

#### A responsible developer of choice in Quebec, Canada

A partner of excellence in North America

for a shared *climate success story* 



TSXV: LMR OTC: LMRMF Frankfurt: DH8C

Geology and Exploration May 2024

MINERAL EXPLORATION PROCESSES CERTIFIED FOR RESPONSIBLE ENVIRONMENT AND SOCIAL BEST PRACTICES UL.COM/EL UL 2723



#### DISCLAIMER

This presentation is not a prospectus, offering memorandum or an advertisement and is being provided for information purposes only and does not constitute or form part of, and should not be construed as, an offer or invitation to sell or any solicitation of any offer to purchase or subscribe for any securities of Lomiko Metals Inc. (the "**Corporation**") in Canada, the United States or any other jurisdiction. Neither this presentation, nor any part of it, nor anything contained or referred to in it, nor the fact of its distribution, should form the basis of or be relied on in connection with or act as an inducement in relation to a decision to purchase or subscribe for or enter into any contract or make any other commitment whatsoever in relation to any securities of the Corporation.

This presentation contains "forward-looking information" within the meaning of the applicable Canadian securities legislation that is based on expectations, estimates, projections and interpretations as at the date of this presentation. The information in this presentation about the Corporation; and any other information herein that is not a historical fact may be "forward-looking information" (**"FLI**"). All statements, other than statements of historical fact, are FLI and can be identified by the use of statements that include words such as "anticipates", "plans", "continues", "estimates", "expects", "may", "will", "projects", "predicts", "proposes", "potential", "target", "implement", "scheduled", "intends", "could", "might", "should", "believe" and similar words or expressions. FLI in this presentation includes, but is not limited to: the Corporation's objective to become a responsible supplier of critical minerals, exploration of the Corporation of exploration of exploration programs; the Corporation's ability to successfully fund, or remain fully funded for the implementation of its business strategy and for exploration of any of its projects (including from the capital markets); any anticipated impacts of COVID-19 on the Corporation's business objectives or projects, the Corporation's current views about future events, and while considered reasonable by the Corporation at this time, are inherently subject to significant uncertainties and contingencies. Accordingly, there can be no certainty that they will accurately reflect actual results. Assumptions upon which such FLI is based include, without limitation: current market for critical minerals; related to receiving and maintaining exploration, environmental and other permits or approals in Quebec; any unforeseen impacts of COVID-19; impact of increasing competition in the industry; general economic conditions, including in relation to currency controls and interest rate fluctuations.

The Corporation's actual results, programs and financial position could differ materially from those anticipated in such FLI as a result of numerous factors, risks and uncertainties, many of which are beyond the Corporation's control. These include, but are not limited to: the market for critical minerals; the evolution of supply and demand for critical minerals; the Corporation's projects may not be explored or developed as planned; uncertainty relating to possible cost-overruns in implementing its business strategy and developing its projects; market prices affecting development of the projects; the availability and ability to secure adequate financing and on favourable terms; inability to obtain required governmental permits; any limitations on operations imposed by governments in the jurisdictions where we operate; technology risk; inability to achieve and manage expected growth; political risk associated with foreign operations; changes in government regulations, including currency controls; changes in environmental requirements; failure to obtain or maintain necessary licenses, permits or approvals; risks associated with COVID-19; insurance risk; litigation risk; receipt and security of mineral property titles and mineral tenure risk; changes in project parameters; uncertainties associated with estimating mineral resources and mineral resources in the future, including uncertainties regarding assumptions underlying such estimates; whether mineral resources (if any) will ever be converted into mineral reserves; opposition to exploration and/or development of the projects; surface access risk; geological, technical, drilling or processing problems; health and safety risks; unanticipated results; unpredictable weather; unanticipated delays; reduction in demand for minerals; intellectual property risks; dependency on key personnel; workforce and equipment availability; currency and interest rate fluctuations; and volatility in general market and industry conditions.

This Presentation has not been independently verified and the information contained within may be subject to updating, revision, verification and further amendment. Except as otherwise provided for herein, neither the Corporation, nor its directors, officers, shareholders, agents, employees or advisors give, has given or has authority to give, any representations or warranties (express or implied) as to, or in relation to, the accuracy, currency, reliability or completeness of the information or opinions in this Presentation, or any revision thereof, or of any other written or oral information made or to be made available to any interested party or its advisers and liability therefore is expressly disclaimed for any loss howsoever arising, directly or indirectly, from any use of such information or opinions or otherwise arising in connection therewith.

Except as may be required by applicable law, in furnishing this presentation, the Corporation does not undertake or agree to any obligation to provide the recipient with access to any additional information or to update this presentation or to correct any inaccuracies or omissions. Information contained in this presentation is the property of the Corporation and it is made available strictly for the purposes referred to above.



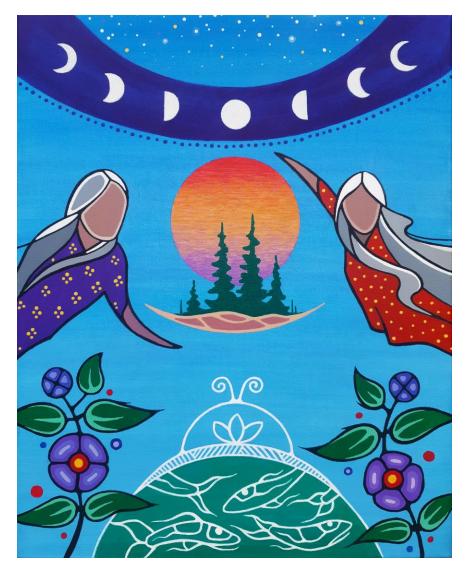
### Land Acknowledgement

The land/projects where we operate are located within the traditional land of the Algonquin Anishnaabeg and Cree Eeyou Istchee Peoples.

Our vision is to embrace Indigenous people and Indigenous values within our projects in order to develop a sustainable approach on our path to critical minerals development, while honouring the lives, memories, and hopes of all seven generations close.

The La Loutre graphite project site is located within the Kitigan Zibi Anishinabeg (KZA) First Nation's territory. The KZA First Nation is part of the Algonquin Nation and the KZA traditional territory is situated within the Outaouais and Laurentides regions.

