

# **Red Cross Lake Nickel-Gold Project**

## **Magmatic Nickel and Orogenic Gold Project in Central Newfoundland**

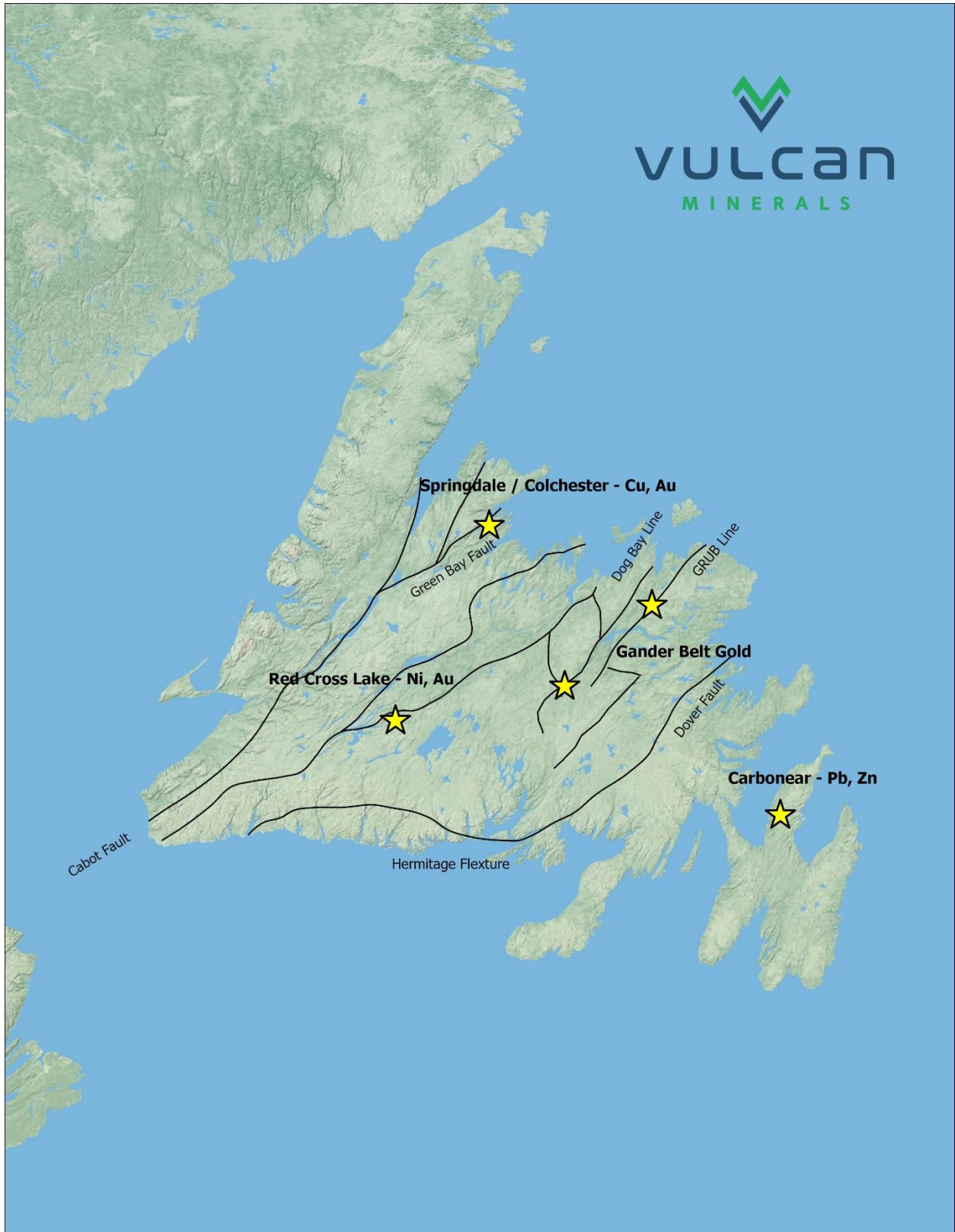
### **Project Summary**

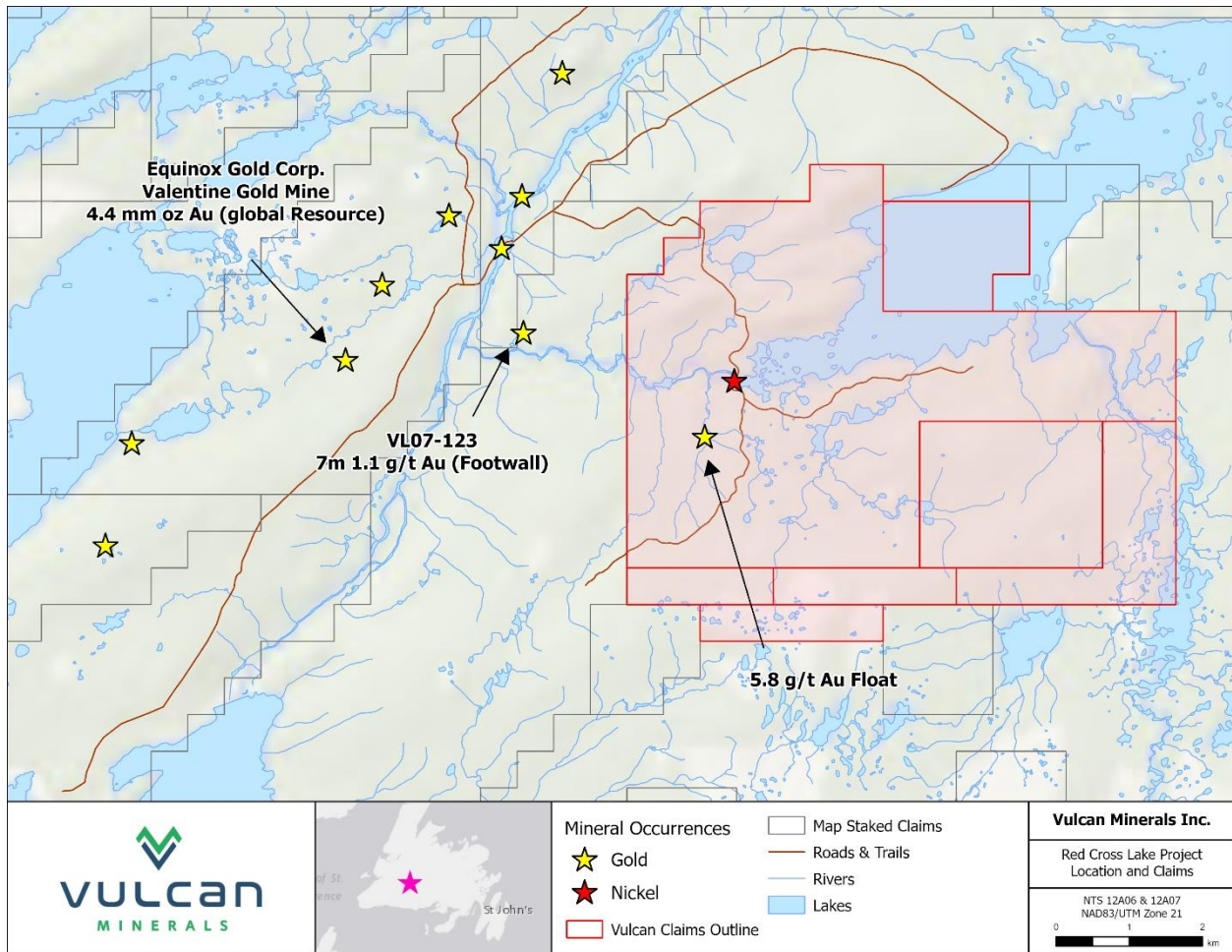
The property contains the Red Cross Lake intrusive which is a layered mafic-ultramafic intrusion comprising peridotite, troctolite and olivine gabbro hosted within metasediments of the Victoria Lake Supergroup. It has the potential for nickel/copper/cobalt/PGE deposits based on several characteristics. It is emplaced south of the Victoria Lake Shear Zone in a prominent dilational (low-pressure) flexure providing the setting for a structurally controlled magmatic plumbing system. There is strong evidence of crustal rock contamination including sulfide-bearing xenoliths and magmatic breccias. Further, nickel depletion in olivine hosted by troctolite and olivine gabbro suggests that nickel has been extracted by an immiscible sulfide melt with the potential for concentrated segregation into sulphide zones. Historic drilling and subsequent core analysis by Vulcan has confirmed the presence of pentlandite (nickel sulphide) within these related magmatic textures.

