅ and CaO concentrations and CaO/P₂O₅ ratios are better than required for phosphoric acid production. Halogen concentrations are variable with F below concerning levels, whereas CI contents are slightly higher than ideal values. CI concentrations could be managed by mixing mineralization with different CI contents. Advanced methods for the reduction of CI should also be explored.
- 4. Other elements, such as Si, Fe, Al, Mg, As, Cd, U, and Th of the apatite concentrate are below deleterious threshold concentrations. During phosphoric acid production from beneficiated apatite concentrate, these low trace element concentrations may produce phosphogypsum that could be recycled into plaster and wallboard.
- 5. The low abundance of sulfide gangue minerals suggests that the environmental risks of acid mine drainage from tailings would be minimal. Such low concentrations of deleterious trace elements and sulfide minerals make the Lac à l'Orignal deposit an attractive and highly probable ESG-compliant source of North American P for the LFP battery industry.
- 6. Paragenetic relationships indicate that apatite precipitated throughout the crystallization history of the magma. However, the highest quality phosphatic mineralization is interpreted to have formed

as apatite-magnetite-ilmenite cumulate layers that precipitated early to mid-way through the fractional crystallization process.

7. Further research should focus on the detailed characterization of other First Phosphate properties. The complexity of the LSJA Complex necessitates a comprehensive understanding of the mineralogy and geochemistry of these areas as a counterpoint to the Lac à l'Orignal region. Such a comparison will provide important new information required to fully assess the distribution of high-grade mineralized zones.

"Advanced mineralogical data is essential for making decisions regarding site feasibility and how to cost effectively extract clean phosphate under strict Environmental, Social and Governance ("ESG") guidelines, with the lowest possible carbon footprint," said Peter Kent, President of First Phosphate Corp. "This partnership has provided First Phosphate with a competitive edge by laying the foundation for developing proprietary and advanced methods of phosphate production for the LFP battery industry. Ultimately, we want to leverage our high-purity phosphate Mineral Resource to help Quebec and Canada become a leader in the electric vehicle industry, and advance on our national climate change goals."

"Most of the estimated world phosphate reserves are from sedimentary rocks (~95%) that generally contain high concentrations of deleterious trace elements. Consequently, they are less desirable for LFP battery production than phosphorus hosted in igneous rocks. Only a small portion of phosphate (~5%), however, is mined from igneous rocks, most of which is hosted in carbonatite. The Lac à l'Orignal phosphate deposit is unique because it occurs in anorthosite. Anorthosite is an igneous rock that is a new and sought-after source of phosphate for the North American LFP market. Collaborative research with the Pufahl Research Group at Queen's University shows that anorthosite may be ideal for producing phosphoric acid with low levels of trace elements, a critical step for producing high-quality, ESG-compliant LFP cathodes," further states Dr. Peir Pufahl.

The primary aim of the research partnership between First Phosphate and Queen's University was to assess the quality of phosphatic mineralization found at the Lac à l'Orignal property for the manufacture of lithium ferro (iron) phosphate (LFP) batteries. The purpose of the report was to describe and interpret the mineralogy, petrology, and geochemistry of First Phosphate's Lac à l'Orignal igneous phosphate deposit. Lac à l'Orignal is part of the Lac-Saint-Jean Anorthosite Complex, Québec, which is the largest anorthosite complex in the world.

Qualified Person

The scientific and technical disclosure for First Phosphate included in this news release have been reviewed and approved by D. Grant Feasby, P.Eng. of P&E Mining Consultants Inc. Mr. Feasby is a metallurgist and a Qualified Person under National Instrument 43-101 Standards of Disclosure of Mineral Projects ("NI 43-101").

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About First Phosphate Corp.

First Phosphate is a mineral development company fully dedicated to extracting and purifying phosphate for the production of cathode active material for the Lithium Iron Phosphate ("LFP") battery industry. First Phosphate is committed to producing at high purity level, at full ESG standard and with low anticipated carbon footprint. First Phosphate plans to vertically integrate from mine source directly into the supply chains of major North American LFP battery producers that require battery grade LFP cathode active material emanating from a consistent and secure supply source. First Phosphate holds over 1,500 sq. km of total land claims in the Saguenay-Lac-St-Jean Region of Quebec, Canada that it is actively developing. First Phosphate properties consist of rare anorthosite igneous phosphate rock that generally yields high purity phosphate material devoid of high concentrations of harmful elements.

