

# First Phosphate Drills 9.44% P<sub>2</sub>O<sub>5</sub> Over 89.10 m at Its Bégin-Lamarche Project in Saguenay-Lac-St-Jean, Quebec, Canada

written by Raj Shah | March 19, 2024

March 19, 2024 ([Source](#)) – First Phosphate Corp. (CSE: PHOS) (OTC: FRSPF) (FSE: KD0) (“**First Phosphate**” or the “**Company**”) is pleased to announce initial assay results from the first 3,394 m of its 25,000 m drill program at its Bégin-Lamarche Project in Saguenay-Lac-St-Jean, Quebec. In total 10,000 m of drilling have been completed to date. Assay results are awaited on 6,606 m and will be released over the coming weeks as they become available.

## Highlights:

- **Phosphate Mountain Zone:** 9 drill holes have been completed to date in the Phosphate Mountain Zone, ones which have intersected high apatite-bearing peridotite visually containing from 30% to 80% apatite over widths of up to 43 m.
- **Northern Zone:** Drill hole BL-24-25 intersected 9.89% P<sub>2</sub>O<sub>5</sub> (phosphate) over 42.80 m starting at a depth of 74.20. Drill hole BL-24-26 intersected 9.44% P<sub>2</sub>O<sub>5</sub> over 89.10 m starting at a depth of 6.90 m.
- **Northwestern Zone:** Drill holes BL-24-49 and BL-24-54 intersected 20 m and 40 m of peridotite, respectively visually containing 30% apatite.
- **Southern Zone:** Drill hole BL-24-24 intersected 5.22%

P<sub>2</sub>O<sub>5</sub> over 129.60 m starting at a depth of 61.30 m. Drill hole BL-24-35 intersected a new higher-grade layer of 7.82% P<sub>2</sub>O<sub>5</sub> over 22.40 m starting at a depth of 165.10 m.

“We are impressed by the high-grade nature and volume of the phosphate layers being defined at Bégin-Lamarche,” said First Phosphate CEO, John Passalacqua. “Bégin-Lamarche is showing increased open-pit surface feasibility in an area of developed infrastructure with direct paved-road access to the deep-sea port of Saguenay at only 70 km away.”

### **Apatite versus Phosphate**

Apatite is very common as an [accessory mineral](#) in [igneous](#) and [metamorphic](#) rocks where it is the most common [phosphate mineral](#) form to be found. Occurrences are usually found as small grains which are often visible only in [thin sections](#). The chemical formula of apatite is Ca<sub>5</sub>(PO<sub>4</sub>)<sub>3</sub>(F,Cl,OH). The molecular weight of the phosphate molecule (PO<sub>4</sub>) in apatite is 41.8%. Apatite is also found in [clastic sedimentary rock](#) as grains eroded out of the source rock over time. [Phosphorite](#) is a phosphate-rich sedimentary rock containing as much as 80% apatite which is present as cryptocrystalline masses. Economic quantities of apatite are also sometimes found in nepheline syenite or in carbonatites. Apatite was recently added to the Critical and Strategic Minerals List of Quebec, Canada. The European Union, South Korea, and the Provinces of Ontario and Newfoundland-Labrador are other jurisdictions that recognize phosphate as a critical and strategic mineral.

### **Phosphate Mountain Zone**

A total of 9 drill holes have been completed to date in the Phosphate Mountain Zone and have intersected high apatite-

bearing peridotite visually containing from 30% to 80% apatite over widths of up to 43 m. Hole BL-24-53 intersected 70% apatite over a length of 1.0 m (See Figure 1).

Multiple semi-massive apatite veins have been intersected across the 9 drill holes where the background apatite content is 30-35%. These results compare well in terms of the apatite content discovered in this zone during last fall's surface sample prospection program where more than 50% of surface samples returned results of above 10%  $P_2O_5$ . These 9 drill holes have been prioritized for assay analysis and their data should be available in the coming weeks.