Previous exploration by Vulcan includes a high-resolution VTEM airborne magnetic and electromagnetic survey commonly used in the search for magmatic sulphide deposits. It identified a main trend of coincident anomalies extending approximately 2 km in length. This anomalous trend also coincides with impressive soil geochemical results for nickel, copper and cobalt, including some of the highest values ever recorded within the Government of Newfoundland and Labrador database (see below). Compilation, historic core analysis and prospecting have also confirmed the merits of the project.

The Red Cross Lake mineral claims are adjacent to Equinox Gold Corp.'s Valentine Lake Project, the western claim boundary being approximately 3 km from the Marathon Gold mine which recently commenced production and is projected to become the largest gold mine in Atlantic Canada. The Valentine project has published resources (inclusive of mineral reserves) of 4.0 million ounces of gold.

Patrick Laracy, President and CEO, commented "Consistent with our exploration approach, we have systematically added value to this project with previous exploration over the last few years. It holds potential for both magmatic nickel/copper and orogenic gold."





## Geochemistry

The Red Cross Lake Nickel-Copper-Cobalt Project in central Newfoundland contains impressive soil geochemical results. From the Government of NL database of 22,400 entries for till samples, the highest recorded nickel value is 2061 ppm. Vulcan's current survey contains three soil samples exceeding this value, namely 3,936 ppm, 2,914 ppm and 2,555 ppm nickel. 17 soil samples exceeding 1000 parts per million (ppm, 0.10%) nickel including best sample of 3,936 ppm nickel, 674 ppm copper and 230 ppm cobalt.

In late 2023, 765 soil geochemical samples were taken over the Red Cross Lake intrusive lake suite (RCLIS) and surrounding volcanic and volcanoclastic sedimentary rocks.

