

# MUSKOX PGE-CHROMITE REEF PROJECT

Copper-Nickel-PGE-Gold

Muskox Intrusion Ultramafic Complex Nunavut, Canada

Northern Exposed Extent of Multilayered, Ultramafic, Muskox Intrusion covering 10432.98 Ha



World Class Mining Camps

# MUSKOX PGE-CHROMITE REEF PROJECT

| <u>Value</u>     | Mining District         | <u>Country</u> |
|------------------|-------------------------|----------------|
| Billions of US\$ |                         |                |
| 1,430            | <b>Bushveld Complex</b> | South Africa   |
| 916              | Noril'sk-Talnakh        | Russia         |
| 777              | Witwatersrand Basin     | South Africa   |
| 992              | Andean Porphyry Belt    | Chile          |
| 400              | Weipa Bauxite           | Australia      |
| 380              | Carajas Iron Province   | Brazil         |
| 368              | Sudbury Basin           | Canada         |
| 350              | Hamersley Iron Basin    | Australia      |
| 224              | Southwest US Copper     | U.S.A.         |

Source: Canadian Mining Journal, Dec. 2004



**Exploration History** 

## **MUSKOX PROJECT**

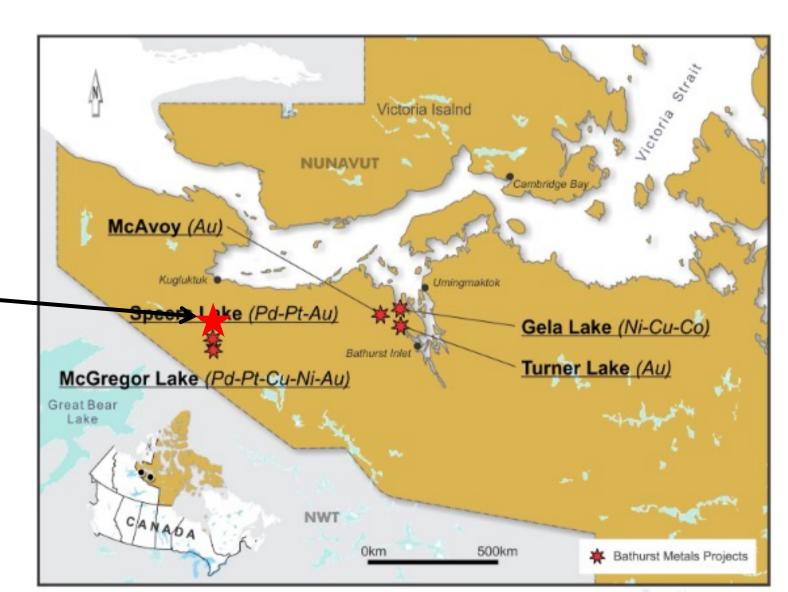
| 1955-1962 | Canadian Nickel (Inco) found |  |
|-----------|------------------------------|--|
|           | and commenced exploration of |  |
|           | the Muskox Intrusion         |  |
| 1967      | GSC Produces first Muskox    |  |
|           | Intrusion Map                |  |
| 1980's    | Equinox and International    |  |
|           | Platinum                     |  |
| 2000-2018 | Muskox Minerals / Prize      |  |
|           | Mining                       |  |
| 2005-2008 | Adriana Resources            |  |
| 2009-2018 | MIE Metals                   |  |



Muskox PGE- Chromite REEF Project

McGregor and Speers Lake Projects under option to SPC Nickel.