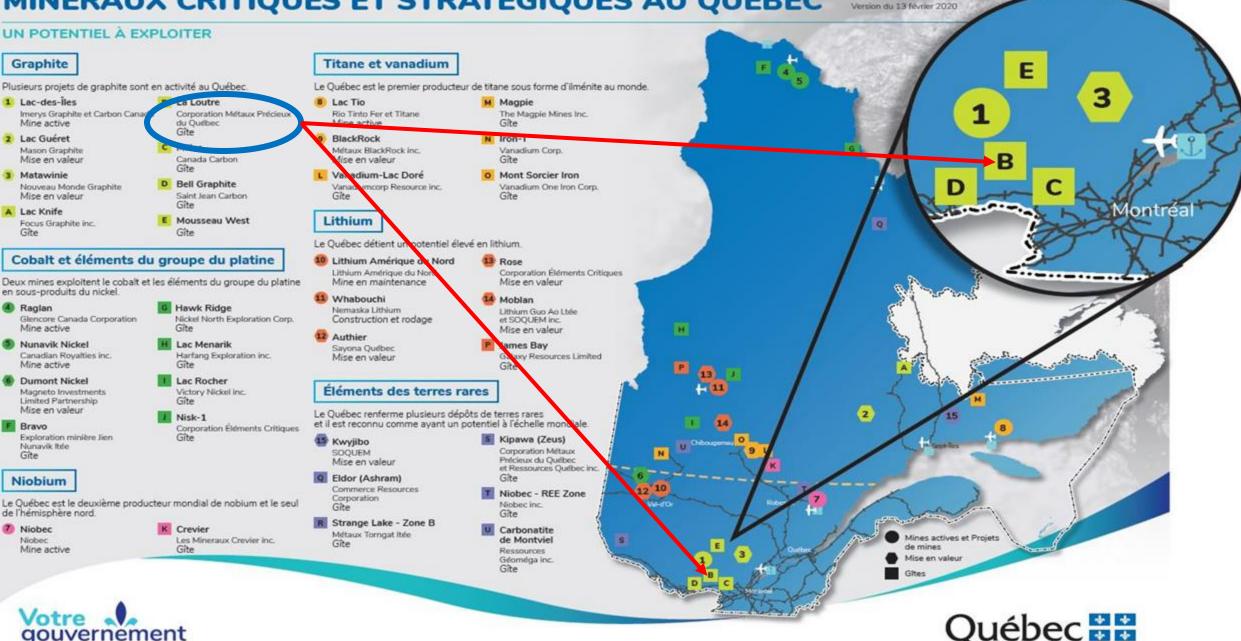
The Bourier lithium project site is located south-east of the Eeyou Istchee James Bay territory in Quebec, near Nemaska Lithium and Critical Elements.





gouvernement

#### **MINERAUX CRITIQUES ET STRATEGIQUES AU QUEBEC**



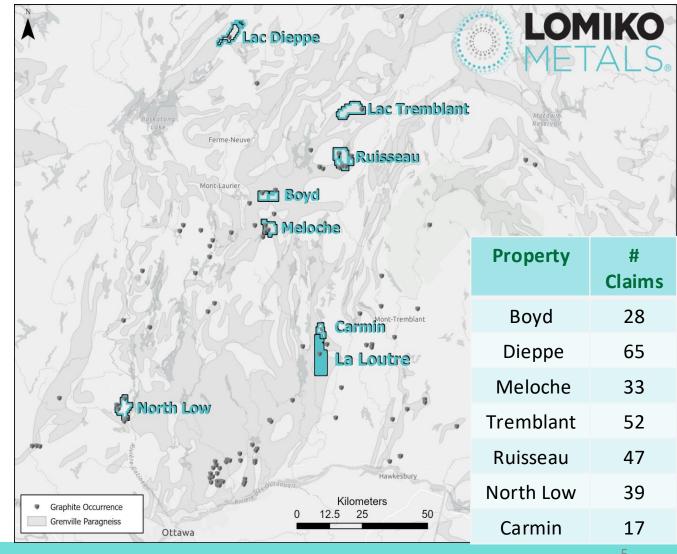
# Regional exploration in Grenville belt Most prospective graphite belt in North America

- Completed 1,518-line kilometers of heliborne geophysical surveys completed over the six graphite properties, with 55 targets identified
- 264 claims in total on 6 early-stage projects covering 15,639 hectares in the Laurentian region of Quebec and within KZA territory

#### **Regional Exploration Program 2023-2024**

 A field program is planned for 2024 to expand on the target sampling and surface mapping of the areas showing deposit grades

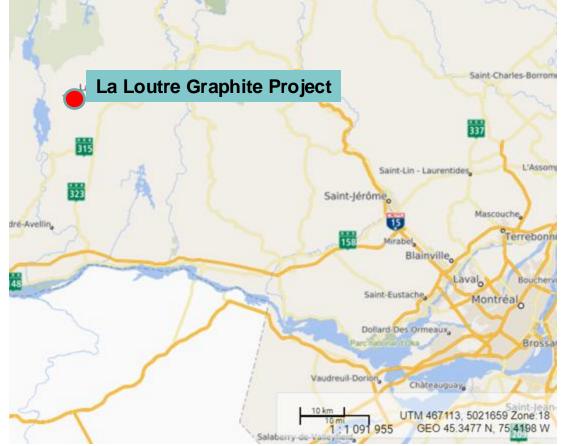
Block	# samples	Min %Cg	Max %Cg	Comments
Boyd	8	5.61	17.10	8/8 > 5.00% Cg
Dieppe	11	0.15	1.47	
Meloche	6	5.62	12.00	6/6 > 5.00% Cg
Ruisseau	26	0.16	22.90	19/26 > 5.00% Cg
Tremblant	6	<0.05	13.90	4/6 > 5.00% Cg



# La Loutre graphite project close to infrastructure with great geological setting

#### Highlights

- Stage of development: Preliminary Economic Assessment ("PEA")
- 50% complete Preliminary Feasibility Studies ("PFS")
- Location: Quebec, Papineau 192 km Highway to Port of Montreal – access to power, infrastructure & talent
- One large, continuous block with 76 minerals claims totaling 4,528 hectares
- Exclusive mineral rights, 1.5% NSR



Source: NI 43-101 Technical Report and Preliminary Economic Assessment (July 2021)

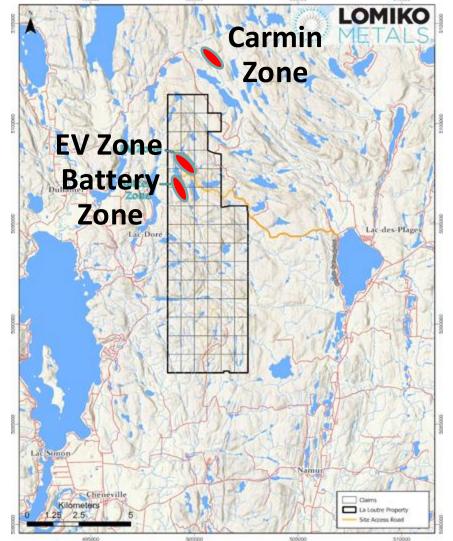


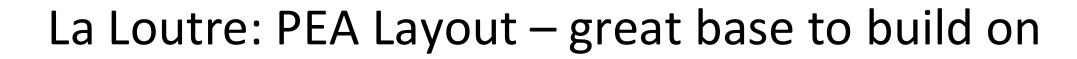
# La Loutre: PEA establishes a critical path ahead for improvements and project de-risking

