



# **SPEERS LAKE PROJECT**

**PGE-Gold-Copper-Nickel**

*Muskox Intrusion*

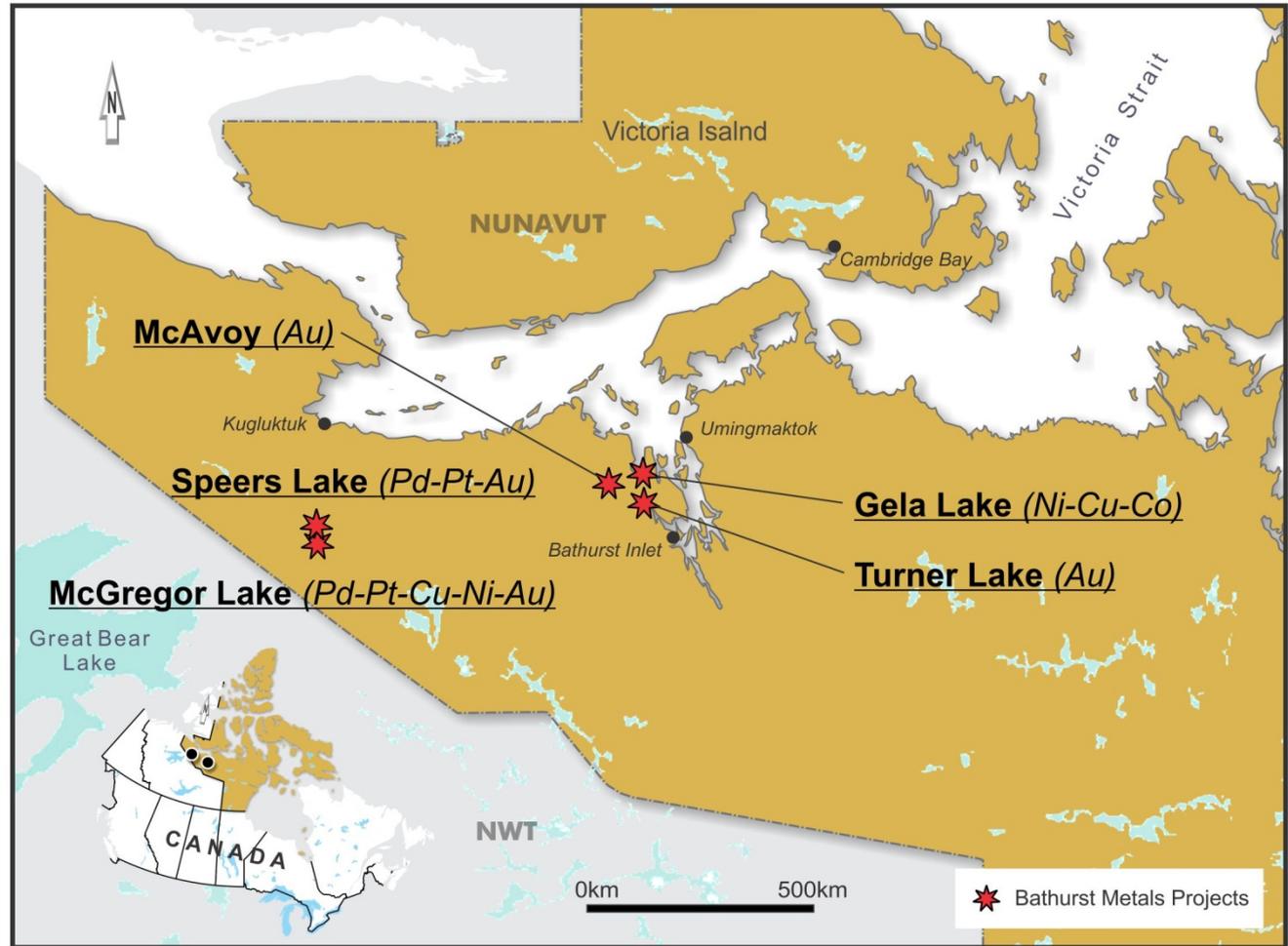
*Ultramafic Complex*