# **MUSKOX PROJECT**

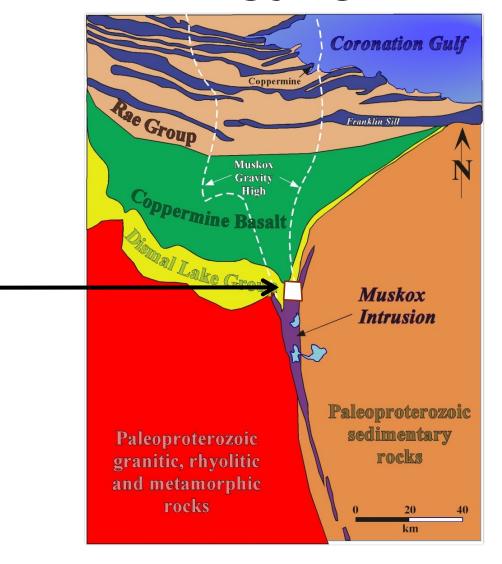


# BATHURST METALS

MUSKOX PGE-CHROMITE REEF PROJECT

Muskox PGE Chromite REEF Project

The surface exposed portion of the Muskox Intrusion represents the southern portion of a large, rifted graben that opened from north to south.

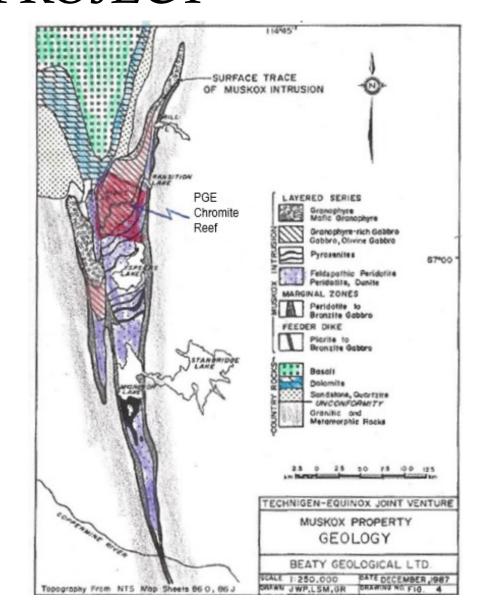




# MUSKOX PGE-CHROMITE REEF PROJECT

### Geology of Muskox Intrusion

- •Consists of ultramafic to mafic at least 42 cumulate layered rocks from cyclic magmatic injections .
- •Ultramafic rocks predominate the lower sequences and are overlain by mafic cumulates towards the roof of the intrusion.
- •There are layered sequences containing concentrations of interstitial to net-textured sulphides.
- •Higher in the sequences exists layers enriched in chromite that are similar to the platiniferous, Merensky Reef and Bushveld Complex.
- •The Muskox PGE-Chromite Reef Project contains all of the known surface exposures and down-dip extent of the REEF with enriched PGE mineralization



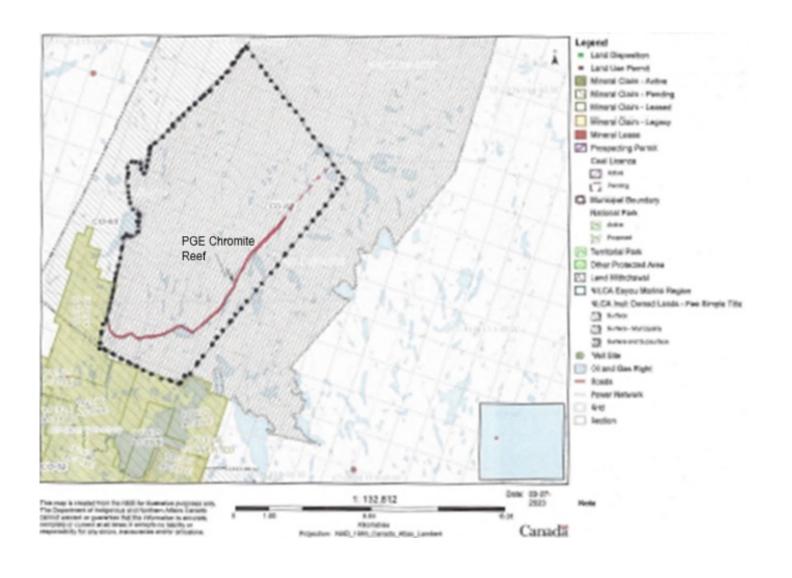
# BATHURST METALS

# MUSKOX PGE-CHROMITE REEF PROJECT

Claim Area – 10,433 Ha

Exploration Agreement with Nunavut Tunngavik Incorporated on Inuit Owned Lands in Exploration Area – CO62-21-001

Agreement provides Bathurst access to area subject to annual rent and work requirements.