**PEA details** 

- Two known deposits currently being explored: EV Zone and Battery Zone
- LOM plant production of 21.8 Mtonnes of mill feed at 6.78% Cg diluted
- Graphite concentrate production at 1.43 Mtonnes grading 95.0% Cg
- 14.7-year mine life producing 100,000tpy of graphite
- Open circuit variability flotation tests produced concentrate grades between 97.6% and 98.6% Cg
- Focused footprint relative to claim size

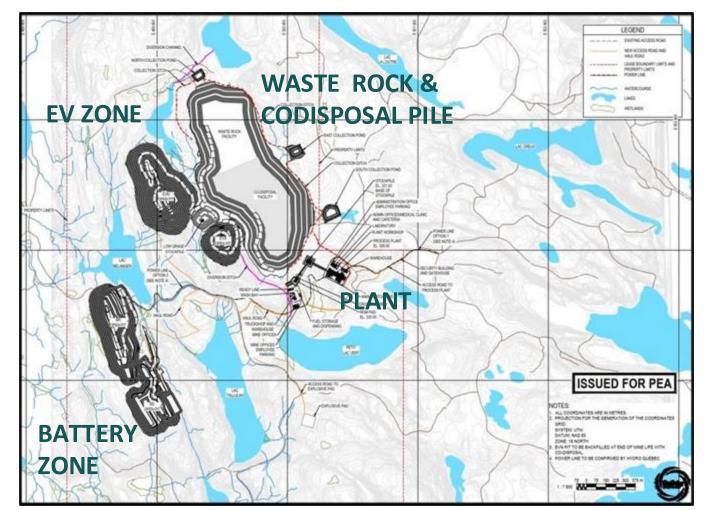
**Carmin Acquisition – historic PFS (in closing stage)** 





#### Mine layout and costs – PEA

- Waste rock and tailings co-disposed
- Efficient site water management with no wet tailings
- Pits sequenced to maximize the returns starting from North – EV Pits to South – Battery Pits
- Stockpiles (low grade and ROM) for blending and Flotation Plant
- Mine truck & shovel operation
- Flotation Plant 4,000tpd
- Capex of C \$236M, AISC US \$ 406/t Cg cost

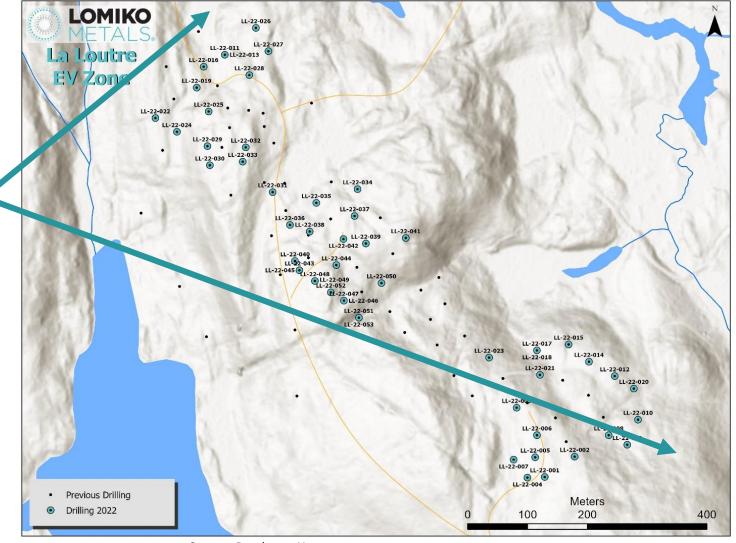


Source: NI 43-101 Technical Report and Preliminary Economic Assessment (July 2021)

# 2022 summer drilling program completed

Focus on higher grade EV Zone

- Completed 53 drill holes in EV Zone for a total of 9,025 meters
- South-east and north-east end of the 
  EV Zone remain open to the south and east
- Discovered new mineralization in EV zone below existing modelled paragneiss mineralization in marble
   9-10 meters thick



