A responsible critical minerals
developer of choice
in Quebec, Canada

A partner of excellence
in North America

for a shared
***climate success story***

LOMIKO METALS®

# Annual General Meeting 2024

**December 2024**

**TSXV: LMR**
**OTC: LMRMD**
**Frankfurt: DH8C**

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

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# 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 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 southeast of the Eeyou Istchee James Bay territory in Quebec, near Nemaska Lithium and Critical Elements.

# Lomiko: a year in review

- Milestones
  - Recipient of US$8.35m in a Technology Investment Agreement with United States Department of Defence and C$4.9m in Canadian contribution agreement for offsite graphite piloting – highly competitive process and historical two country announcement
  - Successful completion of the ore to battery testing with excellent results in single-layer pouch full-cell battery testing
  - Demonstration of high purety graphite at 97% with 3 step flotation testing
  - Laurentides exploration progressing with new zone outlines

- Markets and government policies
  - USA imposes 25% tariff on importation of graphite (2026) and 100% tariff on importation of EVs, Canada matches tariffs on Evs
  - Combination of graphite market over-capacity from China excess production and slowdown of EV sales in @H 2024 has created challenging market in 2024
  - Developers such as Lomiko extremely well positioned for market upswing
  - Quebec permitting becomes more stringent with mandatory consultation periods and time limits – Lomiko receives acknowledgement that it will be accompanied on permitting journey same as any other operator

# Lomiko plan 2025

1. **Management transition in place, board renewal and continued efficient spending in G&A**

2. **La Loutre graphite piloting:** Continue the work on offsite pilot testing – permitting, 200t bulk sample extraction, transport to the lab, flotation testing and purification and activation of all three grants (Federal, US, Provincial)

3. **Continued R&D:** Continue with air classification testing on the La Loutre core materials, graphene testing, continued exploration in Laurentide on 5 prospective properties

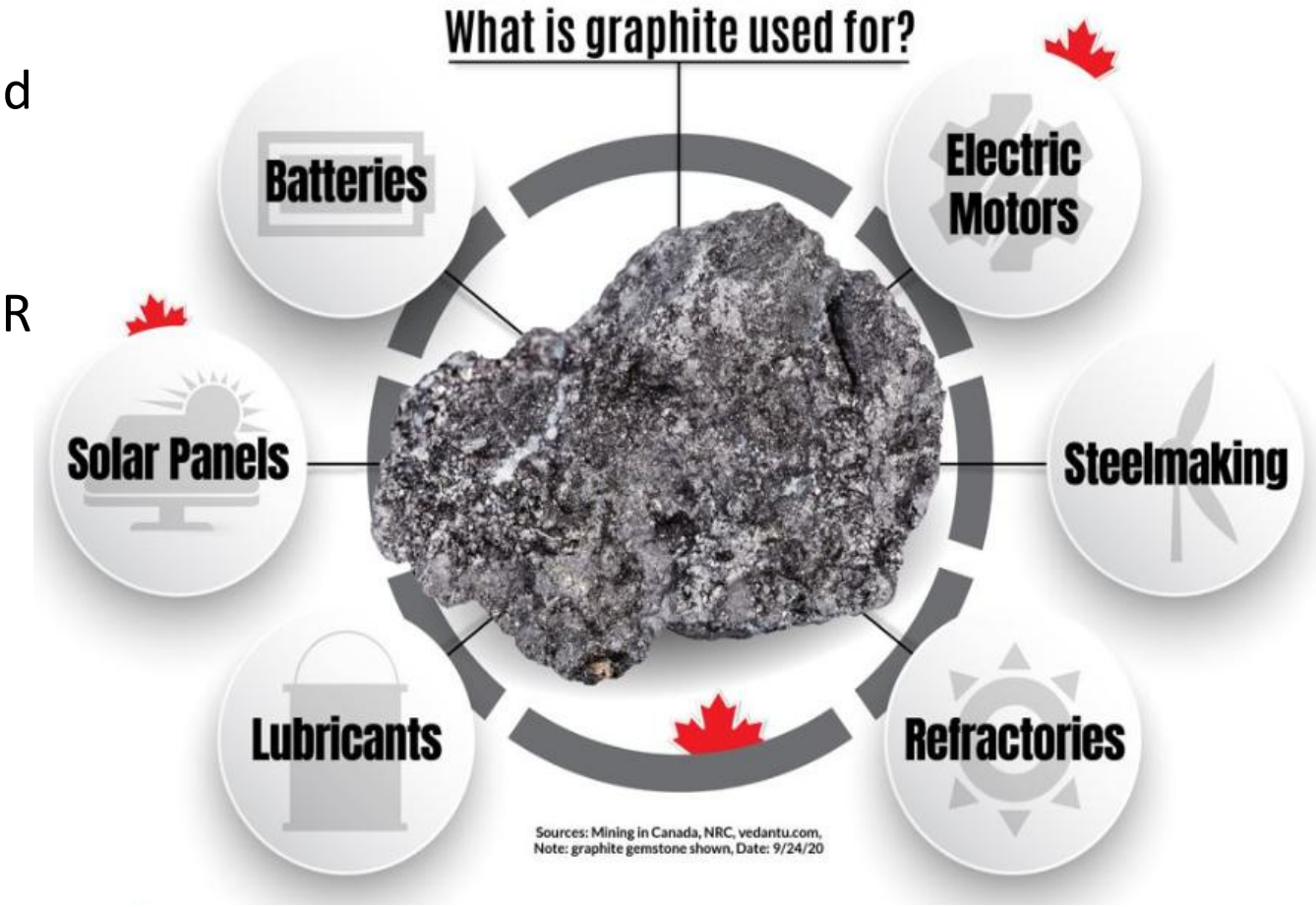
4. **Business development:** reviewing potential for acquisition of other early stage critical minerals projects in Canada

5. **Investor relations:** efforts to continue with Red Cloud, conference attendance and potential new programs targeted efforts with specific outcomes to benefit all shareholders and attract new investors

# Graphite Market

# Graphite is essential for the energy transition

- Primary Battery – Alkaline, primary alkaline lithium, primary lithium Thionyl Chloride
- Secondary Battery – EV, Consumer Good Industrial, Aerospace, Solar Panels
- Fuel cells
- Nuclear Industry (Grade Graphite; PBMR Shielding)
- Aerospace (Coatings & Dispersion)
- Graphene – oxides, powders, etc.
- Refractories and Steelmaking
- Ceramics
- Advanced Lubricants
- Thermal Plastics (PEEK / PTFE) and plastics
- Construction Industry (reinforced concrete)



# The China dynamic underlines the importance of Lomiko

China is the world's top graphite producer and exporter and refines more than 90% of the world's graphite into the anode material

- Trade war on critical minerals is escalating – China banning certain critical minerals export outright to USA
- Export permits from China now required for certain graphite products to safeguard national security since December 2023

The USA response:

1. The tariff rate on lithium-ion EV batteries increase from 7.5% to 25% in 2024
2. The tariff rate on lithium-ion non-EV batteries will increase from 7.5% to 25% in 2026
3. The tariff rate on battery parts increase from 7.5% to 25% in 2024
4. **The tariff rate on natural graphite and permanent magnets will increase from zero to 25% in 2026**

