

Nuinsco Identifies High Grade Apatite Mineralization at the Prairie Lake Critical Minerals Project

Highlights:

- Very high apatite content observed in drill core.
- High apatite content translates into elevated phosphate and rare earth element (“REE”) content.
- Intervals of tens of metres of high-grade rock identified in drill core.
- Provides added value and opportunity to an already enormous asset.

Toronto, May 23, 2024 – Nuinsco Resources Limited (“**Nuinsco**” or the “**Company**”) (CSE: NWI, FRA: NJX) today announced that results from the re-logging of drill core and a review of historic data (the “**Study**”) indicate the presence of higher grade domains of phosphate/apatite mineralization at the Prairie Lake Critical Minerals and phosphate project (“**Prairie Lake**” or the “**Project**”) than reported in the Company’s mineral resource estimate (“**MRE**”) dated May 31, 2022 which could have a positive impact on the Prairie Lake resource.

The Study identified the presence of substantial domains of phoscorite rock containing higher-grade phosphate mineralization associated with elevated content of the mineral apatite. This indicates the potential for larger domains of high-grade phosphate and REEs occurring within the already very large Critical Minerals MRE at the Project (see table below). In places, abundant phoscorite rock with apatite mineralization is observed over tens of metres in drill core – resulting in sizeable, measured intersections with phosphate and REE grades substantially higher than the average grade of the MRE (see table below).



Prairie Lake Project phoscorite rock in drill core containing abundant (circa 50%) apatite (sugary, pale-green mineral)

“The presence of phoscorite and domains containing abundant apatite mineralization is of significant interest to

the Project,” said Paul Jones, Nuinsco’s CEO. “The 871.8 million tonne Inferred and 15.6 million tonne Indicated MRE at the Project is a very substantial asset of vitally important critical minerals with, constantly expanding, global demand. The presence of the apatite rich high-grade mineralization adds high-value domains and may improve the robustness of the project and provide opportunities to enhance the MRE and plan next steps which is a very positive step in assessing the project.”

Tabulated Drill Hole Intersections - Prairie Lake Project

Hole ID	From (m)	To (m)	Width (m)	P2O5 %	Sc ppm	Y ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Sum REE ppm
NP1005	323.8	362	38.2	5.02	2.4	113.4	326.4	760.1	89.5	356.1	59.8	16.4	1724.1
includes	325	344	19	7.29	1.6	101.8	465.2	1073	124	479.5	72.6	18.7	2336.4
includes	335	336.71	1.71	15.26	1.6	149.3	855.8	2017.6	233.7	898.3	135.1	34.3	4325.7
includes	336.27	336.71	0.44	23.08	0.5	202	1170	2790	328	1260	196	50.9	5997.4
NP1004	218	225.5	7.5	10.13	6.6	311.6	578.4	1283.2	165.4	681.4	127.6	37.2	3191.4

Prairie Lake, located near Terrace Bay, Ont., has amongst the world’s highest known light rare earth element content in apatite and contains a host of other REE bearing minerals, as well as niobium-bearing pyrochlore, and phosphate mineralization. Metallurgical studies to date demonstrate that a clean phosphate concentrate, grading 26% P₂O₅ at 76% recovery with ample room for improvement, and with valuable rare earth element co-concentrate, can be reliably produced from Prairie Lake feed.

The Prairie Lake project contains a large, well-located resource of critical minerals in North America. It is a potential source of elements needed for applications in transportation, power distribution, green technologies and a host of other applications, including agriculture. It is of immense value to a secure critical minerals supply chain; a strategic concern identified by numerous governments in the recent past and addressed with incentives and programs to encourage development of the critical minerals sector. The Project is located near the north shore of Lake Superior, putting it in close or easily accessible reach of:

- The towns of Marathon, Terrace Bay and other affected communities - all able to supply a local, skilled workforce.
- All weather forest access road crossing the project and deposit.
- Paved Highways 17 and 11 to the south and north.
- Canadian Pacific Railway and Canadian National Railway networks.
- High capacity (230kV) electrical power transmission line.
- 50km from the Marathon deep water port project. Deep-water ports are also located at Thunder Bay and Sault Ste. Marie, able to handle ocean going ships.
- The Marathon airport.

Laura Giroux, P.Geo, Chief Geologist, acts as Nuinsco's Qualified Person under National Instrument 43-101. Ms. Giroux has reviewed and approved the technical contents of this news release.