Source: BreakawayX

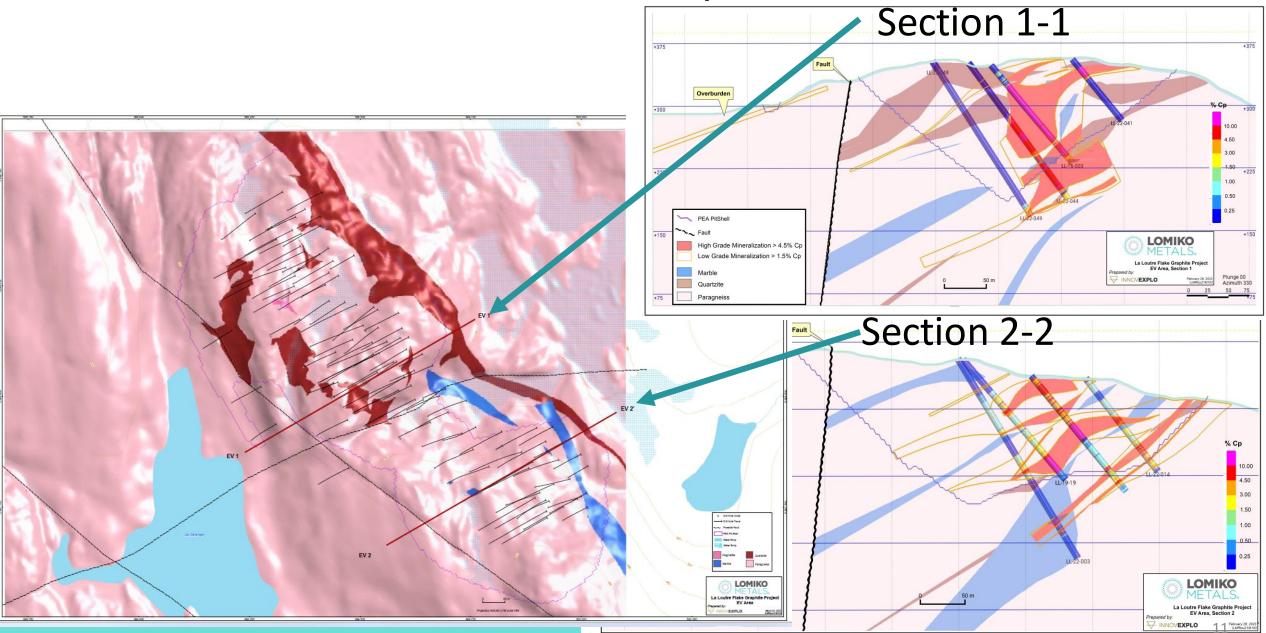


### Exploration Drilling Summary – La Loutre – press released

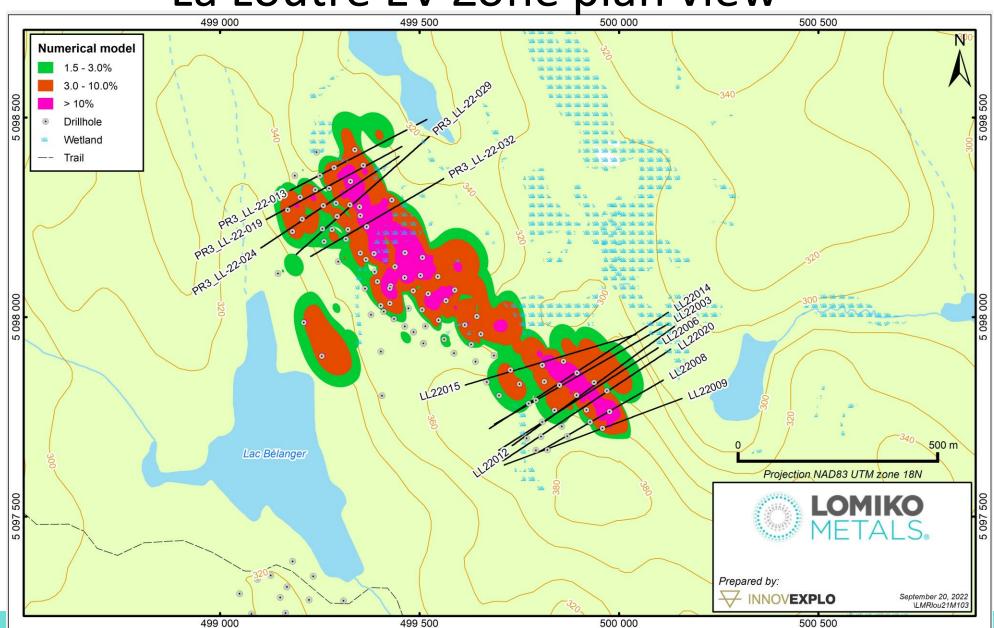
- Total holes drilled EV Zone 53 holes drilled 9,025 meters
- Results published with excellent widths and grades encountered, including:
  - Wide intervals of near-surface, high-grade flake graphite mineralization including 11.64% Cg over 42.0m from 7.0 to 49.0m in hole LL-22-018 including 36m wide mineralization at 13.44% Cg.
  - Result of 8.73% Cg over 110.5m from 81.5 to 192.0m in hole LL-22-019, including 69.0m at 12.09% Cg from 102.5 to 171.5m
  - Up to **13.84% Cg over 42.0m** from 169.0 to 211.0 in hole LL-22-**031**.
  - Several wide intervals of near-surface, high-grade flake graphite mineralization, including 11.02% Cg over 120.00m from 32.0 to 152.0m in hole LL-22-032, including 48.0m at 15.58% Cg from 50.0 to 98.0m.
  - Up to 8.14% Cg over 148.5m from 6.0 to 154.5m in hole LL-22-035, including 15.09% Cg over 60.0m from 13.5m to 73.5m.
  - Hole LL-22-042 encountered 8.68% Cg over 94.5m from 4.5 to 99.0m and 6.64% Cg over 94.4m from 121.0 to 215.4m
  - Up to 7.60% Cg over 119.8m from 81.2 to 201m in hole LL-22-044, including 10.06% Cg over 40.5m from 81.2m to 121.7m and 10.31% Cg over 19.5m from 166.7 to 186.2m
  - Hole LL-22-050 encountered 5.07% Cg over 123.0m from 13.0 to 136.0m, including 14.5% Cg over 22.5m from 14.5 to 37.0m.



