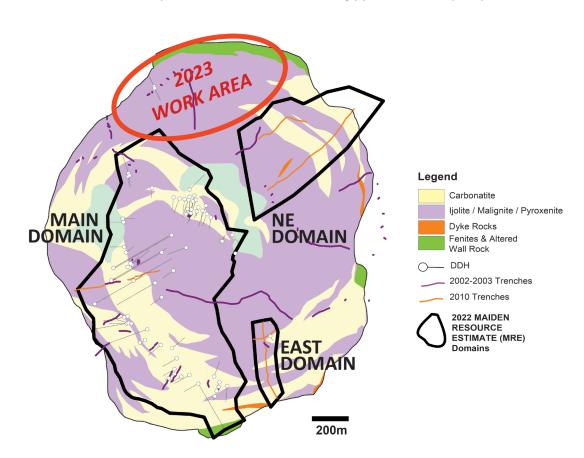


# Nuinsco Reports New Analyses from Prairie Lake Critical Minerals Project, Expands Mineralized Domain by Hundreds of Metres

## **Highlights:**

- New, widespread, and strongly anomalous rare earth element ("REE"), niobium, and phosphate mineralization.
- Analyses demonstrate grades of REE, niobium, phosphate comparable to those of mineral resource estimate ("MRE").
- Significant expansion of strong, near-surface mineralization to the north of the mineral resource estimate.

**Toronto, February 27, 2024** – Nuinsco Resources Limited ("**Nuinsco**" or the "**Company**") (CSE: NWI, FRA: NJX) today announced analytical results from geological mapping and sampling conducted in the previously little-explored northern contact area of Prairie Lake Critical Minerals and phosphate project located near Terrace Bay, Ontario ("**Prairie Lake**" or the "**Project**"). The Project has amongst the world's highest known light rare earth element content in apatite and contains a host of other REE bearing minerals including monazite, bastnaesite, carbocernaite/burbankite, and ancylite, as well as niobium-bearing pyrochlore, and phosphate mineralization.



The field work was conducted during the summer and autumn of 2023 and focussed on the northern part of the Prairie Lake Complex (the "Complex") near the little-explored north contact. Outcrop is near non-existent in the work area, so the field crew prospected likely sites of near-surface bedrock exposure. A total of 25 pits were excavated to successfully access bedrock, and 30 samples were collected for analysis. The field work demonstrates

that the north part of the Complex is underlain by widespread carbonatite rock that extends north from the domains hosting the very significant mineral resource estimate tabulated below, currently comprising nearly 890Mt of identified Critical Minerals endowment. Analytical results reported here demonstrate that grades obtained from the sampling are consistent with those of the MRE. The significance of this is the potential to extend, to the north, mineralization in similar host rock to the MRE, possibly significantly expanding the near-surface MRE. Potential extension of the MRE is supported by the analytical results, tabulated below, that demonstrate the presence of distinctly anomalous grades of rare earth elements, phosphate, and niobium.

"The extension of strong mineralization of economic interest, as observed in the MRE, in this large domain near the north contact of the Prairie Lake Complex has significant implications for potential expansion of resources at the Project," said Paul Jones, Nuinsco's CEO. "The current MRE is already a very large endowment of vitally important Critical Minerals that are in constantly expanding demand as the world's economies transition towards low-carbon emissions. The further expansion of mineralization demonstrates that scope exists to increase resources to other currently untested areas in the north, west, and east of the Project. Given the current size of the MRE at the Project, this possible further expansion is of enormous significance for the secure supply of Critical Minerals in North America and beyond.