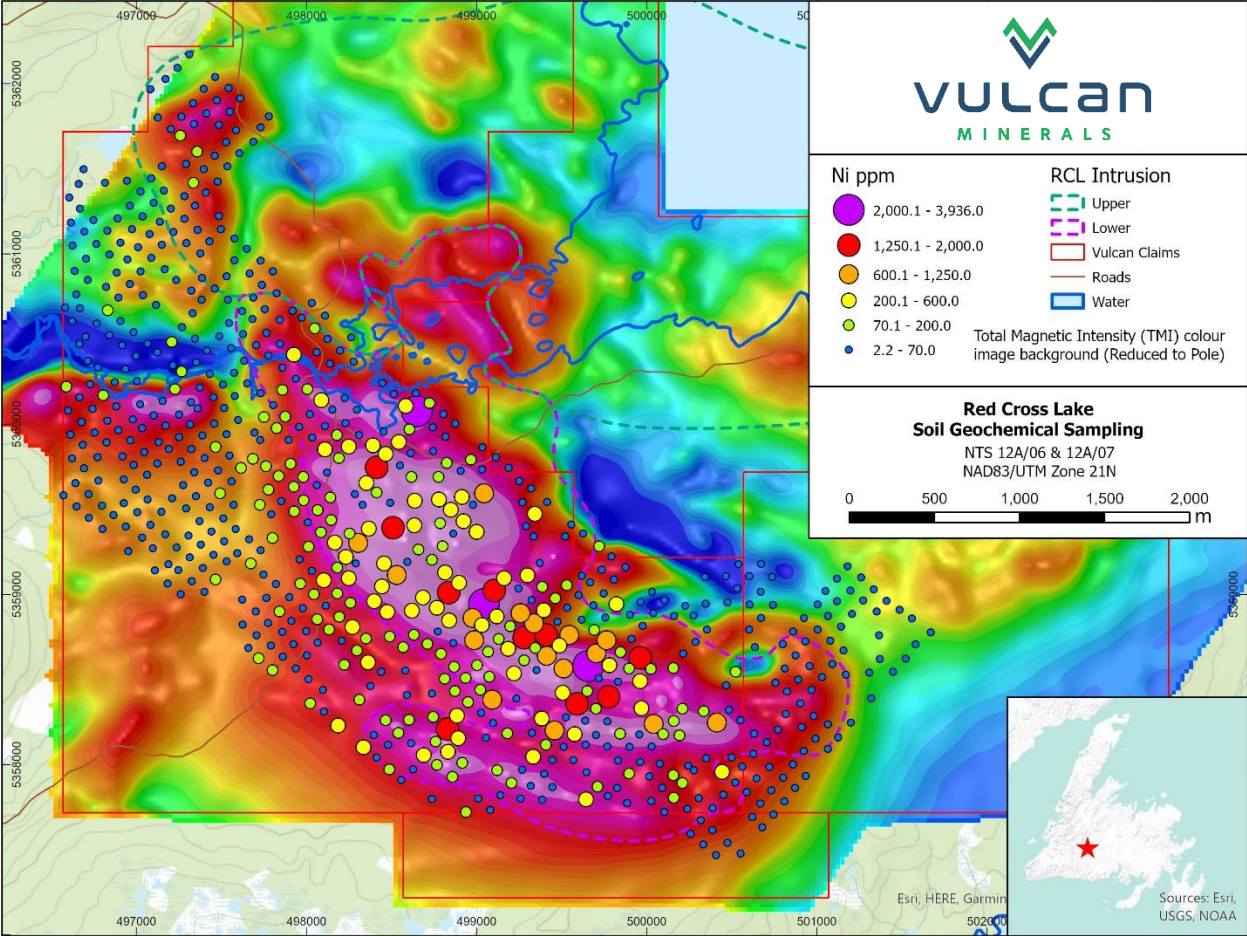
The soil geochemical survey delivered highly anomalous nickel-copper-cobalt values with 41 samples above 500 ppm nickel including 17 samples greater than 1,000 ppm nickel (0.1% Ni) with the highest sample yielding 3,936 ppm (0.39% Ni). This is one of three samples that exceed the highest Ni ever analysed within 22,400 entries in the Newfoundland and Labrador Geological Survey's "Till Geochemistry" database (Newfoundland and Labrador GeoScience Atlas OnLine),