**Canada imposed a 100% surtax on Chinese-made electric vehicles (EVs) on October 1, 2024**

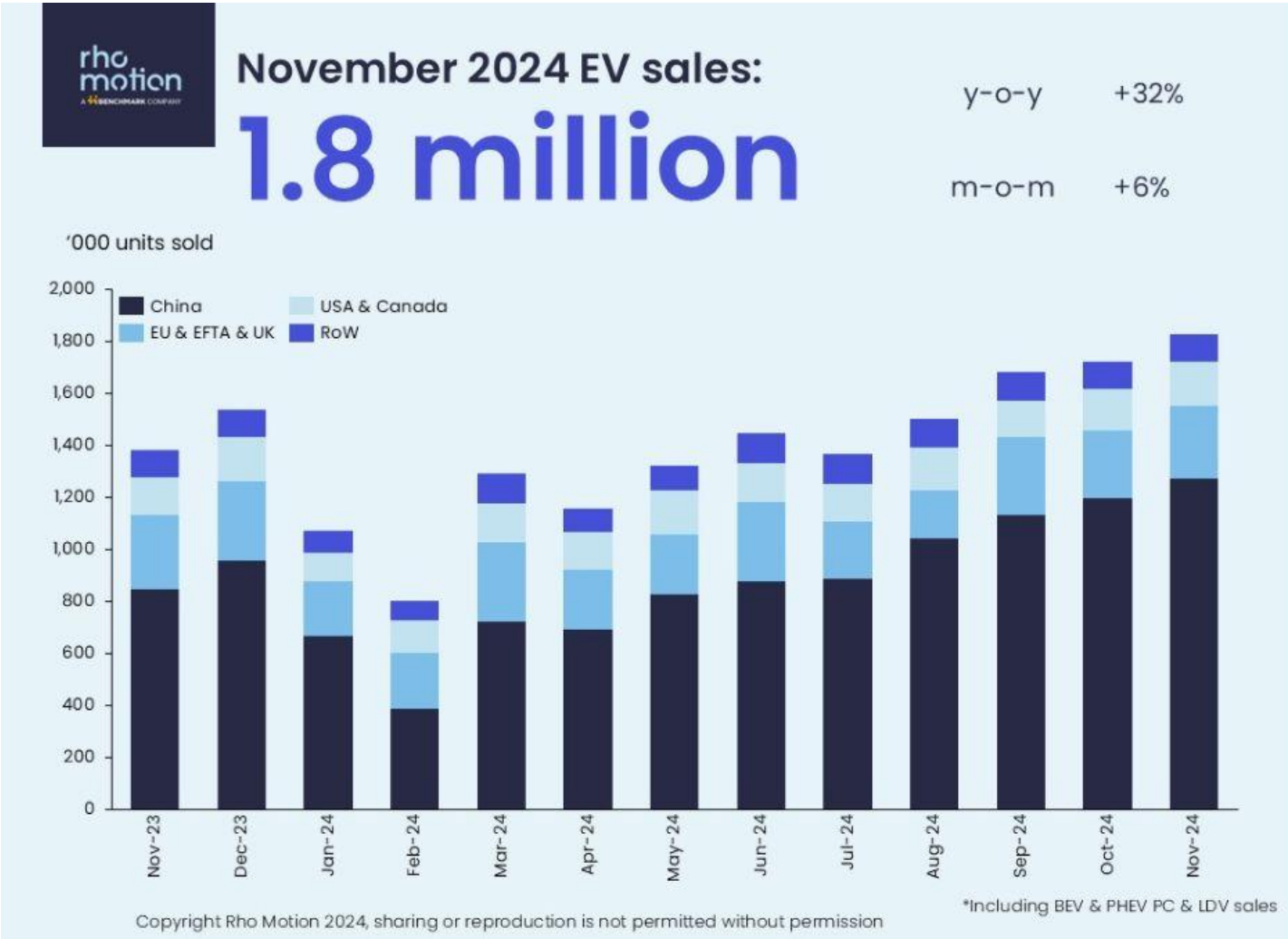
# Lomiko: an ideal partner for investment into electrification growth market

Outstanding investment opportunity to participate in energy transition and natural flake graphite with government partners with grants from  Quebec, the USA Department of Defence and the Canadian Federal government

**Globally** the EV market continues to show strong growth, up 21% compared to the same period (Jan-Sept) in 2023

And the need for domestic sources of graphite is a long-term strategic imperative.

November 2024 – 1.8M units sold

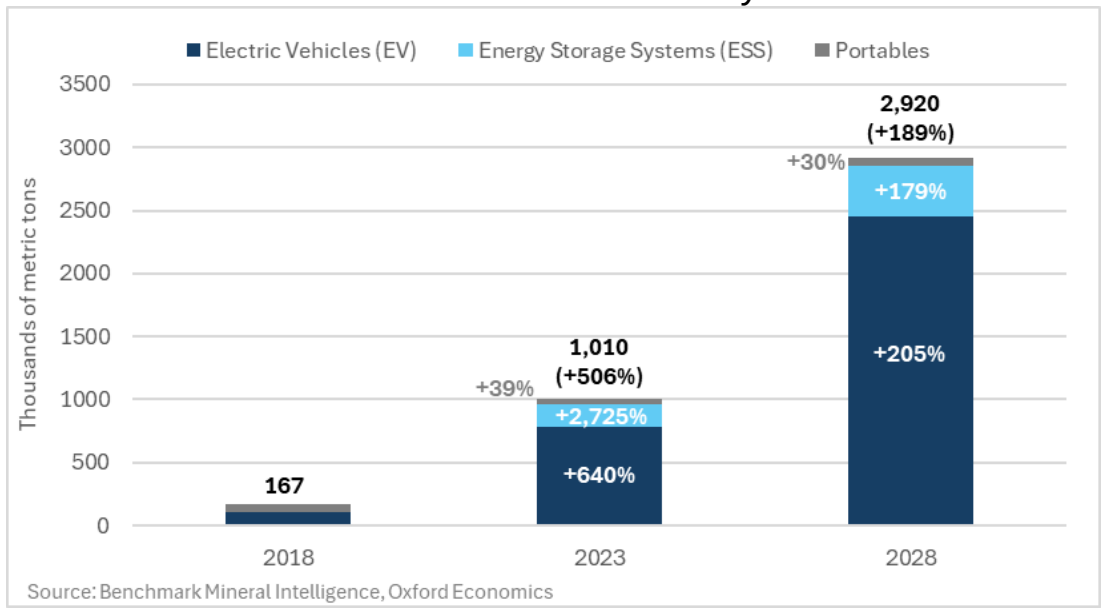


# Lomiko and the Graphite Market

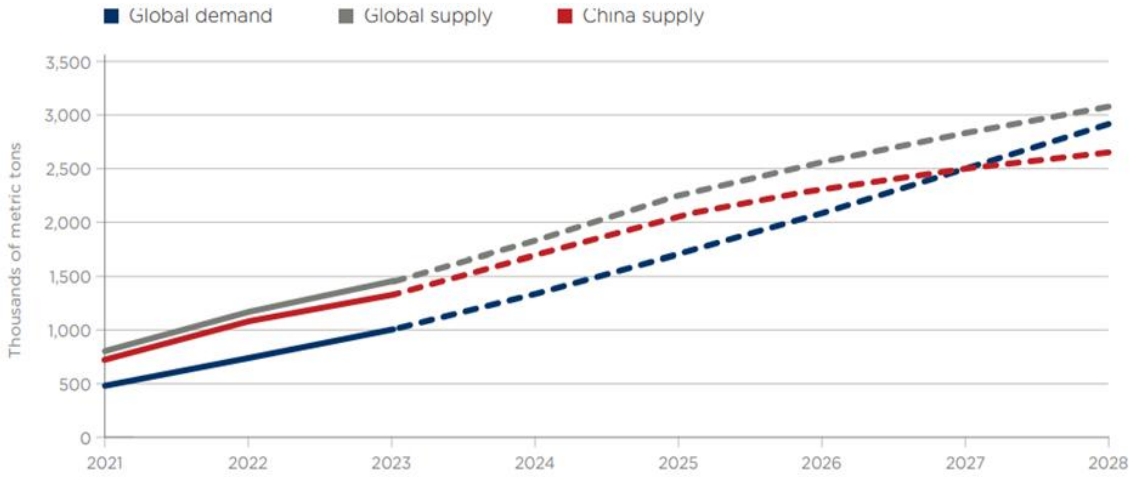
- **Current environment: 52%** of the global demand for anode material originates from China, which is essentially its share of the market for manufacturing LiBs
- China creating over-capacity: The supply of anode material of 1,45 Mt significantly exceeded the demand for anode material of 1,01 Mt, according to Benchmark
- Global demand is estimated to exceed the Chinese supply of anode material by **32%** by the end of 2027
- China continues to invest in graphite manufacturing despite its overcapacity in anticipation of dominating rapidly growing future demand

**Opportunity:** Develop a non-China graphite deposit before 2030, when the markets will be in shortage and battery technology will be streamlined and standardized in North America