### La Loutre EV Zone plan view







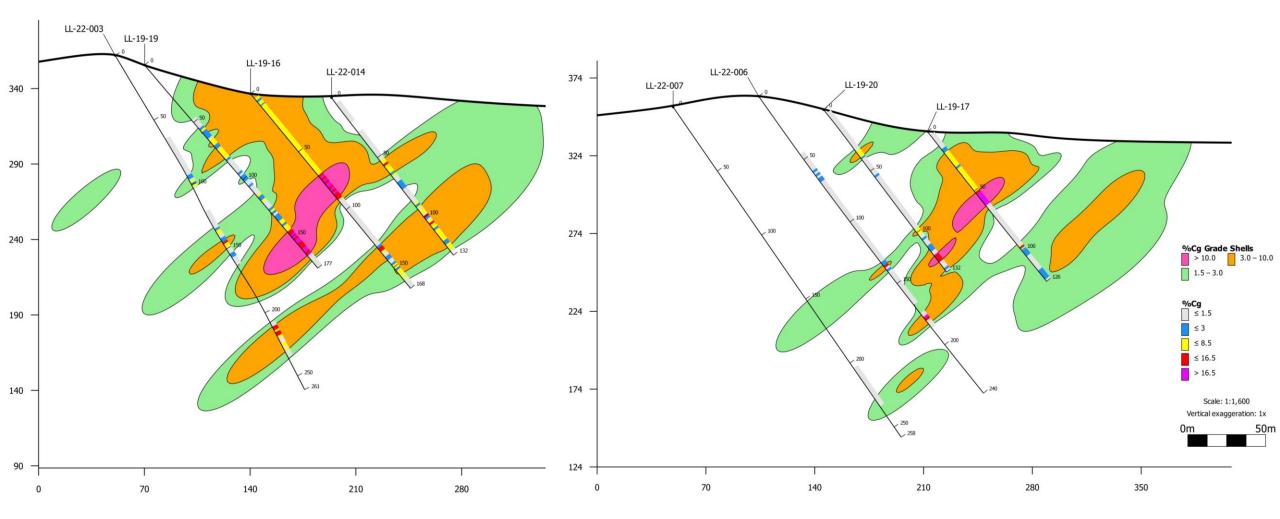
### La Loutre EV Zone plan view



### 2022 summer drilling program – section view

Section LL-22-003

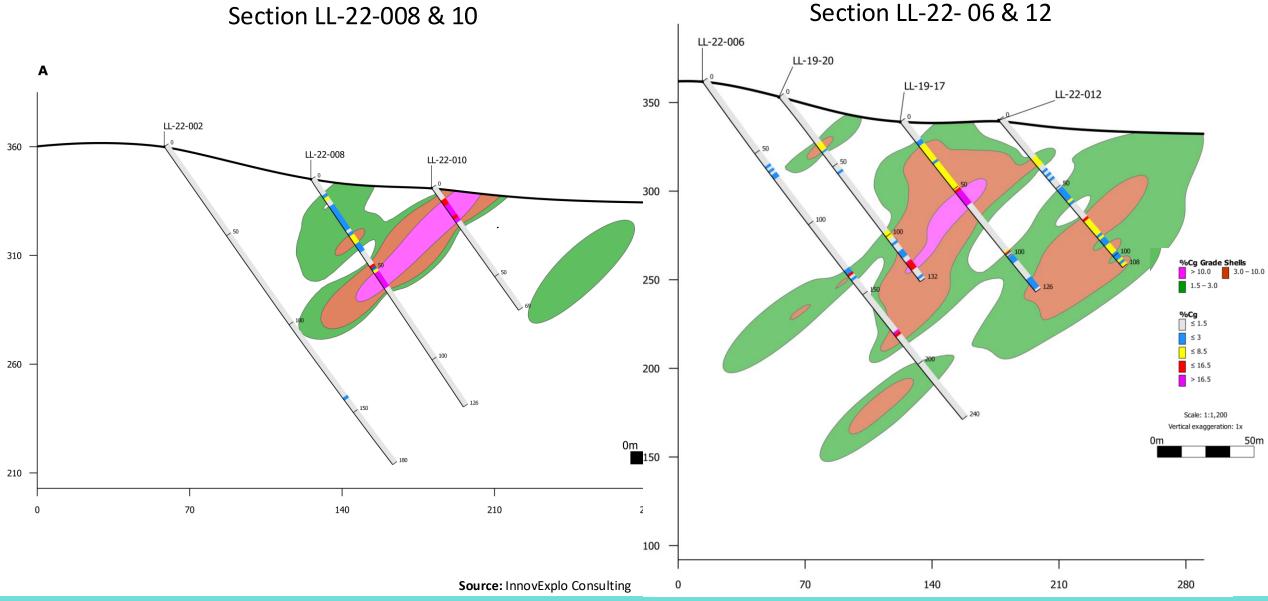
Section LL-22-06&07



Source: InnovExplo Consulting

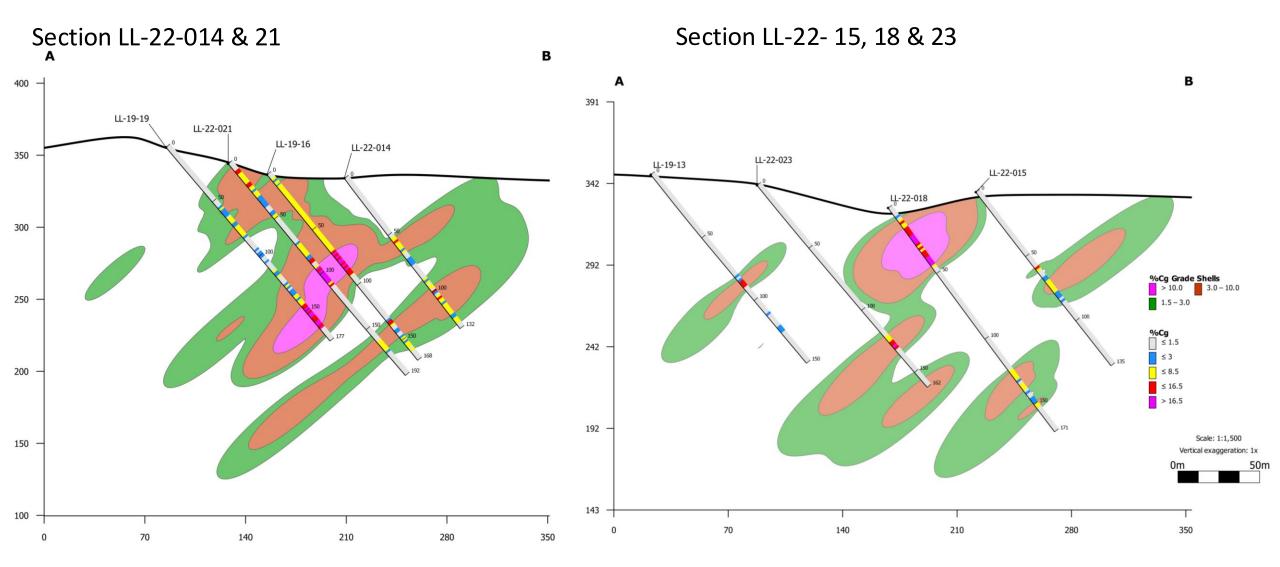


### 2022 summer drilling program – section view





### 2022 summer drilling program – section view

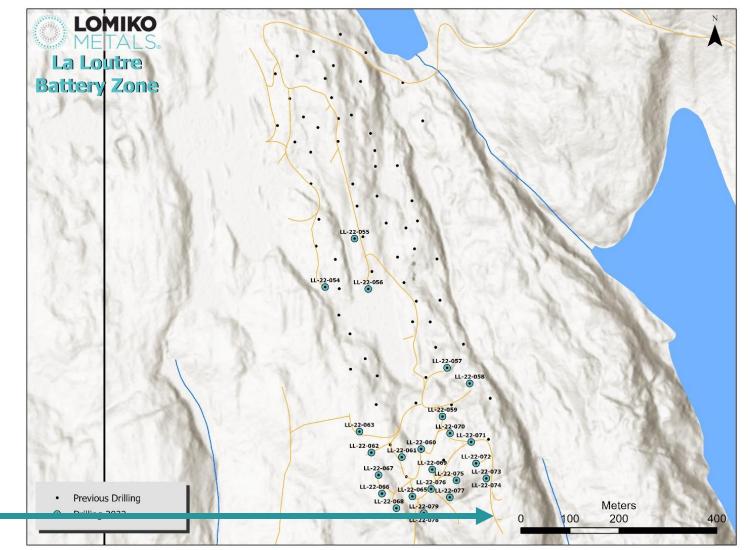




### 2022 summer drilling program completed – Battery Zone

#### Finished drill program at Battery Zone

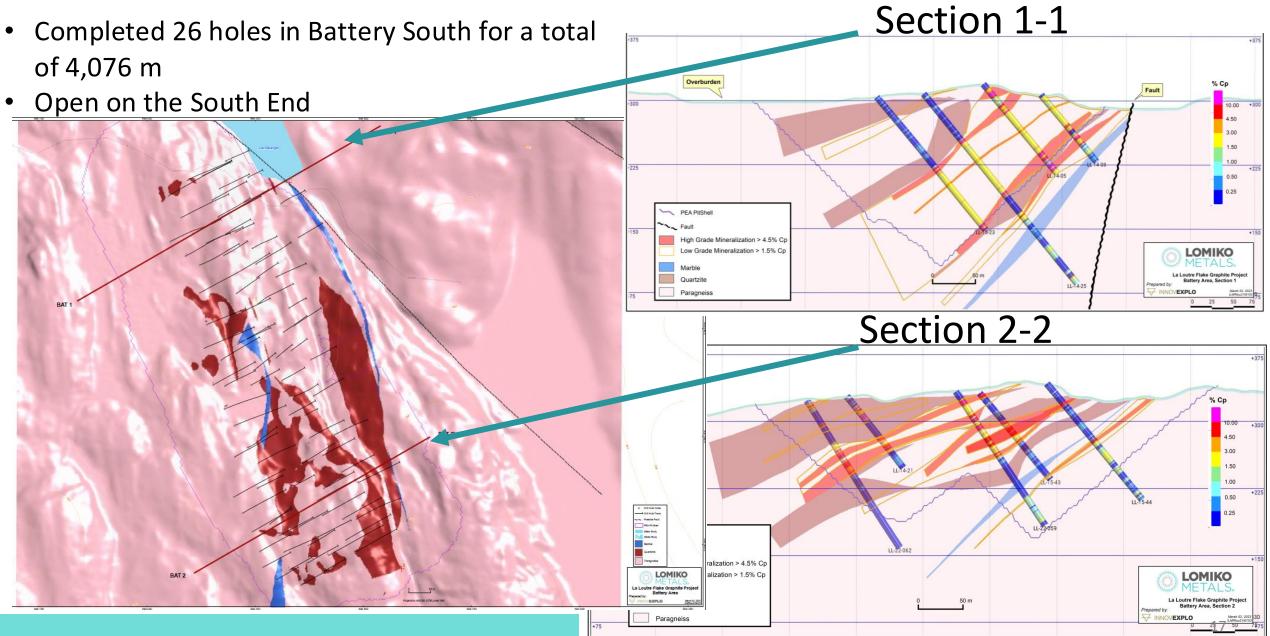
- Completed 26 holes in Battery South for a total of 4,076 meters
- **4.49% Cg over 144.3m** in hole LL-22-054, including **8.43% Cg over 55.5m**
- **5.62% Cg** over 27m in hole LL-22-060 including **6.58% Cg** over 21.0m
- 6.00% Cg over 45.0m in hole LL-22-062 including 7.41% Cg over 33.0m
- 10.37% Cg over 64.0m from 27.0 to 91.0m in hole LL-22-074 including 14.15% Cg over 45m
- **11.42% Cg** over 26.5m, including **15.01% Cg** over 13.5 and **17.16% Cg** over 5.5m in hole LL-22-073
- Open on the South End



Source: BreakawayX



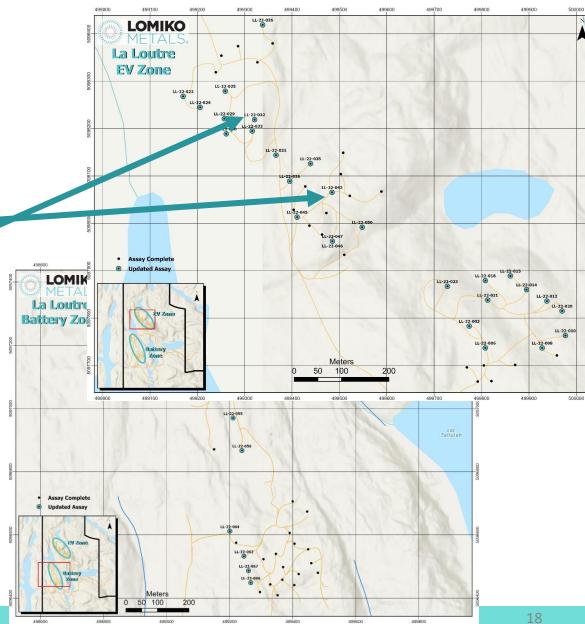
### La Loutre Battery Zone plan view





#### 2022 shoulder sampling results EV & Battery Zone

- Additional core sampling increases thickness of graphite zones in 28 holes
- Increased thickness of greater than 3.0m were noted for 28 graphite zones
- Increases greater than 20.0m were noted for 11 graphite zones ranging from 22.0 to 63.0m
- The most significant intersection is 7.09% Cg over 210.9m from 4.5 to 215.4m in hole LL-22-042, now joining two zones