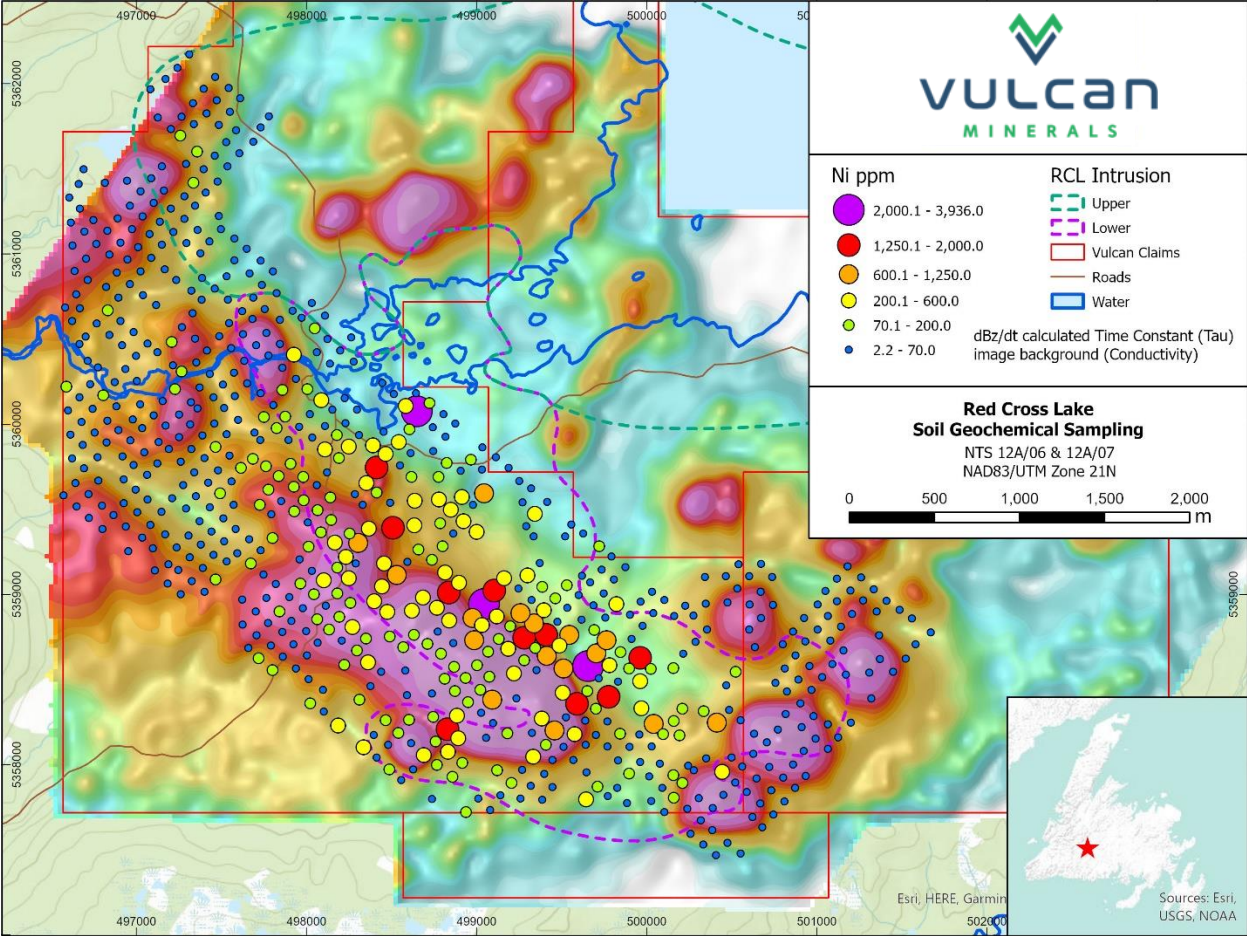
demonstrating the significance of these results on a comparative basis with tills targeting C soil horizons.