Anode material demand by end-use 2018-2028




Source: Benchmark Mineral Intelligence, Oxford Economics

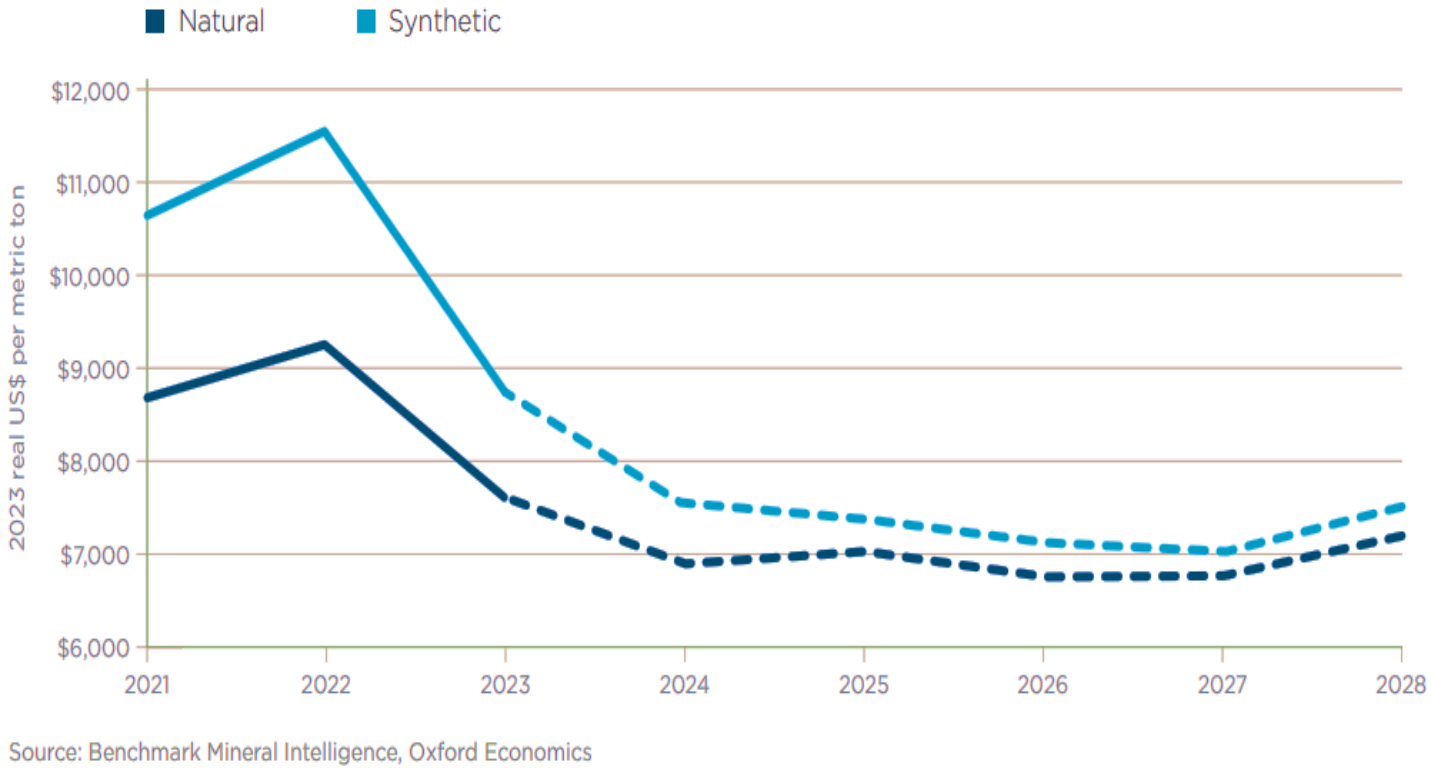



Source: Benchmark Mineral Intelligence, Oxford Economics

# Lomiko and the Graphite Market

The graphite customer base is wide with many industrial applications, with the EV sector anticipated to grow in the next 5-15 years, driving the need for natural-flake graphite and anode material for use in batteries.

- **Electric Vehicles (EVs)** Lomiko is advancing the qualification process with OEMs and downstream buyers. Polaris and NRC's basic electrochemistry analysis shows potential for La Loutre Flake Graphite to become a feedstock for the anode market.
- **Internal Combustion Engines**—Primary batteries require high-purity micronized flake graphite and qualifications in 18 months.
- **Consumer Goods** - conductive additives for cathode and anode applications in medical devices, aerospace, defence, and industrial at 99.9%Cg for C & D and AA & AAA Battery Formats - 45 & 15 microns
- **Energy Storage** – the fastest-growing sector for grid stabilization, transportation, communications, and aerospace.




*Actual price in China for Anode Material 2021-2028*

# Grants and Awards – Non-dilutive capital

# Over CA$16m concurrent Canadian and USA funding announced May 16

- ✓ These are **non-dilutive non-repayable awards!**
- ✓ Recipient of a **US$8.35m (CA$11.2m)** R&D (Research & Development) grant from the United States of America Department of Defense ("DoD") and **CAN $4.9m** contribution from Natural Resources Canada

***Awards support a de-risked path of development with funding for more than 50% of project costs***

- ✓ Announcements are part of the joint Canada-U.S. Energy Transformation Task Force
- ✓ **The DoD grant**, called a Technology Investment Agreement ("TIA") supports studies for La Loutre to complete pre-feasibility (PFS), baseline and metallurgical studies and definitive feasibility study (DFS)
- ✓ The Canadian Critical Mineral Research, Development and Demonstration (CMRDD2) program administered by Natural Resources Canada is to pilot the integrated graphite upgrading process to for cSPG anode grade product

# Summary of CMRDD program administered by Natural Resources Canada

- ✓ Award: **CAN$4.9m**
- The CMRDD program administered by Natural Resources Canada is to pilot the integrated graphite upgrading process with a 200 mt bulk sample over 3 years for a total contribution agreement of CA$6.6m where Lomiko will contribute 25% of this funding
- It supports four tasks: these tasks complement Phase 2 of the DoD grant
- All work and equipment will be in a Canadian lab setting

Task 1: Crushing,  grinding and flotation of La Loutre graphite

Task 2: Chemical and thermal purification of graphite concentrate

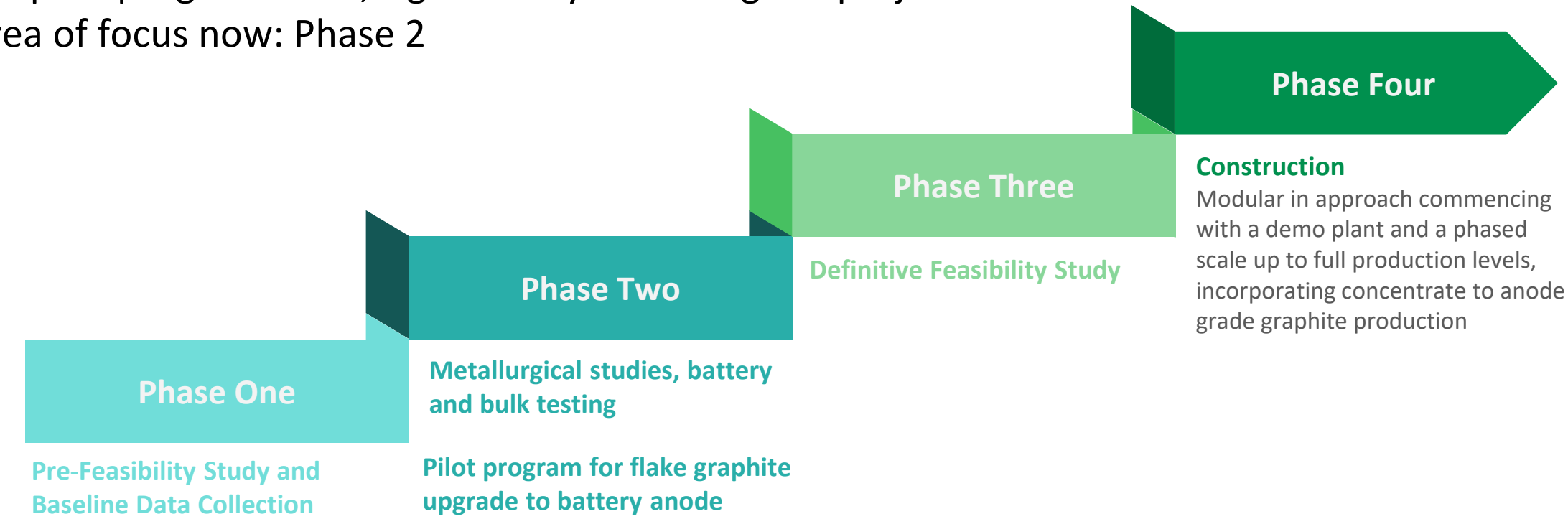
Task 3: Micronization and spheriodization of the flotation concentrate

Task 4: Carbon coating of purified graphite

# La Loutre development

## A de-risked path to continued development of this strategic critical mineral asset

- The U.S. DoD has provided a grant for **50%** of the study costs and NRCan is contributing **75%** of the pilot program costs, significantly de-risking the project.
- Area of focus now: Phase 2



# La Loutre and Graphite Portfolio

# MINÉRAUX CRITIQUES ET STRATÉGIQUES AU QUÉBEC

Version du 13 février 2020

## UN POTENTIEL À EXPLOITER

### Graphite

Plusieurs projets de graphite sont en activité au Québec.