- The second most significant intersection is 9.405% Cg over 154.5m from 32.0 to 186.5m in hole LL-22-032
- Graphite mineralization >1.0% Cg was determined in marble and quartzite units, including a new marble graphite carrying zone between these paragneiss intervals in hole LL-22-042, in addition to the marble zone at the bottom of the paragneiss sequence in EV Zone as announced in a press release September 6, 2022
- Shoulder sampling has also shown that 9 holes in the EV and Battery zones remain open at depth
- Southeast and northeast end of EV zone remain open



# 2023 MRE Achieving 184% Increase in Tonnage in Indicated Mineral Resources

La Loutre Resource Estimate (Effective Date: March 31, 2023)

2023 MRE 2021 MRE Deposit EV **Battery** TOTAL EV **Batterv** TOTAL Cut-off (%) Cg 1.5 1.5 1.5 1.5 1.5 1.5 64,696 Tonnage (kt) 24,267 40,429 8,158 15,007 23,165 Indicated mineral Graphite (%) 5.80 3.86 4.59 6.48 3.44 4.51 resource Graphite (kt) 1,407 1,562 2,969 529 516 1,045 Tonnage (kt) 3,067 14,384 17,452 12,829 33,992 46,821 Inferred 4.29 3.60 3.72 mineral Graphite (%) 5.81 3.33 4.01 resource 132 Graphite (kt) 518 650 745 1,132 1,878

Notes to accompany the Mineral Resource Estimate:

1. The independent and qualified persons for the mineral resource estimate, as defined by NI 43 101, are Marina lund, P.Geo. (InnovExplo Inc.), Martin Perron, P.Eng. (InnovExplo Inc.)., Simon Boudreau, P.Eng. (InnovExplo Inc.). and Pierre Roy, P.Eng. (Soutex Inc.). The effective date of the estimate is March 31st, 2023.

2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability. The mineral resource estimate follows current CIM Definitions (2014) and CIM MRMR Best Practice Guidelines (2019).