Sample	Easting	_	Elevation		TREO	Sc203	Y2O3	La203	CeO2	Pr6011	Nd2O3		Nb2O5	Ta2O5	U308	Description	
	(NAD83)	(NAD83)	(m)	(%)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(%)	(%)	(%)	·	
419805	520410	5432480	310	1.02	3625.8	18.4	156.2	631.0	1584.6	209.0	858.5	168.1	0.111	< 0.003	0.002	CRBT	
419806	520342	5432426	312	0.27	997.3	3.1	64.8	240.4	448.4	47.4	165.6	27.7	0.013	< 0.003	0.000	CRBT	
419807	520186	5432361	311	3.1	1850.3	4.6	88.9	362.4	864.8	99.6	368.6	61.5	0.388	0.005	0.002	BANDED CRBT	
419808	520186	5432361	311	0.49	1000.7	0.0	52.1	247.5	464.3	47.7	163.3	25.9	0.011	< 0.003	0.001	BANDED CRBT	
419809	520186	5432361	311	3.2	1720.5	3.1	85.1	355.4	780.0	92.7	346.4	57.9	0.208	< 0.003	0.001	BANDED CRBT	
419810	520255	5432374	321	0.7	831.4	3.1	53.3	198.2	374.7	39.7	138.8	23.5	0.008	< 0.003	0.004	CRBT	
419811	520200	5432366	316	1.34	1050.5	0.0	57.1	242.8	485.2	51.6	184.3	29.5	0.038	< 0.003	0.000	CRBT	
419812	520200	5432366	316	2.36	1221.1	3.1	62.2	265.1	563.8	62.5	227.4	37.0	0.157	< 0.003	0.000	CRBT	
419813	520321	5432402	323	1.21	872.2	3.1	48.3	204.1	401.7	42.5	149.3	23.3	0.035	< 0.003	0.001	DK BRN CRBT SAND	
419814	520389	5432423	337	1.07	836.5	9.2	245.1	102.5	238.3	34.2	158.6	48.6	0.383	< 0.003	0.000	MAFIC	
419815	520438	5432383	349	1.1	4168.0	30.7	314.9	500.8	1461.8	256.1	1388.0	215.7	0.148	0.003	0.004	PYX CRBT VEINS O/C	
419816	520596	5432484	332	0.09	1556.7	9.2	15.2	312.0	739.5	88.0	340.6	52.3	0.07	< 0.003	0.001	FEN? SIL	
419817	520561	5432492	335	1.17	2879.0	30.7	40.6	647.4	1351.2	153.4	568.0	87.5	0.045	0.004	0.001	PYX ? O/C	
419818	520585	5432569	329	1.12	1238.1	13.8	76.2	231.0	543.0	67.5	260.1	46.5	0.015	< 0.003	0.001	CRBT	
419819	520106	5432290	323	5.05	3785.6	3.1	199.4	666.2	1695.2	211.4	863.1	147.3	0.006	< 0.003	0.002	MAF CLASTS CRBT SAND	
419820	520118	5432234	325	1.21	1841.3	4.6	95.2	371.8	857.4	96.8	355.8	59.7	0.221	< 0.003	0.005	BANDED CRBT	
419821	520035	5432079	332	3.47	2413.1	1.5	174.0	509.0	1061.3	123.2	461.9	82.1	0.008	< 0.003	0.002	BAND CRBT	
419822	520006	5432078	330	0.92	1168.4	21.5	41.9	234.6	544.2	63.7	227.4	35.1	0.172	0.004	0.002	MAF O/C	
419823	520137	5432108	330	0.58	1135.0	0.0	71.1	229.9	511.0	60.7	225.1	37.2	0.032	< 0.003	0.001	CRBT BAND	
419824	520229	5432050	345	3.45	2093.8	3.1	118.1	436.3	956.9	109.0	402.4	68.1	0.032	0.004	0.005	CRBT SAND	
419825	520241	5432038	342	2.3	1577.0	4.6	85.1	335.4	735.8	79.5	288.1	48.5	0.118	< 0.003	0.004	CRBT SAND, SPLIT SAMP	
419826	520241	5432038	342	1.71	1342.1	1.5	78.7	296.7	625.3	63.9	236.8	39.2	0.06	< 0.003	0.002	CRBT SAND, SPLIT SAMP	
419827	520106	5432290	323	0.35	362.8	0.0	72.4	54.7	127.8	17.3	73.1	17.6	0.051	< 0.003	0.001	MAF CLASTS CRBT	
419828	520822	5432461	315	4.59	2137.6	9.2	166.4	382.3	949.6	114.5	435.1	80.6	0.404	0.009	0.023	CRBT ROCK, POSS FLOAT	
419829	520647	5432440	327	2.18	1523.7	4.6	68.6	327.2	714.9	78.8	284.6	45.0	0.039	0.004	0.010	CRBT SAND	
419830	520419	5432358	332	2.45	1027.4	4.6	61.0	213.4	465.6	52.2	197.1	33.5	0.305	0.003	0.009	CRBT SAND W MICA MAF	
419831	520152	5432187	331	0.99	942.3	0.0	44.4	232.2	436.1	47.8	158.6	23.1	0.008	< 0.003	0.000	CRBT MAF SAND	
419832	520234	5432218	338	1.56	1042.4	1.5	61.0	227.5	474.2	53.5	193.6	31.1	0.106	0.003	0.002	LOWER PIT CRBT SAND	
419833	520234	5432218	338	2.18	512.8	12.3	26.7	98.2	221.1	28.0	108.0	18.6	0.182	0.005	0.002	UPPER MT RICH PIT	
419834	520237	5432302	335	1.21	1072.6	0.0	63.5	234.6	481.5	54.0	205.3	33.7	0.055	0.004	0.001	CRBT SAND	
-13034	320237	3-32302	333	1.21	_0,	0.0	03.3	234.0	101.5	34.0	203.3	33.7	5.555	3.004	3.001	CRD1 JAND	

CRBT – carbonatite, PYX – pyroxenite, FEN – fenite, MAF – mafic,

All samples were analysed by Activation Laboratories: samples were submitted to their facility in Thunder Bay, Ontario for preparation and forwarded to their facility in Ancaster, Ontario for analysis. Activation Laboratories is accredited under the Canadian Association for Laboratory Accreditation (CALA), ISO 9001:2015 and ISO/IEC 17025:2017. Samples were analysed for a whole rock and trace element ICP analytical package (QOP WRA/QOP WRA 4B2 Major/Trace Elements Fusion ICPOES/ICPMS) as well as for niobium, tantalum, and zirconium oxides using a fusion XRF method (QOP XRF Fusion (XRF)).

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 <sub>2</sub> O <sub>3</sub>	Pr <sub>6</sub> O <sub>11</sub>	Sc <sub>2</sub> O <sub>3</sub>	CeO <sub>2</sub>	La <sub>2</sub> O <sub>3</sub>	Sm <sub>2</sub> O <sub>3</sub>	Ta <sub>2</sub> O <sub>5</sub>	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<sub>2</sub>O<sub>5</sub> 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.

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