**Figure 1 -70% Apatite Concentration Visible Over 1.0 m in Drill Hole BL-24-53**

To view an enhanced version of this graphic, please visit:

[https://images.newsfilecorp.com/files/8917/202160\\_ad6a7d2054bf5a55\\_001full.jpg](https://images.newsfilecorp.com/files/8917/202160_ad6a7d2054bf5a55_001full.jpg)

## **Northern Zone**

Expanded drilling in the Northern Zone has confirmed grades and widths that were originally identified during the initial 2023 drilling program. In addition, the 3 drill holes BL-24-25, BL-24-26 and BL-24-31 have intersected high grade phosphate layers, grading 9.89%  $P_2O_5$  over 42.80 m from a depth of 74.20 m;

9.44% P<sub>2</sub>O<sub>5</sub> over 89.10 m from a depth of 6.90 m; and 10.47% P<sub>2</sub>O<sub>5</sub> over 48.05 m from a depth of 4.85 m. These results indicate that there are one or more high grade phosphate layers that outcrop on surface and which may be important starting points for an eventual open-pit mining operation.

Drill hole BL-24-23 intersected 7.02% P<sub>2</sub>O<sub>5</sub> over 154.1 m from a depth of 21.0 m and could be interpreted to represent a phosphate layer drilled along dip. If so, this result could be indicative of the average grade for this layer and to be confirmed as the drilling campaign progresses. Results for the Northern Zone are shown in Table 1 below.

**Table 1 – Drill Results for the Northern Zone**

Hole_ID	From (m)	To (m)	Length <sup>1</sup> (m)	P <sub>2</sub> O <sub>5</sub> (%)	TiO <sub>2</sub> (%)	Fe <sub>2</sub> O <sub>3</sub> T (%)
BL-24-22	10.55	47.65	37.10	5.82	4.41	23.88
	96.00	117.00	21.00	4.36	3.17	18.60
	156.00	174.00	18.00	3.06	2.99	18.88
	<b>195.00</b>	<b>259.50</b>	<b>64.50</b>	<b>5.80</b>	<b>2.94</b>	<b>21.04</b>
BL-24-23 <sup>2</sup>	<b>21.00</b>	<b>175.10</b>	<b>154.10</b>	<b>7.02</b>	<b>4.40</b>	<b>27.34</b>
	188.30	194.00	5.70	12.49	6.30	35.91
BL-24-25	<b>74.20</b>	<b>117.00</b>	<b>42.80</b>	<b>9.89</b>	<b>3.54</b>	<b>28.65</b>
BL-24-26	<b>6.90</b>	<b>96.00</b>	<b>89.10</b>	<b>9.44</b>	<b>3.92</b>	<b>27.59</b>
BL-24-27 <sup>2</sup>	6.60	13.40	7.80	9.43	6.12	36.18
	<b>138.00</b>	<b>189.00</b>	<b>51.00</b>	<b>4.41</b>	<b>3.05</b>	<b>20.62</b>
	242.55	258.00	15.45	7.80	3.73	25.56
BL-24-29	<b>99.00</b>	<b>276.00</b>	<b>177.00</b>	<b>4.46</b>	<b>3.63</b>	<b>22.85</b>
<i>including</i>	99.00	138.00	39.00	4.04	2.65	20.26
<i>including</i>	150.00	165.00	15.00	2.95	3.57	21.26

<i>including</i>	174.00	195.00	21.00	5.75	4.79	30.21
<i>including</i>	205.80	276.00	70.20	6.06	3.90	25.01
BL-24-31	4.85	52.90	48.05	10.47	4.97	30.13
	66.00	90.00	24.00	4.55	2.33	13.03
	<b>119.85</b>	<b>213.80</b>	<b>93.95</b>	<b>7.16</b>	<b>3.49</b>	<b>18.76</b>
<i>including</i>	195.00	213.80	18.80	12.29	5.39	31.76
BL-24-32	37.05	39.80	2.75	11.46	5.60	30.99
	44.00	48.00	4.00	10.39	5.24	26.86
	55.50	58.35	2.85	5.08	2.23	17.25
	63.70	70.00	6.30	15.31	4.04	33.51
	94.00	110.70	16.70	9.51	3.90	24.84
	<b>159.00</b>	<b>228.00</b>	<b>69.00</b>	<b>5.51</b>	<b>3.82</b>	<b>24.60</b>
<i>including</i>	159.00	181.10	22.10	8.38	5.23	33.27
BL-24-34	9.00	24.00	15.00	2.92	2.33	19.39
	<b>93.00</b>	<b>192.00</b>	<b>99.00</b>	<b>6.34</b>	<b>2.74</b>	<b>20.09</b>
<i>including</i>	93.00	135.00	42.00	5.27	3.14	20.45
<i>including</i>	144.00	192.00	48.00	8.27	2.86	22.96

<sup>1</sup> Lengths are measured along the core. True widths are estimated to be between 50% and 80% of the core interval.