3. The results are presented undiluted and are considered to have reasonable prospects of economic viability .

4. The estimate encompasses two mineralized domains (EV and Battery) using the grade of the adjacent material when assayed or a value of zero when not assayed.

5. No capping was applied on 1.5m composites.

6. The estimate was completed using sub-block model in Leapfrog Edge 2022 with user block size of 5m x 5m and minimum block size of 2.5m x 2.5m. Grades interpolation was obtained by ID2 using hard boundaries.

7. Bulk density values were applied by lithology (g/cm3): low grade zone = 2.82; high grade zone = 2.82; paragneiss = 2.8; quartzite = 2.73; pegmatite = 2.63, marble = 2.75 and OB = 2.0.

8. The mineral resource estimate is classified as indicated and inferred. The Indicated mineral resource category is defined with a minimum of three (3) drill holes in areas where the drill spacing is less than 55 m, and reasonable geological and grade continuity have been demonstrated. The Inferred category is defined with a minimum of two (2) drill holes in areas where the drill spacing is less than 100m, and reasonable geological and grade continuity have been demonstrated. Clipping boundaries were used for classification based on those criteria.

9. The mineral resource estimate is pit-constrained with a bedrock slope angle of  $45^{\circ}$  and an overburden slope angle of  $30^{\circ}$ . It is reported at a graphite cut-off grade of 1.5%. The cut-off grade was calculated using the following parameters: processing cost = C\$13.04; product transporting cost = C\$41.16; mining cost (rock) = C\$3.70; mining cost (OB) = C\$2.90; graphite price = US\$1,098.07 /tonne of graphite; USD:CAD exchange rate = 1.32; graphite recovery to concentrate product = 94.7\%. The cut-off grade should be re-evaluated in light of future prevailing market conditions (metal prices, exchange rates, mining costs etc.).

10. The number of metric tons was rounded to the nearest thousand, following the recommendations in NI 43 101 and any discrepancies in the totals are due to rounding effects.

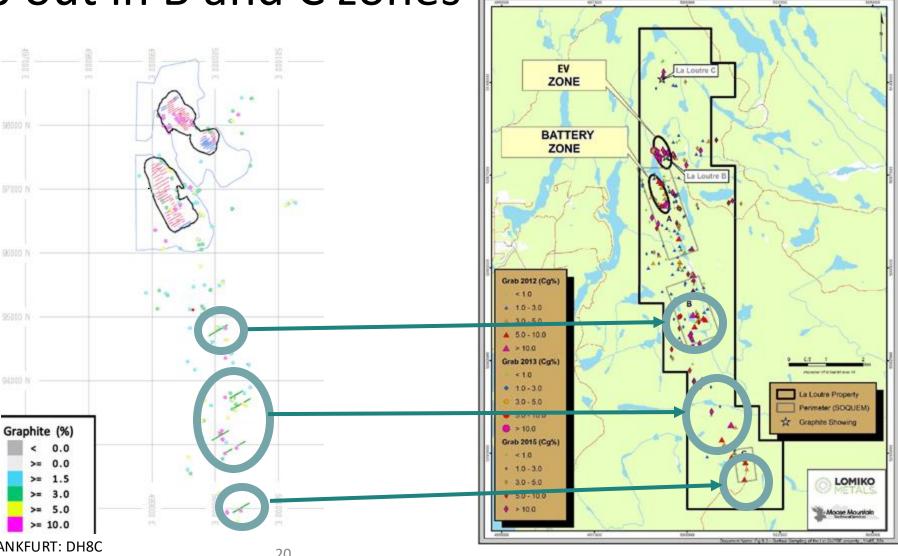
11. The authors of MRE are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political, or marketing issues, or any other relevant issue not reported in the Technical Report, that could materially affect the Mineral Resource Estimate.

**Source:** InnovExplo March 2023



# Additional exploration potential Step out in B and C zones

- Additional graphite zones
- Follow up on preliminary greenfield exploration with drilling at Targets B & C.
- Potential for 5,000 m drill program (15-20 holes)



www.lomiko.com TSXV: LMR OTC: LMRMF FRANKFURT: DH8C

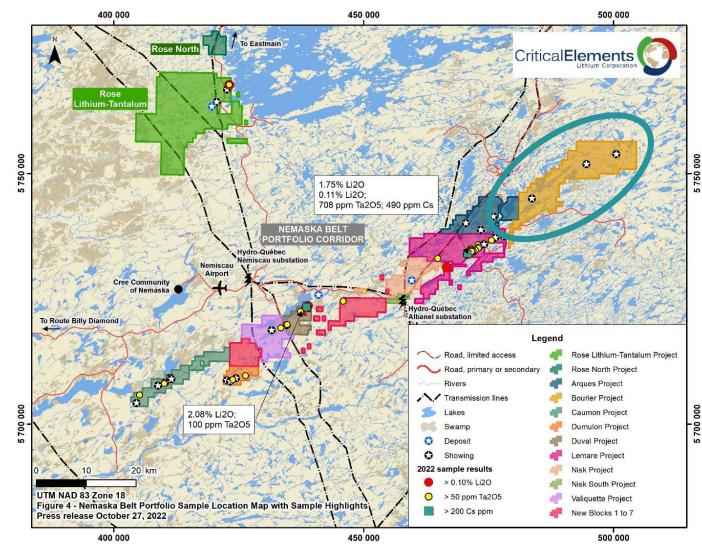


# **Bourier Lithium Property**

# Lithium exploration on massive claim package on Nemaska lithium corridor

#### Bourier

- Earned in 49% ownership from Critical Elements
- 203 claims for a total ground position of 10,252.20 hectares (102 km2) that boasts other lithium deposits and known lithium mineralization
- Bourier consists of volcano-sedimentary units, sequence of quartz-rich paragneiss and late pegmatite dikes
- In early phases of soil and surface sampling





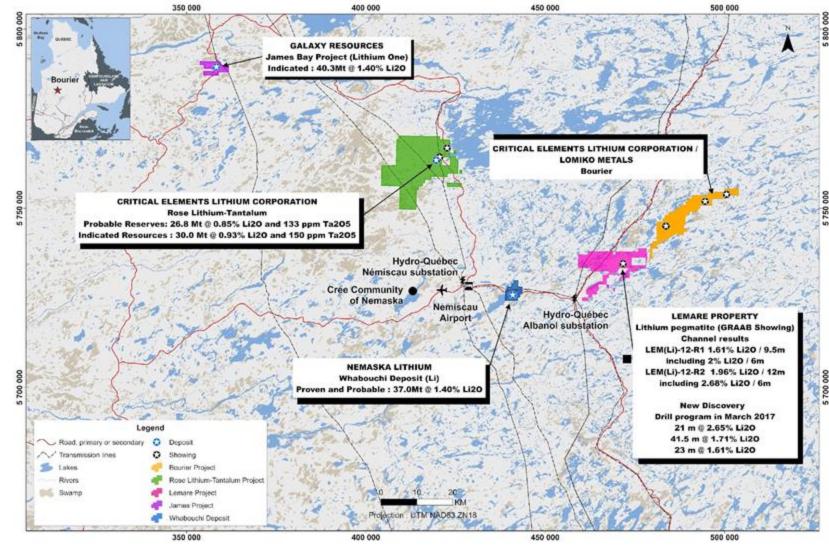
# Bourier lithium project: highly prospective region