*Nunavut, Canada*



# Properties Location

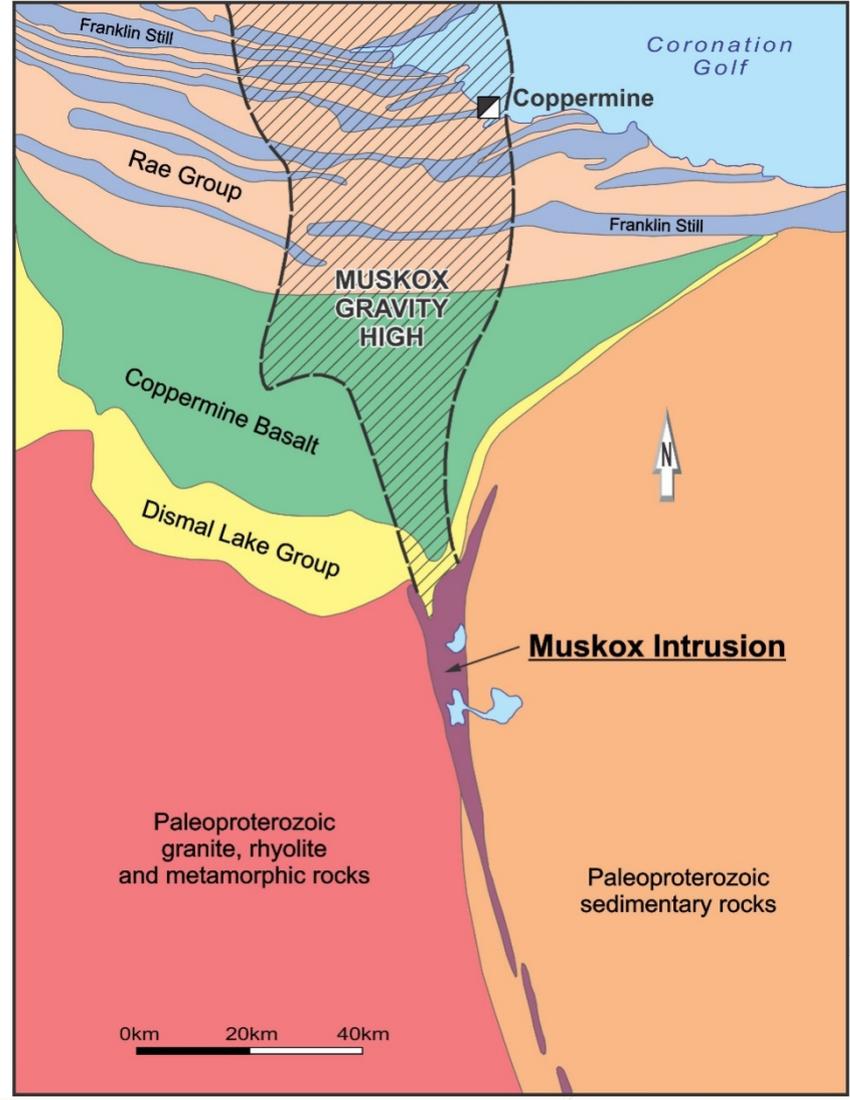
Five Exploration  
Projects 100%  
owned.