<sup>2</sup> These holes have been seemingly drilled parallel to the phosphate layer (potentially along dip)

### Northwestern Zone

Two drill holes completed to date in the Northwestern Zone have intersected 30-35% visual apatite. Similarly to the Mountain Zone, visual inspection confirms the apatite content discovered in this zone during last fall's surface sample prospection program. These 2 drill holes have been prioritized for assay

analysis and their data should be available in the coming weeks.

## Southern Zone

Results from the Southern Zone confirm those from the initial 2023 drill program and include further intersects of over 100 m of phosphate mineralization. Drill holes BL-24-24 and BL-24-33 intersected 5.22%  $P_2O_5$  over 129.60 m from a depth of 61.6 m and 5.00%  $P_2O_5$  over 106.20 m from a depth of 3.8 m. Preliminary interpretation of the results suggests a tabular and horizontal body of phosphate mineralization with a thickness of over 100 m and grading approximately 5.0%  $P_2O_5$ .

Drill hole BL-24-35 intersected two higher grade phosphate layers located below the tabular body mentioned above. This drill hole intersected 7.82%  $P_2O_5$  over 22.40 m and 6.25%  $P_2O_5$  over 41.20 m. Preliminary interpretation indicates that these two layers may connect with the high-grade phosphate layers discovered in drill holes from the already completed 2023 drill campaign. For example, drill hole BL-23-16 returned 7.60%  $P_2O_5$  over 28.7 m and 9.99%  $P_2O_5$  over 34.5 m. Drill hole BL-23-16 is located 300 m to the southwest of current drill hole BL-24-35. Infill drilling is currently underway in the area between these two drills holes to confirm if connectivity exists between these two layers. Currently available drill results for the Southern Zone are presented in Table 2 below. Drill results from the initial already completed 2023 drill campaign can be found in Table 4 below.

**Table 2 – Drill Results for the Southern Zone**

Hole_ID	From (m)	To (m)	Length <sup>1</sup> (m)	$P_2O_5$ (%)	$TiO_2$ (%)	$Fe_2O_3T$ (%)
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BL-24-24	<b>61.30</b>	<b>190.90</b>	<b>129.60</b>	<b>5.22</b>	<b>3.63</b>	<b>22.32</b>
	230.00	249.20	19.20	5.12	3.38	24.85
	284.70	310.40	25.70	3.73	2.74	17.17
BL-24-28	56.10	65.10	9.00	4.91	3.80	23.32
	<b>73.25</b>	<b>152.20</b>	<b>78.95</b>	<b>5.48</b>	<b>4.07</b>	<b>24.68</b>
	203.00	214.00	11.00	2.87	3.63	19.37
	231.00	244.10	13.10	4.50	2.54	18.42
	273.00	285.00	12.00	3.07	2.04	14.88
BL-24-30	<b>33.00</b>	<b>78.65</b>	<b>45.65</b>	<b>4.28</b>	<b>2.97</b>	<b>19.83</b>
	239.00	250.00	11.00	4.12	3.19	21.06
BL-24-33	<b>3.80</b>	<b>110.00</b>	<b>106.20</b>	<b>5.00</b>	<b>3.70</b>	<b>21.19</b>
	126.00	145.50	19.45	5.80	3.33	17.07
BL-24-35	12.00	44.00	32.00	3.79	3.58	24.52
	108.20	140.60	32.40	5.03	3.28	30.46
	<b>165.10</b>	<b>187.50</b>	<b>22.40</b>	<b>7.82</b>	<b>4.44</b>	<b>30.57</b>
	196.40	201.70	5.30	5.52	2.55	5.36
	<b>212.50</b>	<b>253.70</b>	<b>41.20</b>	<b>6.25</b>	<b>3.44</b>	<b>19.55</b>

<sup>1</sup> Lengths are measured along the core. True width is estimated to be between 60 and 90% of the core interval

**Table 3 – Parameters for the Current Drill Holes Being Released**

Hole_ID	Easting	Northing	Azimuth	Dip	Depth	Zone
BL-24-22	326743	5403399	330	-45	270	Northern
BL-24-23	326743	5403399	150	-45	207	Northern
BL-24-24	325784	5402454	125	-45	324	Southern
BL-24-25	326719	5403448	330	-45	200	Northern
BL-24-26	326698	5403481	330	-45	150	Northern