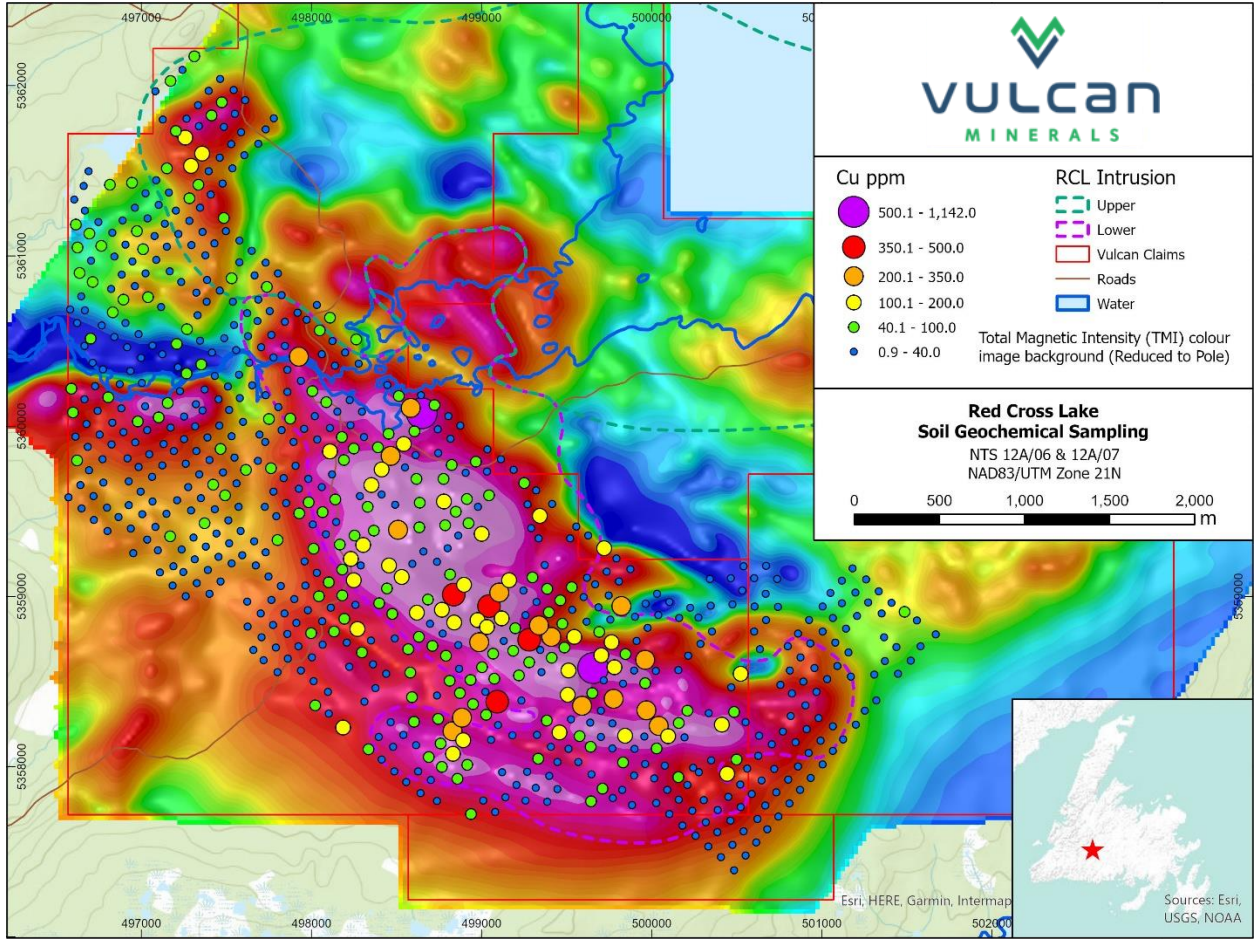
Nickel (Ni) values show a strong correlation with copper (Cu) and cobalt (Co). Twenty-four samples assayed greater than 200 ppm Cu (maximum of 1,142 ppm) and 22 samples assayed greater than 100 ppm Co (maximum 230 ppm). The highest Ni-Cu-Co values are coincident with and adjacent to a prominent magnetic high and electromagnetic conductor defined from an airborne VTEM survey which is interpreted, based on surface geology, to be related to the lower portion of the Red Cross Lake intrusion.

President Patrick Laracy commented “The impressive soil results confirm the project’s significant potential for magmatic style nickel-copper-cobalt mineralization in a favourable geologic environment. The high number of anomalous samples spatially associated with relevant geophysical anomalies provide an excellent exploration target.”

Further, five samples assayed greater than 200 ppm gold within anomalous clusters on the margins of the geophysical anomalies suggesting association with the Victoria Lake sedimentary country rock into which the Red Cross Lake Intrusion penetrated.