1 **Lac-des-Îles**
Imerys Graphite et Carbon Canada
Mine active

2 **Lac Guéret**
Mason Graphite
Mise en valeur

3 **Matawinie**
Nouveau Monde Graphite
Mise en valeur

A **Lac Knife**
Focus Graphite inc.
Gîte

B **La Loutre**
Corporation Métaux Précieux du Québec
Gîte

C **Miller**
Canada Carbon
Gîte

D **Bell Graphite**
Saint Jean Carbon
Gîte

E **Mousseau West**
Gîte

### Cobalt et éléments du groupe du platine

Deux mines exploitent le cobalt et les éléments du groupe du platine en sous-produits du nickel.

4 **Raglan**
Glencore Canada Corporation
Mine active

5 **Nunavik Nickel**
Canadian Royalties inc.
Mine active

6 **Dumont Nickel**
Magneto Investments Limited Partnership
Mise en valeur

F **Bravo**
Exploration minière Jien Nunavik ltée
Gîte

G **Hawk Ridge**
Nickel North Exploration Corp.
Gîte

H **Lac Menarik**
Harfang Exploration inc.
Gîte

I **Lac Rocher**
Victory Nickel inc.
Gîte

J **Nisk-1**
Corporation Éléments Critiques
Gîte

### Niobium

Le Québec est le deuxième producteur mondial de nobium et le seul de l'hémisphère nord.

7 **Niobec**
Niobec
Mine active

K **Crevier**
Les Mineraux Crevier inc.
Gîte

### Titane et vanadium

Le Québec est le premier producteur de titane sous forme d'ilménite au monde.

8 **Lac Tio**
Rio Tinto Fer et Titane
Mine active

9 **BlackRock**
Métaux BlackRock inc.
Mise en valeur

L **Vanadium-Lac Doré**
Vanadiumcorp Resource inc.
Gîte

M **Magpie**
The Magpie Mines Inc.
Gîte

N **Iron-T**
Vanadium Corp.
Gîte

O **Mont Sorcier Iron**
Vanadium One Iron Corp.
Gîte

### Lithium

Le Québec détient un potentiel élevé en lithium.

10 **Lithium Amérique du Nord**
Lithium Amérique du Nord
Mine en maintenance

11 **Whabouchi**
Nemaska Lithium
Construction et rodage

12 **Authier**
Sayona Québec
Mise en valeur

13 **Rose**
Corporation Éléments Critiques
Mise en valeur

14 **Moblan**
Lithium Guo Ao Ltée et SOQUEM inc.
Mise en valeur

P **James Bay**
Galaxy Resources Limited
Gîte

### Éléments des terres rares

Le Québec renferme plusieurs dépôts de terres rares et il est reconnu comme ayant un potentiel à l'échelle mondiale.

15 **Kwyjibo**
SOQUEM
Mise en valeur

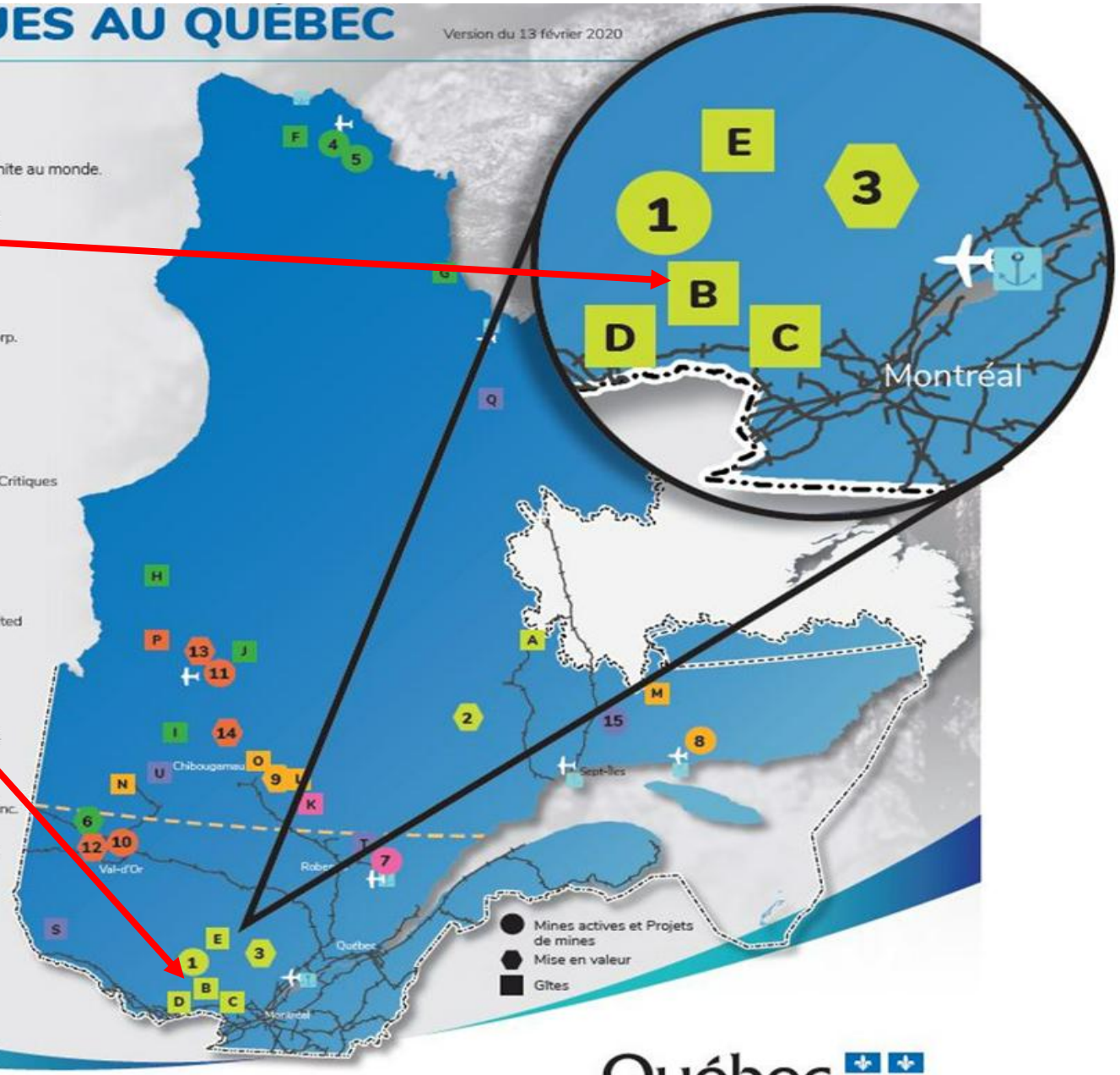
Q **Eldor (Ashram)**
Commerce Resources Corporation
Gîte

R **Strange Lake - Zone B**
Métaux Torngat ltée
Gîte

S **Kipawa (Zeus)**
Corporation Métaux Précieux du Québec et Ressources Québec inc.
Gîte