BL-24-27	326698	5403481	150	-50	264	Northern
BL-24-28	325784	5402454	125	-60	312	Southern
BL-24-29	326617	5403433	150	-45	327	Northern
BL-24-30	325771	5402585	125	-45	255	Southern
BL-24-31	326675	5403328	150	-45	222	Northern
BL-24-32	326728	5403215	330	-45	228	Northern
BL-24-33	325892	5402372	125	-45	174	Southern
BL-24-34	326645	5403381	330	-45	207	Northern
BL-24-35	325951	5402332	125	-45	255	Southern

**Table 4 – Existing Drill Results from the 2023 Drill Campaign for the Northern and the Southern Zones**

**Table 4a – 2023 Drill Results for the Northern Zone from the 2023 Drill Campaign**

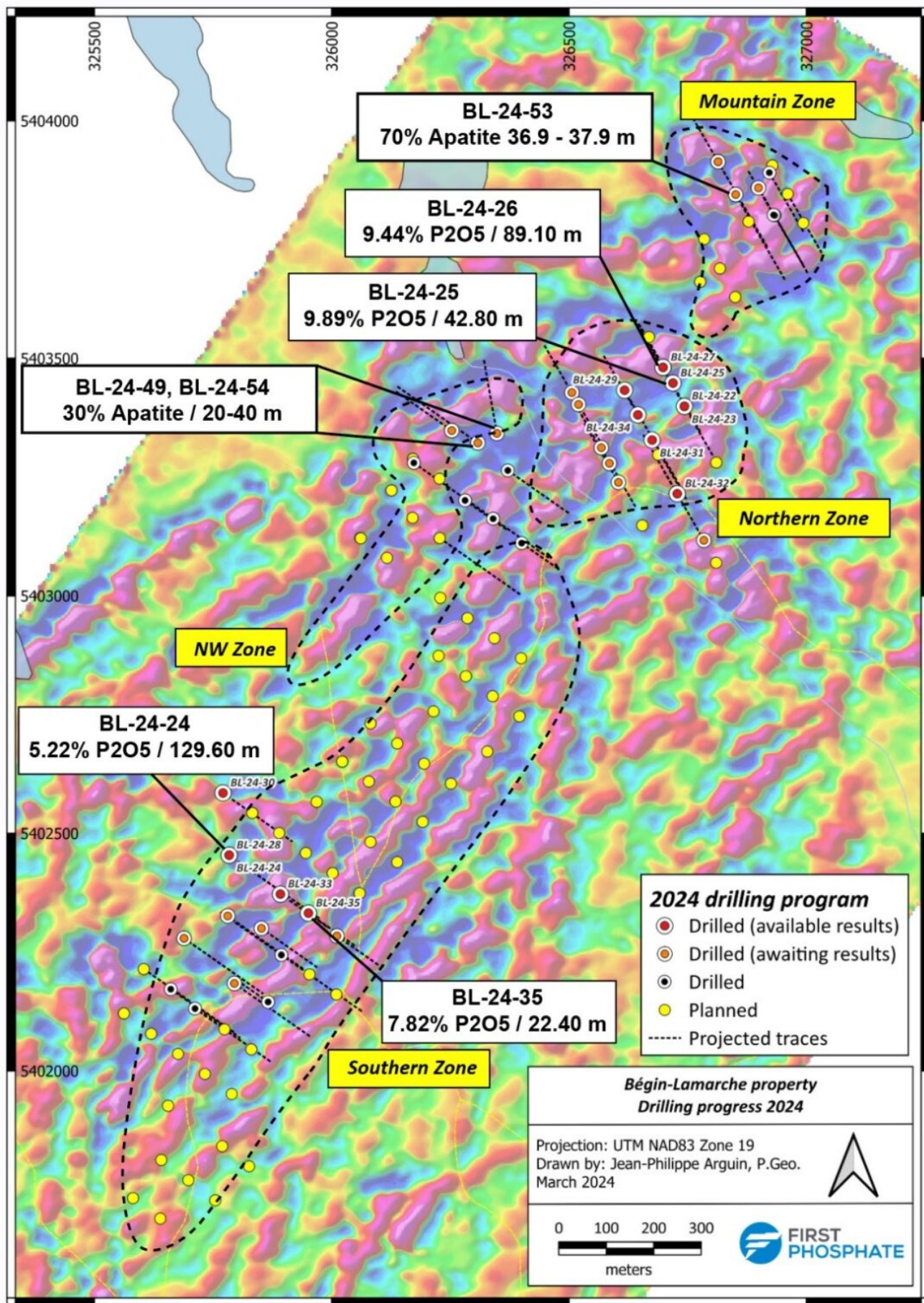
Hole_ID	From (m)	To (m)	Length (m)	P <sub>2</sub> O <sub>5</sub> (%)	TiO <sub>2</sub> (%)	Fe <sub>2</sub> O <sub>3</sub> T (%)
BL-23-01	131.9	215.4	83.5	7.82	4.16	27.13
BL-23-02	143.7	201.0	57.3	8.35	3.38	23.68
BL-23-03	13.8	78.0	64.2	8.43	4.37	28.17
BL-23-03	143.0	201.0	58.0	3.94	3.03	19.58
BL-23-04	4.8	76.7	71.9	4.28	2.78	15.29
BL-23-05	105.1	222.0	116.9	4.45	2.90	21.16
BL-23-06	7.3	66.8	59.5	6.55	4.41	27.72
BL-23-06	201.0	295.3	94.3	6.10	3.70	25.55
BL-23-07	53.5	156.0	102.5	3.65	3.42	19.11
BL-23-08	62.6	94.1	31.5	5.89	2.73	14.93
BL-23-09	39.0	91.75	52.8	4.45	3.11	20.13
BL-23-10	74.15	159.0	84.9	4.57	2.65	17.63
BL-23-10	252.2	311.0	58.8	7.14	3.30	24.05



