

Nuinsco Identifies High Grade Phosphate Mineralized Domain at the Prairie Lake Critical Minerals Project

Highlights:

- Multiple high-grade phosphate drill intersections identified; define an extensive phosphate domain.
- Domain exceeds 1200m length abundant room for expansion.
- High-grade domain occurs within the 900Mt mineral resource estimate ("MRE") on the project.
- High-grade phosphate within the MRE is a higher-value component that enhances potential viability.
- High-grade phosphate translates into elevated rare earth element ("REE") content.

Toronto, June 25, 2024 – Nuinsco Resources Limited ("**Nuinsco**" or the "**Company**") (CSE: NWI, FRA: NJX) today announced an expansion of the results from review and reinterpretation of historic drill data (the "**Study**") that establishes the presence of enriched apatite domains measured over hundreds of metres along a zone within the near 900Mt existing MRE (see MRE description below) at the Prairie Lake Critical Minerals Project ("**Prairie Lake**" or the **"Project"**). Phosphate grades are substantially higher than reported in the Company's MRE dated May 31, 2022. The identification of such domains may have great significance to the development of the Prairie Lake Project and enhances its value.



Identification of high-grade apatite/phosphate mineralization in 22 diamond drill holes (see table below), with intersections up to tens of metres wide in a domain at least 1200m long, is a step-change in awareness of the attributes of the mineralization at the project, and particularly within the MRE. Higher grade domains are higher value components of the MRE and allow greater versatility in planning and scheduling development of the resource should the project merit a production decision. The very large Critical Minerals MRE at the Project is enhanced by

the identification of high-grade domains within it. Ample room exists to expand the mineralized domain to other parts of the Complex with similar geology.

"High-grade phosphate zones at the Project further enhance its already significant potential as a North American source of much sought after Critical Minerals," said Paul Jones, Nuinsco's CEO. "The high-grade intersections occur within the existing 871.8 million tonne Inferred MRE and 15.6 million tonne Indicated MRE at the Project. Based upon our understanding of the geology of the Complex we believe there is substantial opportunity to expand the high-grade domains elsewhere on the project. To be clear though, the Prairie Lake Project is already a vitally important Critical Minerals asset. Further definition of high-grade phosphate domains will allow greater leeway in planning and developing the project."

Hole	Zone	From	То	Width (m)	P2O5 (%)	
NP0705	JS	63.72	111.55	47.83	5.14	
NP0702	JS	116.30	132.50	16.20	7.00	
NP0714	JS	32.55	56.00	23.45	8.45	
NP0715	JS	20.90	44.00	23.10	7.15	
NP0810	JS	456.75	492.50	35.75	5.63	
NP0703	JS	144.20	157.20	13.00	9.74	
NP0706	JS	243.00	278.00	35.00	7.52	
NP0701	JS	56.60	77.00	20.40	8.33	
P29	JS	38.40	48.46	10.06	5.03	
NP0704	JS	141.00	152.00	11.00	5.89	
NP0707	JS	52.00	61.70	9.70	6.27	
NP0707	JS	71.40	72.40	1.00	9.05	
P19	JS	63.70	69.49	5.79	6.47	
P24	Main	70.41	97.54	27.13	6.32	
NP0708	Main	16.00	36.00	20.00	6.59	
NP1007	Main	147.50	167.00	19.50	6.73	
NP1007	Main	212.65	212.95	0.30	15.90	
NP1006	Main	165.92	181.83	15.91	6.52	
NP1006	Main	316.13	404.61	88.48	4.95	
P23	Main	32.00	58.22	26.22	5.95	
NP0709	Main	3.50	27.50	24.00	6.56	
NP0709	Main	48.00	56.00	8.00	9.56	
NP1005	Main	252.55	258.47	5.92	5.39	
NP1005	Main	323.80	362.00	38.20	5.02	
NP1004	Main	218.00	225.50	7.50	10.13	
NP1004	Main	284.00	289.90	5.90	7.04	
NP1004	Main	305.00	333.50	28.50	6.20	
NP1002	Main	171.10	185.00	13.90	9.04	
NP1002	Main	201.50	207.50	6.00	5.42	
P39	Main	65.04	66.60	1.56	10.10	

Tabulated Phosphate Intersections:

The Prairie Lake Project is located near Terrace Bay, Ontario. It is a very substantial resource of phosphate mineralization, 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. 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⁾)
---	---

			Rare Earth Oxides								Niobium	Phosp hate	
Class	Cut-Off	Tonnes	Nd ₂ O ₃	Pr ₆ O ₁₁	Sc ₂ O ₃	CeO ₂	La₂O ₃	Sm₂O ₃	Ta₂O₅	Y ₂ O ₃	TREO	Nb ₂ O ₅	P ₂ O ₅
	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

*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, 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.

 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 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	<u>@nuinscoresources</u>
613-867-5902	416-712-7481	416-868-1079	
		877-838-1079	
paul.jones@	<u>sean.stokes@</u>	cathy@chfir.com	Twitter
nuinsco.ca	<u>nuinsco.ca</u>		@NWIResources