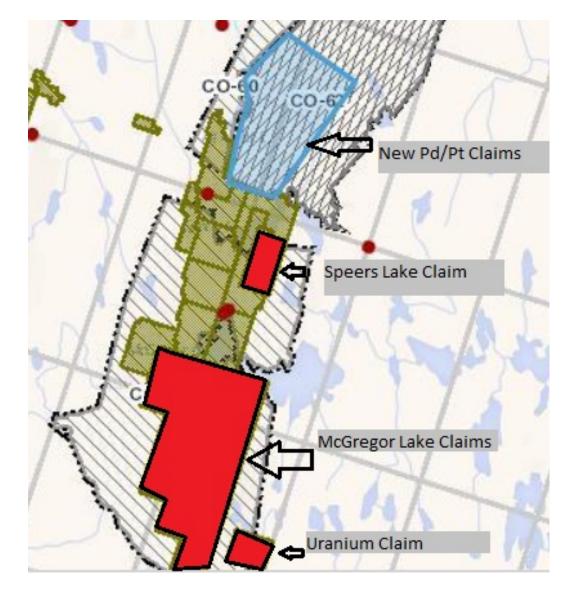




### LOCATION MAP OF PROJECT

PGE-Chromite Reef claim location with respect to recently optioned Speers/ McGregor Lake to SPC Nickel.

The project contains all of the same layered sequences on Speers/McGregor claims but also hosts the upper reefs known to host chromite and PGEs.





### HISTORICAL Pd/Pt ASSAY DATA

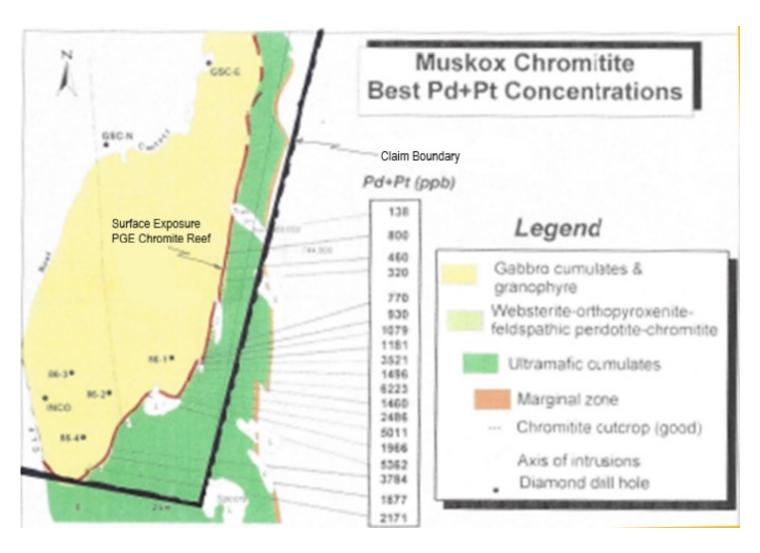
Historical results from the reef area indicated lower layers hosting anomalous PGE concentrations.

No correlation between chromite and PGE values.

Sulphide mineralization appears to control primary PGE deposition.

Hydrothermal PGE enrichment has potential where diabase dyking cuts through the reef.