T **Niobec - REE Zone**
Niobec inc.
Gîte

U **Carbonatite de Montviel**
Ressources Géoméga inc.
Gîte




Votre gouvernement

Québec

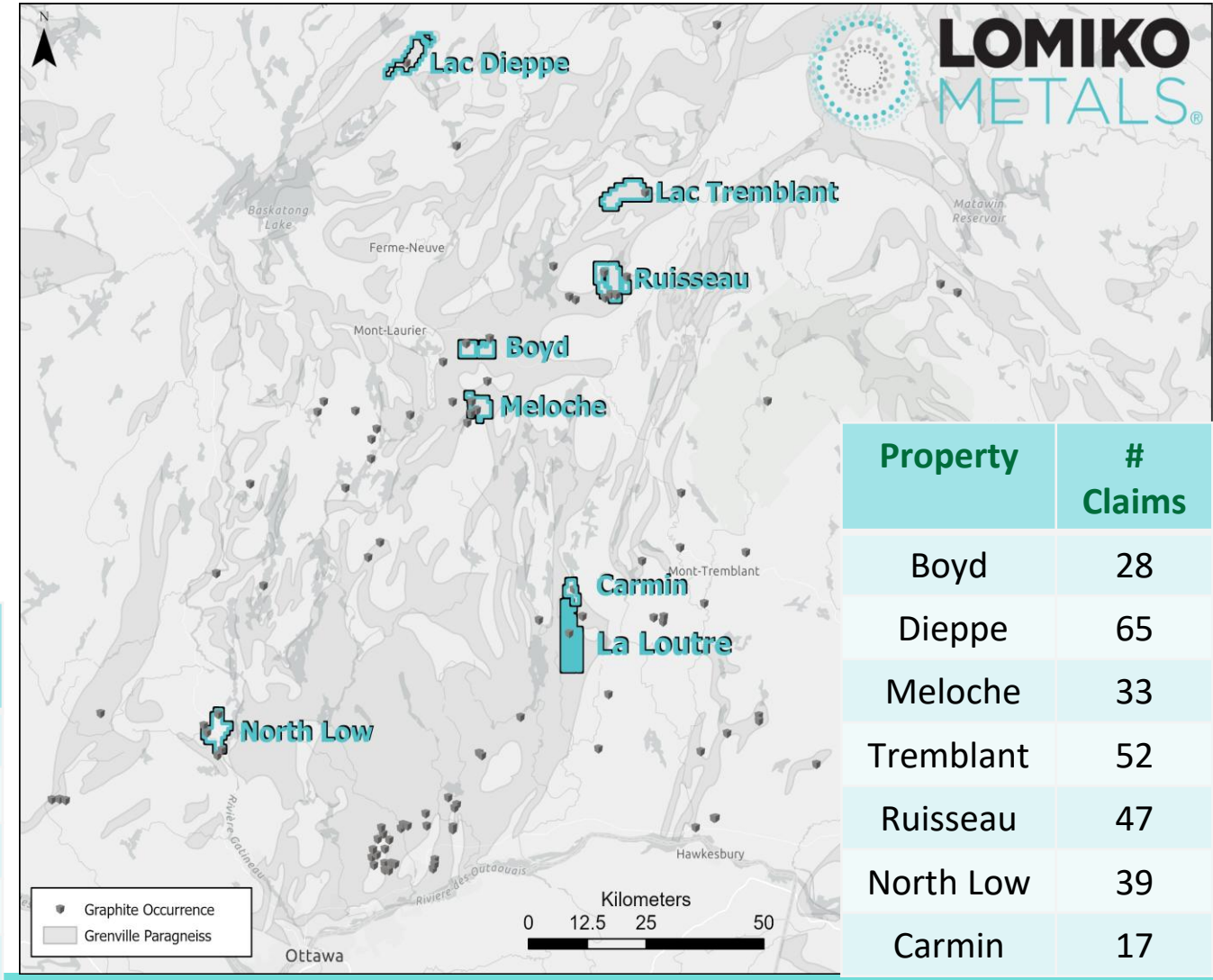
# Regional exploration in Grenville belt
# Most prospective graphite belt in North America

- 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

**2024 Field Program results pending** for Meloche, Dieppe, Tremblant and Rousseau

**Regional Exploration Program 2023**
(field program results displayed below)

| 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 |

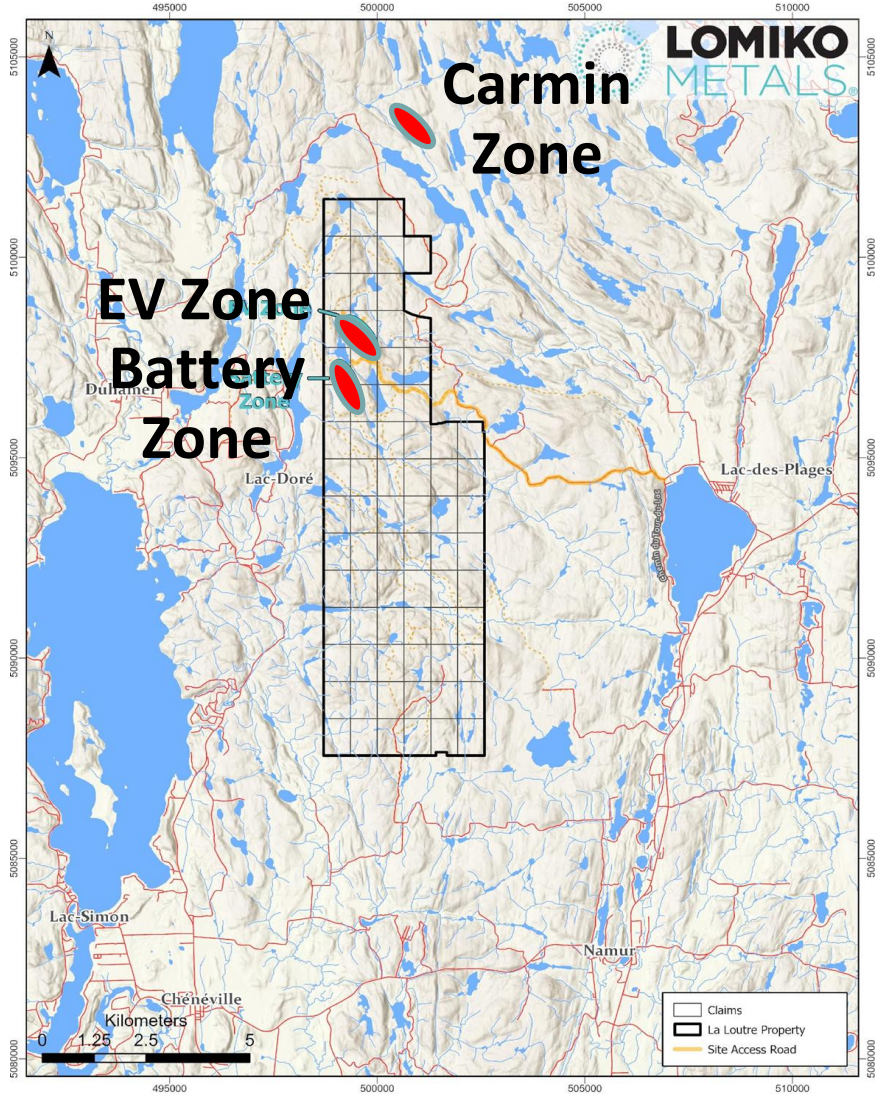



| Property | # Claims |
|---|---|
| Boyd | 28 |
| Dieppe | 65 |
| Meloche | 33 |
| Tremblant | 52 |
| Ruisseau | 47 |
| North Low | 39 |
| Carmin | 17 |

# La Loutre PEA details dated September 2021

- 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
- **Exceeded PEA test with PFS level testing** - Open circuit variability flotation tests produced concentrate grades between **97.9% and 99.7% Cg with 9.47% recoveries!**
- Focused footprint relative to claim size