#### **Bourier**

Adjacent Properties:

- Galaxy Resources
- Nemaska Lithium
- Critical Elements
- 1. Rose Tantalum Project FS stage
- Lemare Property:
  21m @ 2.65% Li2O
  41.5m @ 1.71% Li2O
  23m @ 1.61% Li2O

**CELC completed drilling campaign outlining a deposit** 

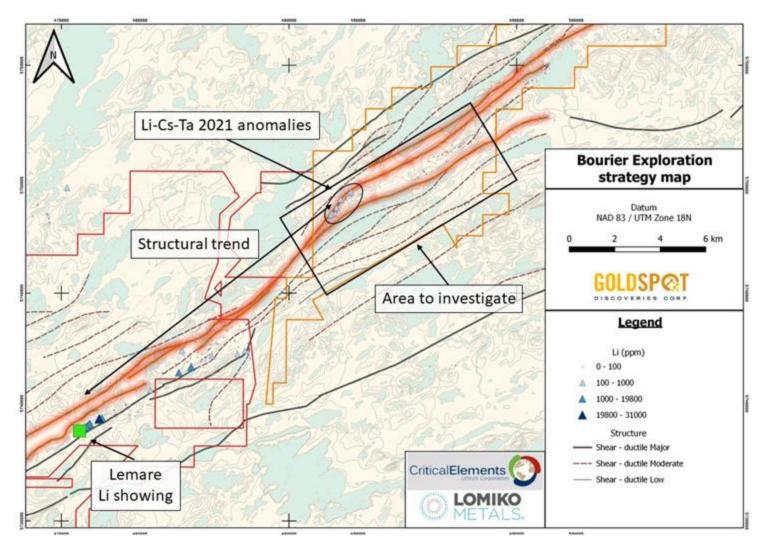




# Bourier lithium project

#### **Bourier Field Work Summary**

- The analytical results feature highgrade values for zinc and tungsten and anomalies in lithium-tantalumcesium and gold
- The lithium-tantalum-cesium anomalies represent an unprecedented discovery and spans along a 2.5 km long NEtrending mica-rich white pegmatites system

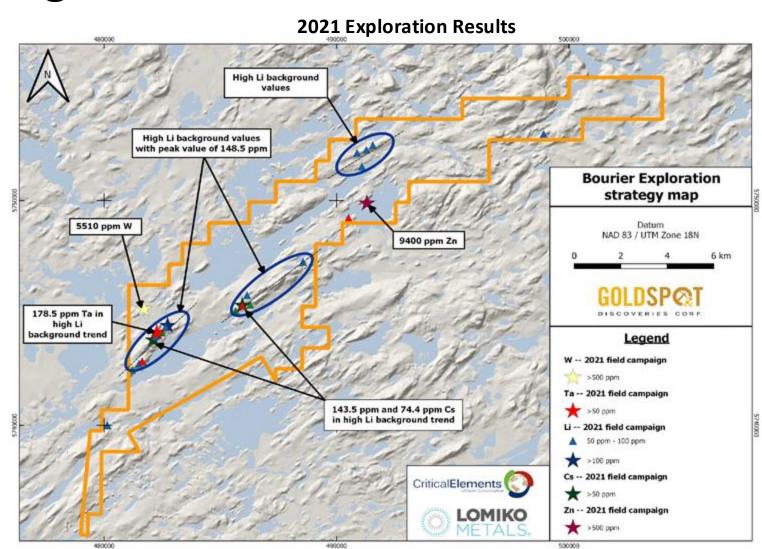


Source: Critical Elements Corp.

### Bourier lithium project identifies exploration targets with Li anomalies

#### **Bourier Exploration Program 2022 - 2023**

- Completed field program in July with Critical Elements and GoldSpot AI
- Collected over 1000 soil samples and over 400 rock samples, mapped over 350 outcrops
- Focus on 2.5km long Li-Ce-Ta (lithium-Cesium-Tantalum) discovery
- Further geochemical studies needed and soil sampling over entire concession



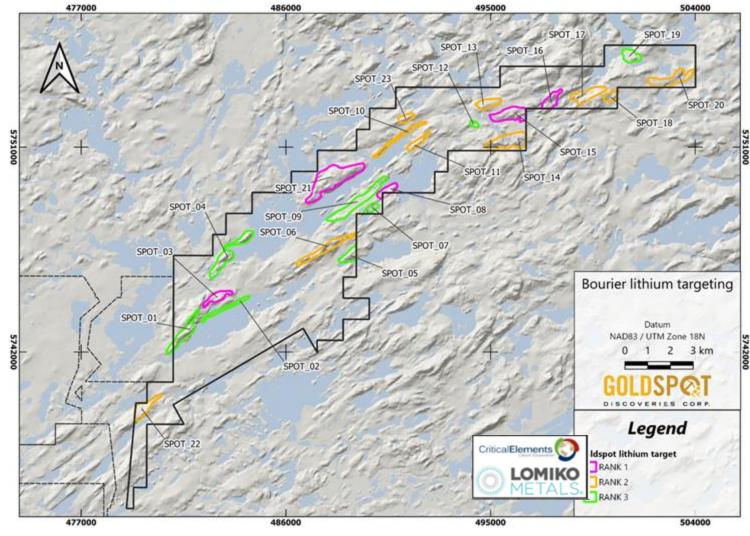
Source: Critical Elements Corp.



### Bourier lithium project targeting

#### AI Targeting at Bourier

- GoldSpot highlighted lithium exploration targets at the Bourier project, using both traditional and machine learning approaches with various combinations of the numeric and categoric data and interpretations generated from the geoscience work.
- Target generation has narrowed the exploration focus to 10.5% (12.1 km<sup>2</sup>) of the total pertinent claim holdings, providing the ability to prepare for field exploration in a time- and cost-efficient manner.



Source: Critical Elements Corp.



#### For more information <u>info@lomiko.com</u> Follow us @lomikometals on socials