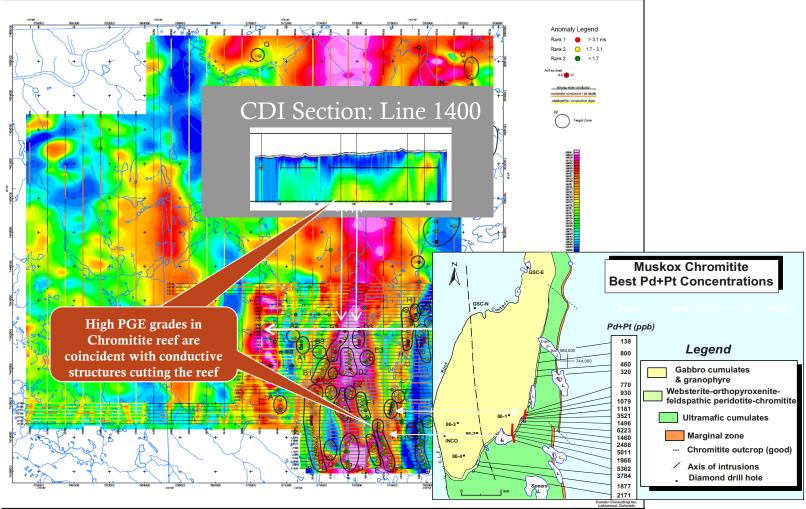
This model is untested.





### HISTORICAL GEOPHYSICAL DATA

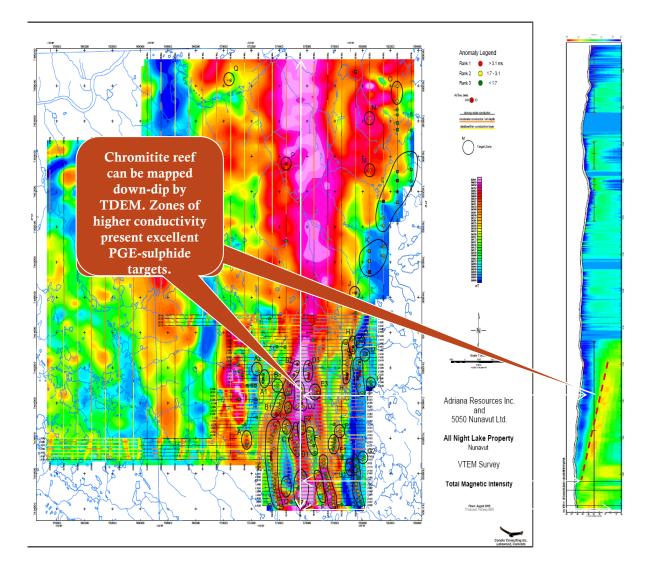
Indicates the potential areas where the Reef is cut by the diabase dykes.





### HISTORICAL GEOPHYSICAL DATA

Geophysical Data also indicates down-dip the location of the Reef



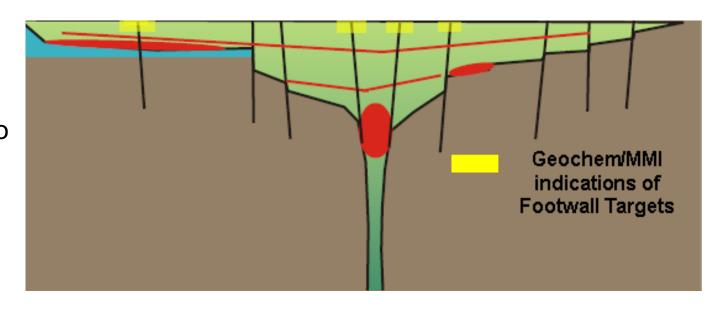


There are four targets outlined on the PGE-Chromite Reef Project whereas the claims to the south do not have the potential to host the upper and north dipping PGE-enriched layers.

# MUSKOX PGE-CHROMITE REEF PROJECT

### **Targets on Reef Project**

- 1. Sulphides along the floor of the Intrusion,
- 2. Footwall Benches along east and west margins,
- 3. PGE-Enriched Layers, &
- 4. Footwall Sulphides on the Western Flank





# MUSKOX PGE-CHROMITE REEF PROJECT

## 2023 Field Program

Bathurst's Geological Team will investigate the potential of PGE remobilization and enrichment of the PGE-Chromite Reef by:

- •Geologic mapping and rock sampling of the PGE-Chromite Reef
- Including lower layers
- •Focusing in areas that are in close proximity to where the diabase dykes have cross-cut the Muskox Intrusion.