**Carmin Acquisition – historic PFS**

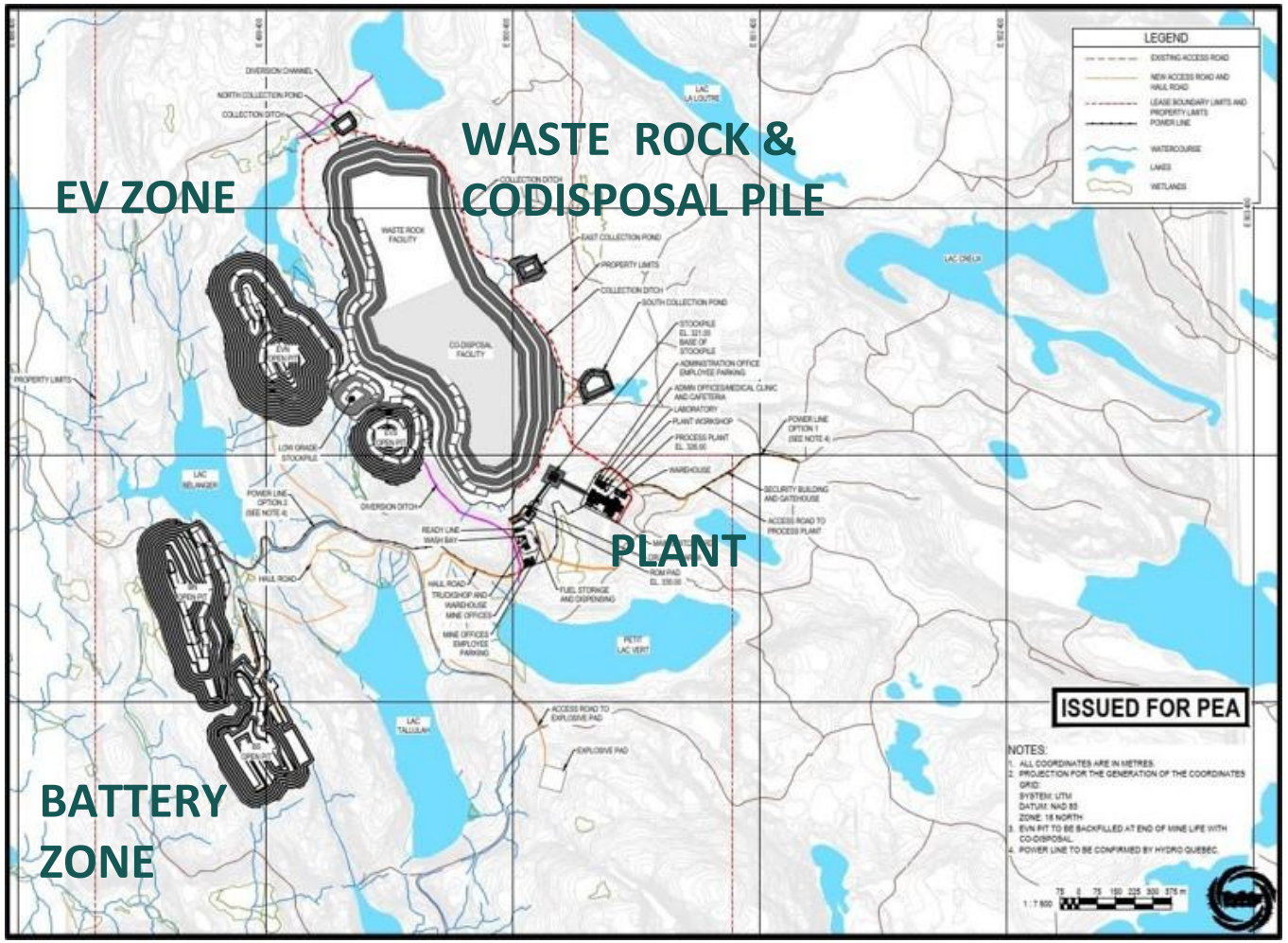



**Source:** Company Data

# La Loutre: PEA Layout – great base to build on

**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)

# Lomiko advantage: Ranked as the seventh biggest deposit worldwide by Mining.COM

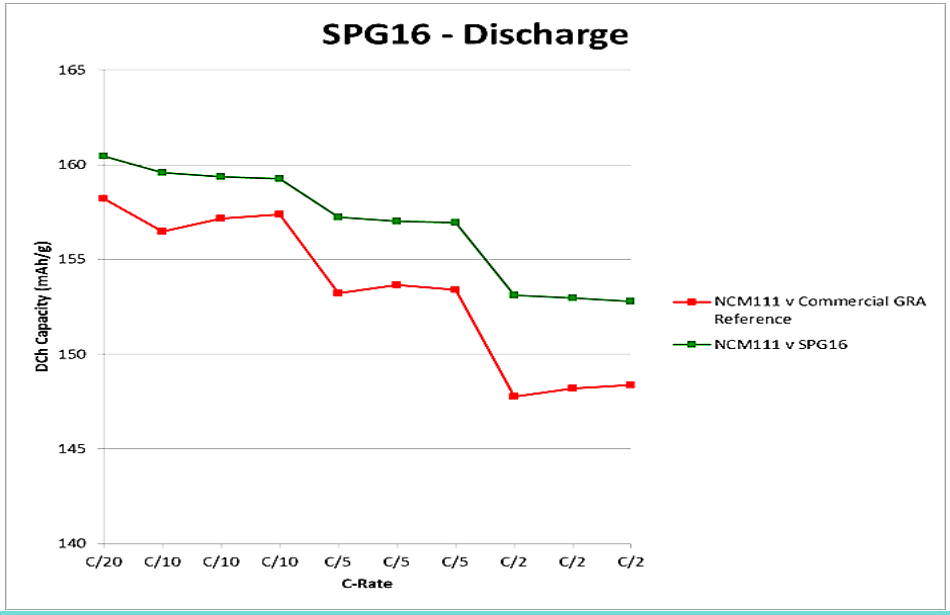
| | Property | Country | Owner | Development Status | M+I Resources (mt) | Grade (%) | Contained Graphite (mt) |
|---|---|---|---|---|---|---|---|
| 1. | Balama/Nicanda Hill | Mozambique | Triton Minerals Ltd | Stalled (previously Feasibility) | 369 | 11.3 | 41.7 |
| 2. | Sarytogan | Kazakhstan | Sarytogan Graphite Limited | Prefeasibility | 126 | 28.8 | 36.3 |
| 3. | Lac Gueret (Uatnan) | Canada | Mason Resources Inc | PEA | 66 | 17.19 | 11.3 |
| 4. | Mahenge | Tanzania | Black Rock Mining Ltd | Permitting | 116 | 8.02 | 9.3 |
| 5. | Siviour | Australia | Renascor Resources Limited | Permitting | 73 | 7.14 | 5.2 |
| 6. | Epanko | Tanzania | EcoGraf Ltd | Permitting | 63 | 7.6 | 4.8 |
| 7. | La Loutre | Canada | Lomiko Metals Inc | Prefeasibility | 65 | 4.5 | 2.9 |
| 8. | Malingunde | Malawi | NGX Limited | Prefeasibility | 37 | 7.37 | 2.7 |
| 9. | Balama Central | Mozambique | Tirupa Graphite plc | Permitting | 27 | 10.24 | 2.7 |
| 10. | Bunyu | Tanzania | Volt Resources Limited | Feasibility | 40 | 5.64 | 2.3 |

MINING INTELLIGENCE

Source: Mining.com

# La Loutre single-layer pouch full-cell battery testing met and surpassed commercial graphite results

- ✓ Demonstrated that La Loutre material is suitable for battery applications – single layer pouch full cell battery testing completed with Polaris Battery Labs, LLC, USA.
- ✓ The single-layer pouch cells constructed with La Loutre graphite anode and standard cathode material: cSPG16 and cSPG20 samples from La Loutre reveal strong performance of the La Loutre cSPG with better discharging capacity compared to commercial graphite material in North America today (358-367mAh) depending on the purification methods
- ✓ Both samples were put through a brief life cycle analysis for 25 cycles at C/2 and performed well.


- ✓ Figure top - Lomiko graphite Single layer pouch batteries produced and tested by Polaris
- ✓ Figure bottom - SPG20 sample from La Loutre has better charging/discharging capacity compared to commercial graphite in the market today in North America.