Forward-Looking Information and Cautionary Statements

Certain information in this news release constitutes forward-looking statements under applicable securities laws. Any statements that are contained in this news release that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as "may", "should", "anticipate", "expect", "potential", "believe", "intend" or the negative of these terms and similar expressions. Forward-looking statements in this news release include statements relating to: the Company's commitment to producing high purity phosphate materials at full ESG standard under a lowcarbon footprint; the Company's plans to integrate directly into the functions of certain major North American LFP battery producers; the Company's proposed development of its land claims in the Saguenay-Lac-St-Jean Region; the submission and availability of the Report on the Company's website; the stated benefits of the partnership with Queen's University and the findings and publication of the Report on the Company, and howthe aforementioned factors into the Company's business plans and exploration and development plans for its mineral claims under the stated goals; the Company's plans to leverage high-purity phosphate Mineral Resource to help Quebec and Canada become a leader in the electric vehicle industry, and to advance on national climate change goals; that anorthosite may be ideal for producing phosphoric acid with low levels of trace elements, as a critical step for producing high-quality, ESG-compliant LFP cathodes; and the Report's conclusion that the Company's Lac à l'Orignal deposit is a source of North American phosphorus for the LFP battery industry that has a high probability of being ESG-compliant.

Forward-looking information in this press release are based on certain assumptions and expected future events, namely: the Company's ability to producing high purity phosphate materials at full ESG standard under a lowcarbon footprint; the Company's ability to integrate directly into the functions of certain major North American LFP battery producers; the Company's ability to develop its land claims in the Saguenay Saguenay-Lac-St-Jean Region; the Report will be submitted and available on the Company's website; the Company's ability to capitalize on the stated benefits of the partnership with Queen's University and the findings and publication of the Report on the Company, and carry out the Company's business plans and exploration and development plans for its mineral claims under the stated goals; the Company's ability to carry out its plans to leverage high-purity phosphate Mineral Resource to help Quebec and Canada become a leader in the electric vehicle industry, and to advance on national climate change goals; that anorthosite will be ideal for producing phosphoric acid with lowlevels of trace elements, and will be a critical step for producing high-quality, ESG-compliant LFP cathodes; and the actualization and realization of the Report's conclusion that the Company's Lac à l'Orignal deposit is a source of North American phosphorus for the LFP battery industry that has a high probability of being ESG-compliant.

These statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements to differ materially from those expressed or implied by such statements, including but not limited to: the Company's inability to produce high purity

phosphate materials at full ESG standard under a lowcarbon footprint; the Company's inability to integrate directly into the functions of certain major North American LFP battery producers; the Company's inability to develop its land claims in the Saguenay-Lac-St-Jean Region; the inability of the Report to be submitted and available on the Company's website; the Company's inability to capitalize on the stated benefits of the partnership with Queen's University and the findings and publication of the Report on the Company, and inability to carry out the Company's business plans and exploration and development plans for its mineral claims under the stated goals; the Company's inability to carry out its plans to leverage high-purity phosphate Mineral Resource to help Quebec and Canada become a leader in the electric vehicle industry, and to advance on national climate change goals; that anorthosite will not be ideal for producing phosphoric acid with lowlevels of trace elements, and will not be a critical step for producing high-quality, ESG-compliant LFP cathodes; and the Report's conclusion that the Company's Lac à l'Orignal deposit is a source of North American phosphorus for the LFP battery industry that has a high probability of being ESG-compliant does not actualize or materialize as described.

Readers are cautioned that the foregoing list is not exhaustive. Readers are further cautioned not to place undue reliance on forward-looking statements, as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated.

Forward-looking statements contained in this press release are expressly qualified by this cautionary statement and reflect the Company's expectations as of the date hereof and are subject to change thereafter. The Company undertakes no obligation to update or revise any forward-looking statements, whether as a result of newinformation, estimates or opinions, future events or results or otherwise or to explain any material difference between subsequent actual events and such forward-looking information, except as required by applicable law.



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