BL-23-18	55.9	141.5	85.6	8.75	4.18	28.82
BL-23-19	197.4	308.2	110.8	7.02	3.30	25.46
BL-23-20	56.2	102.3	46.1	4.48	2.73	19.65
BL-23-21	122.8	255.0	132.2	6.75	3.94	24.37

**Table 4b – Results for the Southern Zone from the 2023 Drill Campaign**

Hole_ID	From (m)	To (m)	Length (m)	P <sub>2</sub> O <sub>5</sub> (%)	TiO <sub>2</sub> (%)	Fe <sub>2</sub> O <sub>3</sub> T (%)
BL-23-11	24.1	36.3	12.2	4.81	0.32	10.15
BL-23-12	53.1	182.3	129.2	4.83	2.95	18.39
BL-23-13	139.6	225.0	85.4	4.08	2.58	13.39
BL-23-14	18.0	151.5	133.5	5.00	4.15	27.17
BL-23-15	50.0	183.7	133.7	4.52	3.40	20.05
BL-23-16	36.1	64.8	28.7	7.60	3.88	22.09
BL-23-16	97.0	131.5	34.5	9.99	5.50	29.83
BL-23-17	13.0	79.0	66.0	2.59	2.15	12.84



## **Figure 2 – Drilling Progress at Bégin-Lamarche**

To view an enhanced version of this graphic, please visit:

[https://images.newsfilecorp.com/files/8917/202160\\_ad6a7d2054bf5a55\\_002full.jpg](https://images.newsfilecorp.com/files/8917/202160_ad6a7d2054bf5a55_002full.jpg)

### **Quality Assurance / Quality Control**

The sampling of, and assay data from, the drill core is monitored through the Company's implementation of a quality assurance – quality control (QA-QC) program designed to the CIM Mineral Exploration Best Practices Guidelines.

A formal chain-of-custody procedure was adopted for security of samples until their delivery at the laboratory. Drill core (NQ size) is logged and samples are selected by Laurentia Exploration Inc. geologists and sawn in half with a diamond saw at the project site. Half of the core is retained at the site for reference purposes. Sample intervals may vary from 0.5 to 3 metres in length depending on the geological observations. A blank and a standard are inserted at the beginning of each sample batch, usually one complete hole, and a blank and a standard are then inserted alternatively each 10 samples. Half-core samples are packaged and sent by ground transportation in sealed rice bags to an independent laboratory, Activation Laboratories Ltd. of Ancaster, Ontario (ISO/IEC 17025:2005 with CAN-P-1579). The core samples are crushed up to 80% passing 2mm (10 mesh), riffle split 250 g and pulverized (mild steel) to 95% passing -200 mesh. Each sample is analyzed for whole rock analysis (code 4B) for 10 major oxides and 7 trace elements by lithium metaborate/tetraborate fusion of 3g of material and analyze by ICP-OES. The laboratory has its own QA/QC protocols.