# Next Steps – Phase 2 works: Metallurgical and Battery Trials

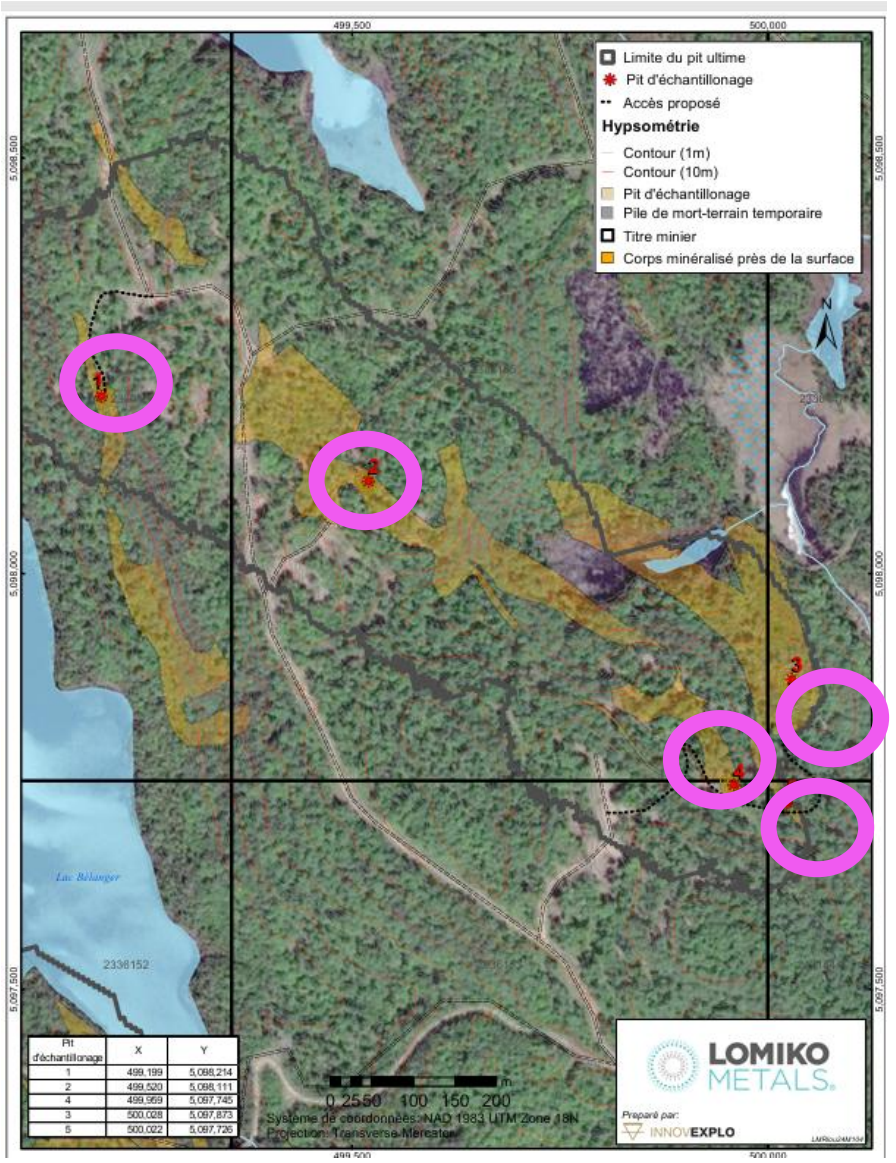
- CRITM Quebec studies
  - Lab testing to set bulk sample processing conditions
  - Process 1,100kg of the material to generate flotation flakes
  - NRC- 2000-cycle battery tests
- Polaris
  - Further 500-cycle battery testing
- Air Classification Testing
  - Upgrade crushed ore to +97%Cg without the use of water
  - Use the pressured air to separate waste and graphite
- Graphene testing
  - Produce graphene for use in paints, additives and specialty batteries
- Initiating the 200t bulk sample with local operators
  - To start permitting 4-5 test locations in EV Zone

# La Loutre – next 6 months

- CRITM Quebec studies – Grant finishes at the end of May 2025
  - Lab testing to set bulk sample processing conditions
  - Process 1,100kg of the material to generate flotation flakes
  - Pre-Requirement to evaluate the equipment capabilities at Corem
  - SGS can – Quebec lab an option
- DoD and NRC supported- Pilot Processing
  - Initiating the 200t bulk sample with local operators
  - To start permitting 4-5 test locations in EV Zone
  - Meet the mayors in early January
  - Permitting:
    - ATI – Impact Causing Work
    - MRNF- Forestry application
  - Engaged InnovExplo/Norda Stillo, P3 Solutions (Quebec-based engineers) and LRR to support bulk sample planning

# La Loutre – Bulk Sample Locations

- DoD and NRC supported- Pilot Processing
- Testing to be done in EV Zone only
- Proposed - 5 locations
- Each Location up to @50tonnes of ore
- Road access
- Three cutting – minimal
- Stripping
- Drill/blast
- Mining
- Haulage
- Noise monitoring to establish what are the audible levels




| Pit d'échantillonage | X | Y |
|---|---|---|
| 1 | 499,199 | 5,098,214 |
| 2 | 499,520 | 5,098,111 |
| 4 | 499,959 | 5,097,745 |
| 3 | 500,028 | 5,097,873 |
| 5 | 500,022 | 5,097,726 |

# Share structure

Lomiko has a tight capital structure with 48.7m shares outstanding

**Lomiko Metals Inc**

December 12, 2024

| | |
|---|---|
| **Total Issued and Outstanding** | **48,689,505** |
| Options | 2,174,000 |
| Warrants | 18,462,420 |
| Broker Warrants | 253,470 |
| DSU | 779,684 |
| RSU | 1,481,228 |
| **Fully Diluted** | **71,840,307** |

# Why invest in Lomiko?

- ✓ **$16M** in the grants and investment agreement – **non-repayable securing 50%** of all the funds needed to come to the construction decision
- ✓ Pilot processing financed the project at 75% of the cost by the federal government and it is **non-repayable!**
- ✓ Project is vetted by the US Department of Defense and the Federal Government
- ✓ Secure jurisdiction
- ✓ Chinese export restrictions on graphite will fuel the shortage for North American automakers
- ✓ La Loutre is the seventh biggest graphite deposit close to the US and battery highway
- ✓ Battery testing showcases excellent results meeting and exceeding industry standard

# Lomiko collaborations

CRITM
vecteur de transformation métallique

Polaris BATTERY LABS
Navigating You to Commercialization

Femina Collective

corem
Innovation en traitement de minerais
Innovation in mineral processing

Investissement Québec International

SOQUEM

SGS

LSTM

UNIVERSITÉ LAVAL

Canada
National Research Council Canada
Conseil national de recherches Canada

ECOLOGO
PRODUCT CERTIFIED FOR REDUCED ENVIRONMENTAL IMPACT. VIEW SPECIFIC ATTRIBUTES EVALUATED: UL.COM/EL
UL XXXX

NRC·CNRC
Industrial Research Assistance Program
NRC-IRAP
Industrial Research Assistance Program

For more information

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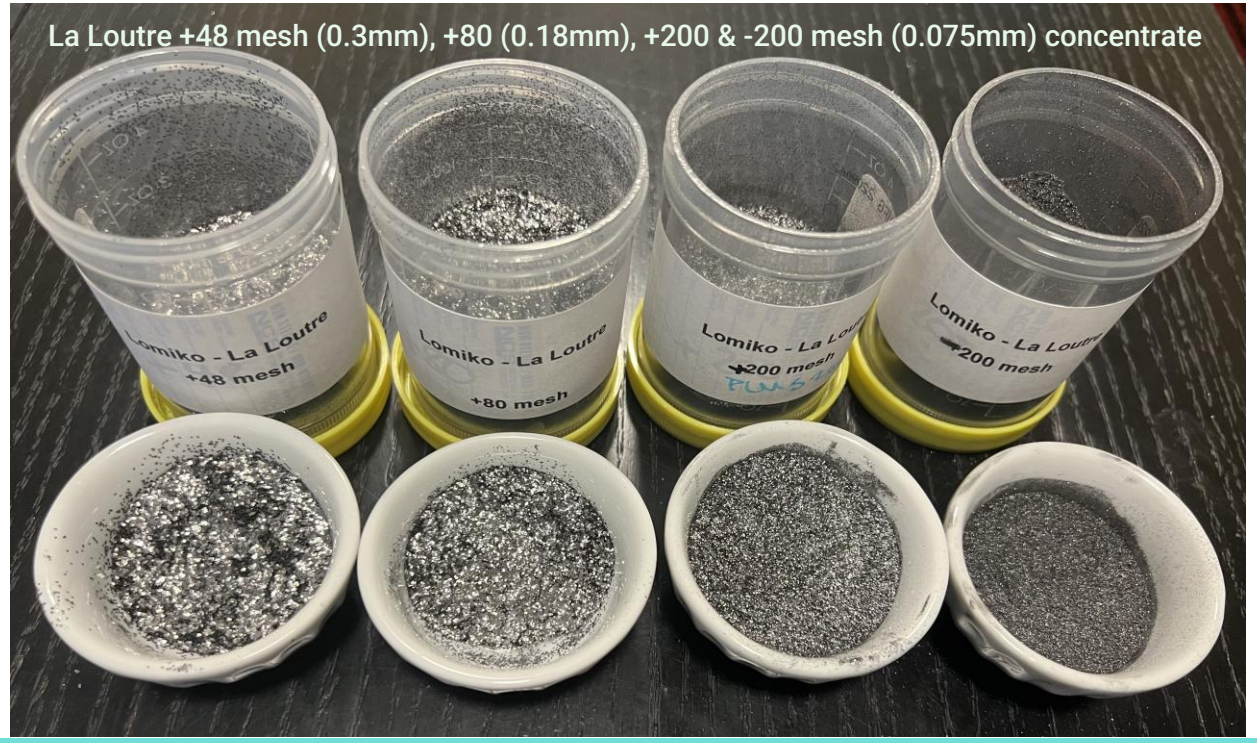
Follow us @lomikometals on socials