About Nuinsco Resources Limited

Nuinsco Resources has over 50 years of exploration success and is a growth-oriented, multi-commodity mineral exploration and development company focused on prospective opportunities in Canada and internationally.

Currently the Company has the large multi-commodity (phosphate, rare earth element, niobium, tantalum) Prairie Lake project near Marathon-Terrace Bay, the Zig Zag Lake property (lithium, tantalum) near Armstrong optioned to First Class Metals PLC and retains a NSR royalty on the Sunbeam gold property near Atikokan. In addition, Nuinsco has an agreement for gold exploitation at the El Sid project in the Eastern Desert of Egypt.

Prairie Lake Project Pit Constrained Mineral Resource Estimate⁽¹⁻⁶⁾

Class	Cut-Off	Tonnes	Rare Earth Oxides									Niobium	Phosphate
			Nd ₂ O ₃	Pr ₆ O ₁₁	Sc ₂ O ₃	CeO ₂	La ₂ O ₃	Sm ₂ O ₃	Ta ₂ O ₅	Y ₂ O ₃	TREO	Nb ₂ O ₅	P ₂ O ₅
	NSR C\$/t	M	g/t	g/t	g/t	g/t	g/t	g/t	g/t	g/t	kg/t	%	%
Indicated	30	15.6	344	96	15	754	300	58	28	100	1.67	0.16	3.71
Inferred	30	871.8	409	82	18	905	388	79	17	127	2.01	0.10	3.39

*TREO = Total Rare Earth Oxides: neodymium, Nd₂O₃; praseodymium, Pr₆O₁₁; scandium, Sc₂O₃; Cerium, CeO₂; lanthanum, La₂O₃; samarium, Sm₂O₃; yttrium, Y₂O₃.

A full description of methodology used to estimate the Prairie Lake project Mineral Resource Estimate is contained in the NI 43-101 compliant Technical Report, effective date 31 May 2022 prepared by P&E Mining Consultants Inc. that is filed on SEDAR.

1. *Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*
3. *The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could potentially be upgraded to an Indicated Mineral Resource with continued exploration.*
4. *The Mineral Resources were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*
5. *US\$ Metal prices used were \$80/Kg Nd₂O₃, \$80/Kg Pr₆O₁₁, \$1,500/Kg Sc₂O₃, \$50/Kg Nb₂O₅, \$250/t P₂O₅, \$1.35/Kg CeO₂, \$1.35/Kg La₂O₃, \$3.50/Kg Sm₂O₃, Nil\$/t Ta₂O₅ and \$13.00/kg Y₂O₃, 0.78 FX all with combined process recoveries and payables of 50%, except P₂O₅ at 75%.*
6. *The constraining pit optimization parameters were C\$2.50/t mining cost for all material, C\$25/t process cost, C\$5/t G&A cost and 45-degree pit slopes with a C\$30/t NSR cut-off.*

Forward-Looking Statements

This news release contains certain "forward-looking statements." All statements, other than statements of historic fact, that address activities, events or developments that Nuinsco believes, expects or anticipates will or may occur in the future are forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "seek," "anticipate," "believe," "plan," "estimate," "expect," and "intend" and statements that an event or result "may," "will," "can," "should," "could," or "might" occur or be achieved and other similar expressions. These forward-looking statements reflect the current expectations or beliefs of Nuinsco based on information currently available to Nuinsco. Forward-looking statements are subject to a number of risks and uncertainties that may cause the actual results of Nuinsco to differ materially from those discussed in the forward-looking statements, and even if such actual results are realized or substantially realized, there can be no assurance that they will have the expected consequences to, or effects on Nuinsco. Factors that could cause actual results or events to differ materially from current expectations include, among other things, failure to successfully complete financings, capital and other costs varying significantly from estimates, production rates varying from estimates, changes in world copper and/or gold markets, changes in equity markets, uncertainties relating to the availability and costs of financing needed in the future, equipment failure, unexpected geological conditions, imprecision in resource estimates, success of future development initiatives, competition, operating performance of facilities, environmental and safety risks, delays in obtaining or failure to obtain tenure to properties and/or necessary permits and approvals, and other development and operating risks. 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, Nuinsco disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise. Although Nuinsco believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance and accordingly undue reliance should not be put on such statements due to the inherent uncertainty therein.

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