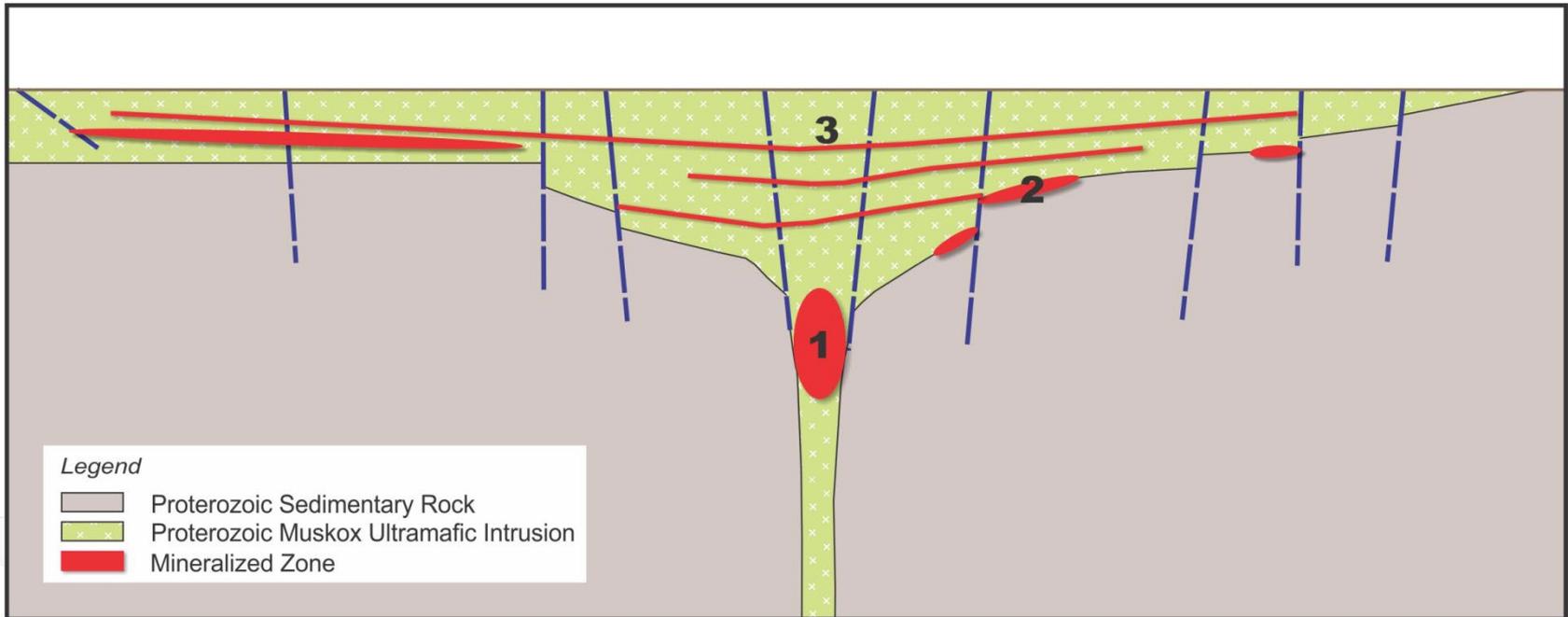
# McGregor Project – Regional Geology

- The exposed portion of the Muskox Intrusion represents the southern portion of a large, rifted graben that opened from north to south.
- There is a strong probability that several sub-chambers exist along the strike of the rift.



# Historic Exploration Targets

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





# Exploration History

The company's Speers Lake Project covers known Copper, Nickel, Palladium, Platinum and Gold mineralization within or along the contact of the Proterozoic Layered Muskox Ultramafic Intrusive (LMUI) in western Nunavut.

The region has received only sporadic, systematic exploration since its first discovery and exploration by Inco in the late 1950's. Additional systematic exploration was not conducted again until the 1980's and in 1999 to 2007. Several geochemical, geophysical, geological mapping and limited diamond drilling had been undertaken on the property with these studies being able to define at least two sulphide pulses associated with the emplacement of the LMUI.

These pulses both contain high nickel and copper concentrations with associated precious metals.





# Speers Lake Location Map

## Speers Lake Property

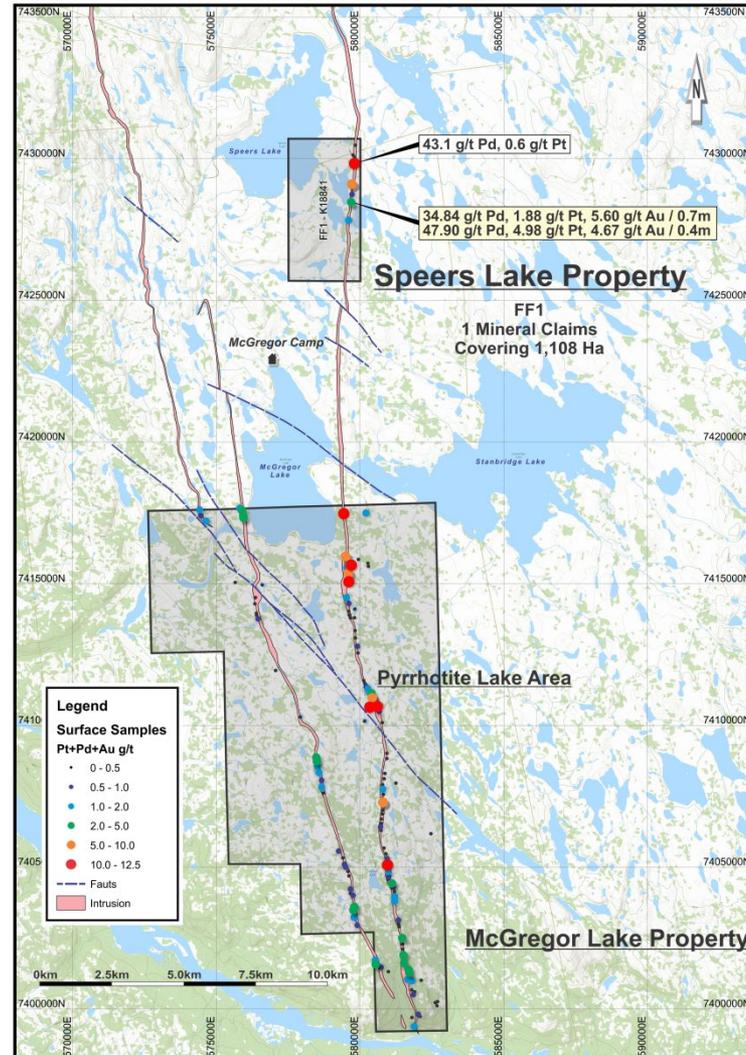
Covers 1108 Ha

Known Pd/Pt/Au/Cu/Ni mineralization

Mineralization at surface along ultramafic/ metasedimentary contact and drill tested with good results