# SGS Characterization Study, 2023
# 67% fines content in the flotation concentrate

- La Loutre flake distribution is ~67% fines - suitable for anode market **37% growth year over year!**
- -100 mesh is used most commonly in SPG (spherical graphite) as a precursor for battery production



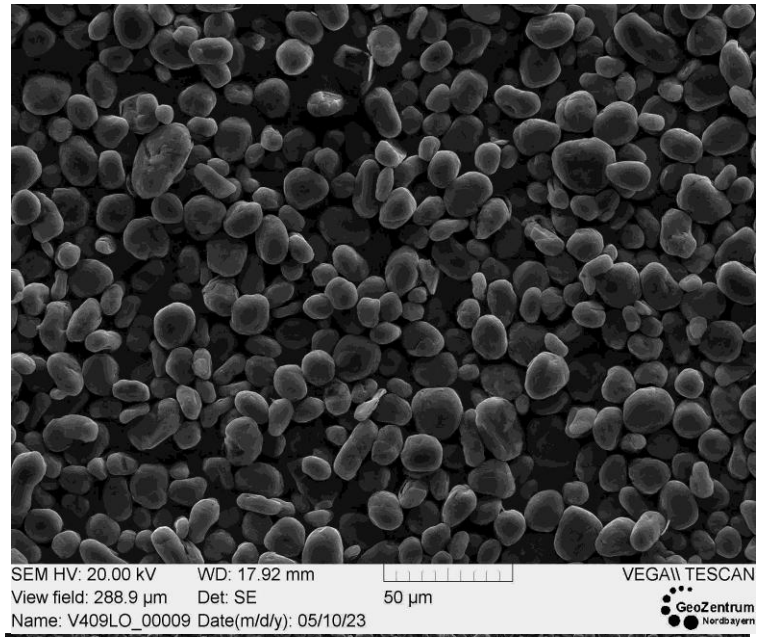

**Size Fraction Analysis of Combined Concentrate of LCT – PFS Level MetPro Report Feb 2023**

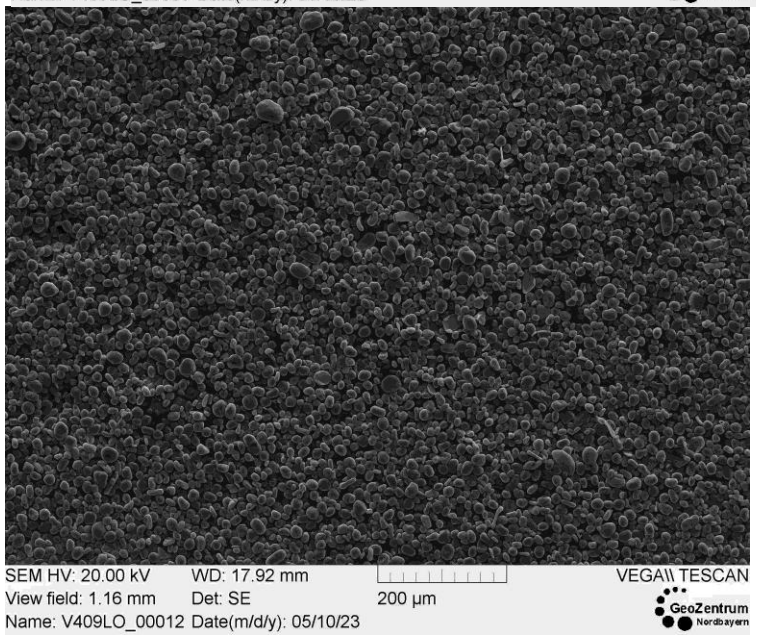
33% of +100 mesh

| Size (Mesh) | Size (µm) | Mass (%) | C(t) (%) | C(t) Distribution (%) |
|---|---|---|---|---|
| 32 | 500 | 0.4 | 98.3 | 0.4 |
| 48 | 300 | 5.6 | 98.7 | 5.5 |
| 80 | 180 | 18.1 | 98.3 | 17.9 |
| 100 | 150 | 9.5 | 98.8 | 9.4 |
| 150 | 106 | 17.0 | 99.4 | 17.1 |
| 200 | 75 | 18.6 | 99.6 | 18.7 |
| 325 | 45 | 18.2 | 99.5 | 18.2 |
| -325 | -45 | 12.7 | 99.1 | 12.7 |
| Final Concentrate | | **100** | **99.1** | **100** |

# La Loutre metallurgical program 99.99% purified graphite content

- ✓ Completed PFS level met testing and optimized flow sheet
- ✓ Completed value-added testing with ProGraphite – micronization, spheroidization, and purification:
- ✓ **Proved that La Loutre material is suitable for battery applications - Spherical Graphite production yielded excellent results**
- ✓ **Achieving excellent 99.99%Cg SPG and flake purity**
- ✓ All physical characterization tests produced excellent results
- ✓ Achieved continuous and reliable production of micronized products with homogenous properties.
- ✓ Low specific energy input to convert the La Loutre flotation concentrate to micronized material.



# Traditional Graphite Markets Opportunities in addition to EV-ICE and Energy Storage

- **Engineered Products** include electronics, agriculture, automotive, ceramics, government defence, carbon brushes, and fire retardants that use natural flake graphite. Graphite foils in sheets and rolls are used in electronics, nuclear applications, and other thermal management applications in this market group. Standard 95.0% Cg and High Purity 99.9% Cg
- **Expanded graphite** – LL graphite can be used for primary alkaline batteries, ceramics, and other electrochemistry applications. Expanded graphite can be purified through the Cl/thermal process to produce a high-purity product. Lomiko completed the testing on +50 and +80 mesh meeting and surpassing industry-level results
- **Lubricants –**Applications include grease, dispersions, dry, nuclear-grade, aerospace, agriculture, MIL-SPEC, rail and food-grade lubricants. Traditional and advanced graphite powder additives are used in all applications listed with standard 95.0%Cg and high purity 99.9% Cg grades in various mesh sizes and micron PSDs
- **Polymers and Plastics, rubbers, and coatings** will extend the life of consumer devices, automotive tires, reusable plastics, industrial bearings, and plastics used in antistatic films, coatings, and electronic packaging. Graphite powder is used as a lubricant or conductive additive, including power cables, PTFE, PEEK, seals, bearings, coatings, rubber seals, wiper blades, antistatic packaging, thermal plastics and paints. Based on both Corem and PH analytical reports, there are chemical markers of the La Loutre signature that are unique for use in coatings, seals, thermal plastics, and consumer goods.
- **Graphene** Graphene's manufacturing process uses natural flake graphite to produce a single layer, a few layers, and multi-layer plates. applications in high-frequency electronics, bio, chemical and magnetic sensors, ultra-wide bandwidth photodetectors, and energy storage and generation. Lomiko is undertaking studies to determine La Loutre graphite's suitability for graphene production. Graphene is a transparent and flexible conductor used in many high-tech applications.