

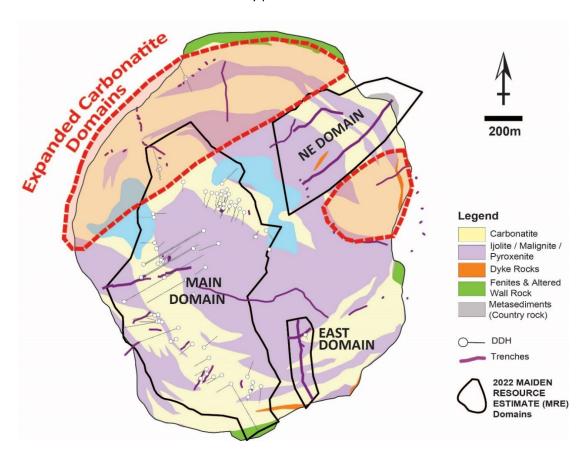
# Nuinsco Reports New Geological Interpretation at Prairie Lake Critical Minerals Project: Geology Simplified, Prospective Host Rock Expanded

## Highlights:

- Updated interpretation substantially reduces geological complexity.
- Expands extent of carbonatite host-rock by approximately 70%.
- Simplifies ongoing evaluation of resource potential, metallurgical processing evaluation.
- Greatly expands potential development areas beyond existing mineral resource estimate ("MRE").
- Great significance for overall potential size of phosphate and critical minerals deposit.

**Toronto, March 27, 2024** – Nuinsco Resources Limited ("**Nuinsco**" or the "**Company**") (CSE: NWI, FRA: NJX) today announced that recent fieldwork and reinterpretation of historical data from the Prairie Lake Critical Minerals and phosphate project ("**Prairie Lake**" or the "**Project**") have combined to produce an updated interpretation of the geology of the Prairie Lake Complex (the "**Complex**") that expands, by approximately 70%, the carbonatite component of the Complex, potentially simplifying further development of resources.

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  $26\% \ P_2O_5$  at 76% recovery with ample room for improvement, and with valuable rare earth element co-concentrate can be reliably produced from Prairie Lake feed.



"With the new geological interpretation of the Project its overall complexity is substantially reduced," said Paul Jones, Nuinsco's CEO. "We were aware that strong mineralization, consistent with the MRE, had been identified outside of the MRE. We have now greatly extended the domain of predominantly carbonatite host rock, producing a much expanded and simplified target area for future work. Metallurgy is key to the evaluation of this project, and with the new interpretation the potential mineralized source rock is more homogeneous and hence potentially more effectively and efficiently processed. This is of enormous significance to potential economic viability. The potential exists to expand the carbonatite mineralized endowment beyond the current MRE, making the project a very significant asset of vitally important Critical Minerals that are in constantly expanding demand as the world's economies transition towards low-carbon emissions."

Field work was conducted during the summer and autumn of 2023 on the northern part of the Prairie Lake Complex near the little-explored north contact. The resultant mapping and sampling, combined with re-evaluation of historic data, has significantly expanded the area of interpreted mineralized carbonatite rock domains at surface, increasing the carbonatite content of the Complex at surface by approximately 70%. This new carbonatite domain is at least 1.5 km long by 500m wide. The importance of the updated interpretation is that is substantially reduces geological complexity and so simplifies ongoing evaluation of resource potential and metallurgical processing. The current MRE consists of the very significant Critical Minerals endowment, tabulated below, currently comprising nearly 890Mt. A simplified geology enhances the possibilities for resource enhancement with further work.

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<sup>(1-6)</sup>

			Rare Earth Oxides								Niobium	Phosp hate	
Class	Cut-Off	Tonnes	$Nd_2O_3$	Pr <sub>6</sub> O <sub>11</sub>	Sc <sub>2</sub> O <sub>3</sub>	CeO <sub>2</sub>	La <sub>2</sub> O₃	Sm <sub>2</sub> O <sub>3</sub>	Ta₂O₅	Y <sub>2</sub> O <sub>3</sub>	TREO	Nb <sub>2</sub> O <sub>5</sub>	P <sub>2</sub> O <sub>5</sub>
	NSR C\$/t	М	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

<sup>\*</sup>TREO = Total Rare Earth Oxides: neodymium,  $Nd_2O_3$ ; praseodymium,  $Pr_6O_{11}$ ; scandium,  $Sc_2O_3$ ; Cerium,  $CeO_2$ ; lanthanum,  $La_2O_3$ ; samarium,  $Sm_2O_3$ ; yttrium,  $V_2O_3$ .

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.

- 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, sociopolitical, 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 Nd<sub>2</sub>O<sub>3</sub>, \$80/Kg Pr<sub>6</sub>O<sub>11</sub>, \$1,500/Kg Sc<sub>2</sub>O<sub>3</sub>, \$50/Kg Nb<sub>2</sub>O<sub>5</sub>, \$250/t P<sub>2</sub>O<sub>5</sub>, \$1.35/Kg CeO<sub>2</sub>, \$1.35/Kg La<sub>2</sub>O<sub>3</sub>, \$3.50/Kg Sm<sub>2</sub>O<sub>3</sub>, Nil\$/t Ta<sub>2</sub>O<sub>5</sub> and \$13.00/kg Y<sub>2</sub>O<sub>3</sub>, 0.78 FX all with combined process recoveries and payables of 50%, except  $P_2O_5$  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 forwardlooking 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.

Paul Jones,	Sean Stokes,	Cathy Hume,	Instagram
CEO	Executive VP	Consultant	@nuinscoresources
613-867-5902	416-712-7481	416-868-1079	
		877-838-1079	
paul.jones@	sean.stokes@	cathy@chfir.com	Twitter
nuinsco.ca	nuinsco.ca		@NWIResources