Indications of remobilization of mineralization along near-vertical structures

Remobilization may be related to later, high temperature diabase dyking.





# Historical Assay Results

- Listed below are some of the more significant precious and base metal assay results from historical geochemical rock sampling and diamond drilling.

## Historical Rock Geochemistry – Grab Samples

<b>Pt</b> (g/tonne)	<b>Pd</b> (g/tonne)	<b>Au</b> (g/tonne)	<b>Cu</b> (%)	<b>Ni</b> (%)
<b>0.87</b>	<b>5.48</b>	<b>5.0</b>	<b>3.50</b>	<b>0.18</b>
<b>2.55</b>	<b>3.43</b>	<b>2.0</b>	<b>0.45</b>	<b>0.24</b>

## Historical Surface Chip Sampling

<b>Pd</b> g/tonne	<b>Pt</b> g/tonne	<b>Au</b> g/tonne	<b>Length</b> Metres
<b>42.24</b>	<b>2.26</b>	<b>6.79</b>	<b>0.76</b>
<b>58.09</b>	<b>6.04</b>	<b>5.66</b>	<b>0.43</b>

## Historical Diamond Drill Hole 87-S10 Assay Results

<b>FROM</b> (m)	<b>TO</b> (m)	<b>THICKNESS</b> (m)	<b>Pt</b> (g/tonne)	<b>Pd</b> (g/tonne)	<b>Au</b> (g/tonne)	<b>Cu</b> (%)	<b>Ni</b> (%)
<b>94.4</b>	<b>95.1</b>	<b>0.7</b>	<b>1.94</b>	<b>38.45</b>	<b>6.03</b>	<b>1.18</b>	<b>3.89</b>
<b>107.23</b>	<b>107.63</b>	<b>0.40</b>	<b>5.57</b>	<b>52.71</b>	<b>1.41</b>	<b>0.22</b>	<b>3.79</b>





# Untested Remobilization Model

Quote from 2000 Assessment Report “Hydrothermal remobilization appears to be an important factor at the Muskox. As previously noted, PGM mineralization in the vicinity of massive sulphide lenses is thought to have been hydrothermally transported, as has arsenic, bismuth, copper lead and silver, all of which show elevated background values in the area and appear to be part of the mobilizing chemistry.

High grade PGM mineralization and hydrothermal indicators have been located near diabase dykes that intrude the Muskox south east of Speers Lake. Diamond drill hole DDM 87-510 on SPEE 13 ( located on Speers Lake Property) intersected two narrow zones of massive, pyrrhotite-pentlandite mineralization with a hematite-altered breccia an space fillings of pyrite.

This returned values up to 0.162 oz/ton platinum, 1.540 oz/ton palladium, 0.153 oz/ton gold and high values of silver, arsenic and bismuth over 0.4m. These intersections are distinguished from the massive sulphide lenses by their high gold values, low copper values, hematite-pyrite breccia and occurrence within the intrusion, not in the hornfels zone.

The hole is located approximately 200 m from a large diabase dyke which may have provided the heat source for a hydrothermal system, and quite likely marks a graben fault. The high gold values indicate that enrichment has taken place, perhaps in the vicinity of an existing PGM-rich massive sulphide lens. Hydrothermal enrichment has considerable potential to the north where numerous diabase dykes cut through disseminated PGM rich sulphides of the central layered series. **This is a largely untested model for PGM mineralization in the Muskox intrusion and of unknown potential.”**





# Proposed 2021 Exploration Program

- January to March 2021 Data compilation
- June- August 2021 Detailed geological mapping and structural analysis of ultramafic intrusive and metasedimentary rocks. Also rock geochemical sampling program.
- October-December 2021 Permit and prepare project for 2022 diamond drilling program.
  - Focus on high-grade PGE and base metals – Pd/Pt/Au/Cu/Ni/Co
  - Also on potential cumulate layered mineralization