### **Qualified Person**

The scientific and technical disclosure for First Phosphate

included in this news release has been reviewed and approved by Gilles Laverdière, P.Geo. Mr. Laverdière is Chief Geologist of First Phosphate and a Qualified Person under National Instrument 43-101 – *Standards of Disclosure of Mineral Projects* (“NI 43-101”).

### **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 royalty-free district-scale 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.

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### **Forward-Looking Information and Cautionary Statements**

*This news release contains certain statements and information that may be considered “forward-looking statements” and “forward-looking information” within the meaning of applicable securities laws. In some cases, but not necessarily in all cases, forward-looking statements and forward-looking information can be identified by the use of forward-looking terminology such as “plans”, “targets”, “expects” or “does not expect”, “is expected”, “an opportunity exists”, “is positioned”, “estimates”, “intends”, “assumes”, “anticipates” or “does not anticipate” or “believes”, or variations of such words and phrases or statements that certain actions, events or results “may”, “could”, “would”, “might”, “will” or “will be taken”, “occur” or “be achieved” and other similar expressions. In addition, statements in this news release that are not historical facts are forward-looking statements, including, among other things, the Company’s planned exploration and production activities, the properties and composition of any extracted phosphate, the Company’s plans for vertical integration into North American supply chains, statements relating to the Company’s planned exploration activities, including its drill target strategy and next steps for the Bégin-Lamarche Property; and the Company’s interpretations and expectations about the results on the Bégin-Lamarche Property.*

*These statements and other forward-looking information are based on assumptions and estimates that the Company believes are appropriate and reasonable in the circumstances, including, without limitation, expectations of the Company’s long term*

business outcomes given its short operating history; expectations regarding revenue, expenses and operations; the Company having sufficient working capital and ability to secure additional funding necessary for the exploration of the Company's property interests; expectations regarding the potential mineralization, geological merit and economic feasibility of the Company's projects; expectations regarding drill programs and the potential impacts successful drill programs could have on the life of the mine and the Company; mineral exploration and exploration program cost estimates; expectations regarding any environmental issues that may affect planned or future exploration programs and the potential impact of complying with existing and proposed environmental laws and regulations; receipt and timing of exploration and exploitation permits and other third-party approvals; government regulation of mineral exploration and development operations; expectations regarding any social or local community issues that may affect planned or future exploration and development programs; expectations surrounding global economic trends and technological advancements; and key personnel continuing their employment with the Company.

There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the Company's expectations include: limited operating history; high risk of business failure; no profits or significant revenues; limited resources; negative cash flow from operations and dependence on third-party financing; the uncertainty of additional funding; no dividends; risks related to possible fluctuations in revenues and results; insurance and uninsured risks; litigation; reliance on management and key personnel; conflicts of interest; access to supplies and

materials; dangers of mineral exploration and related liability and damages; risks relating to health and safety; government regulation and legal uncertainties; the company's exploration and development properties may not be successful and are highly speculative in nature; dependence on outside parties; title to some of the Company's mineral properties may be challenged or defective; Aboriginal title and land claims; obtaining and renewing licenses and permits; environmental and other regulatory risks may adversely affect the company; risks relating to climate change; risks related to infrastructure; land reclamation requirements may be burdensome; current global financial conditions; fluctuation in commodity prices; dilution; future sales by existing shareholders could cause the Company's share price to fall; fluctuation and volatility in stock exchange prices; and risks related to market demands. There can be no assurance that any opportunity will be successful, commercially viable, completed on time or on budget, or will generate any meaningful revenues, savings or earnings, as the case may be, for the Company. In addition, the Company will incur costs in pursuing any particular opportunity, which may be significant.

These factors and assumptions are not intended to represent a complete list of the factors and assumptions that could affect the Company and, though they should be considered carefully, should be considered in conjunction with the risk factors described in the Company's other documents filed with the Canadian securities authorities, including without limitation the "Risk Factors" section of the Company's Annual Information Form dated November 29, 2023 which is available on SEDAR at [www.sedarplus.ca](http://www.sedarplus.ca). Although the Company has attempted to identify factors that would cause actual actions, events or results to differ materially from those disclosed in the forward-looking information or information, there may be other

*factors that cause actions, events or results not to be as anticipated, estimated or intended. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.*