**Cu ppm**

- 500.1 - 1,142.0
- 350.1 - 500.0
- 200.1 - 350.0
- 100.1 - 200.0
- 40.1 - 100.0
- 0.9 - 40.0

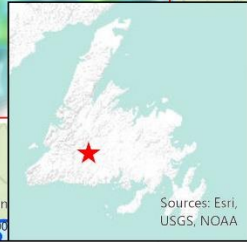
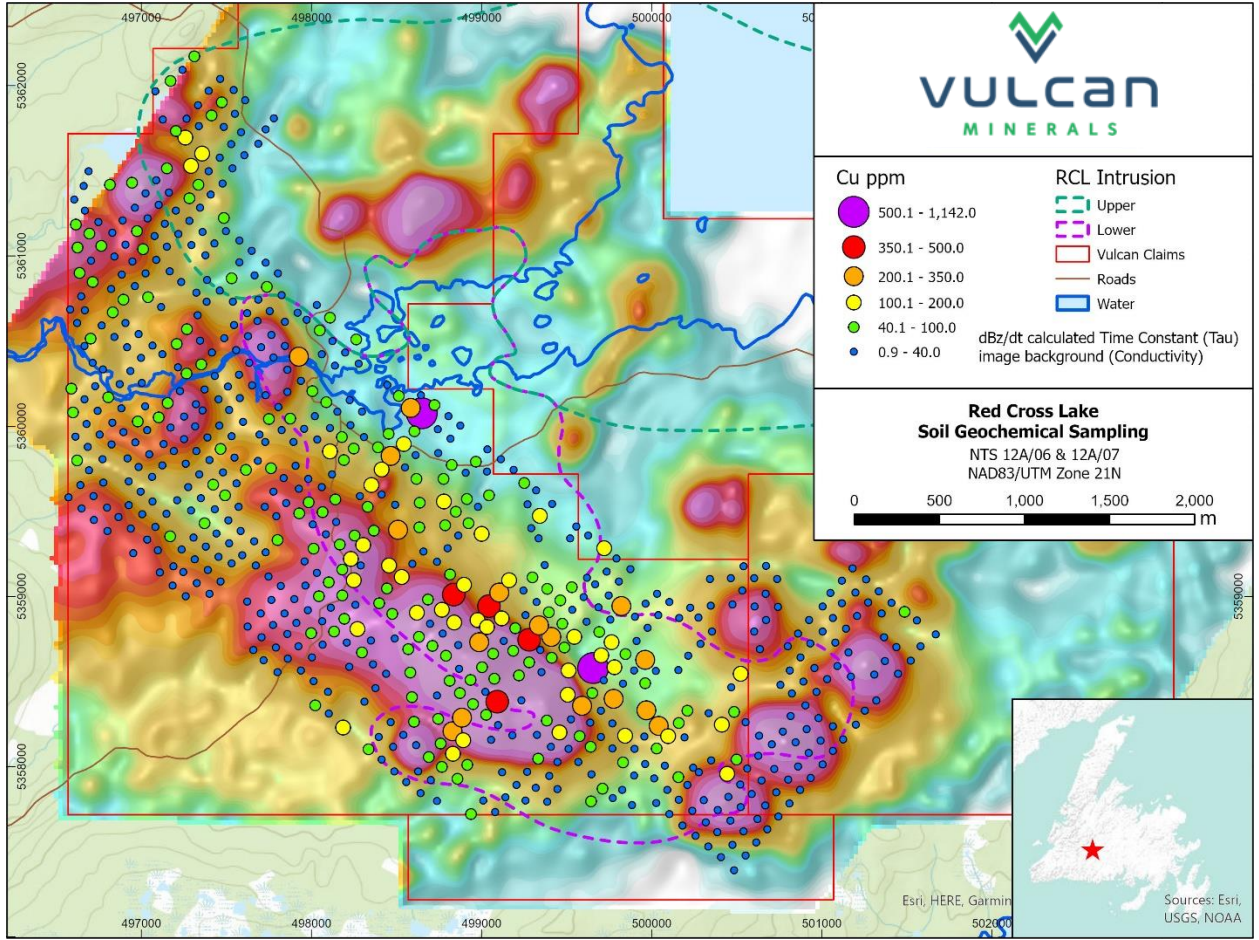
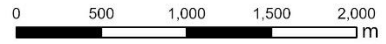
**RCL Intrusion**

- Upper
- Lower
- Vulcan Claims
- Roads
- Water

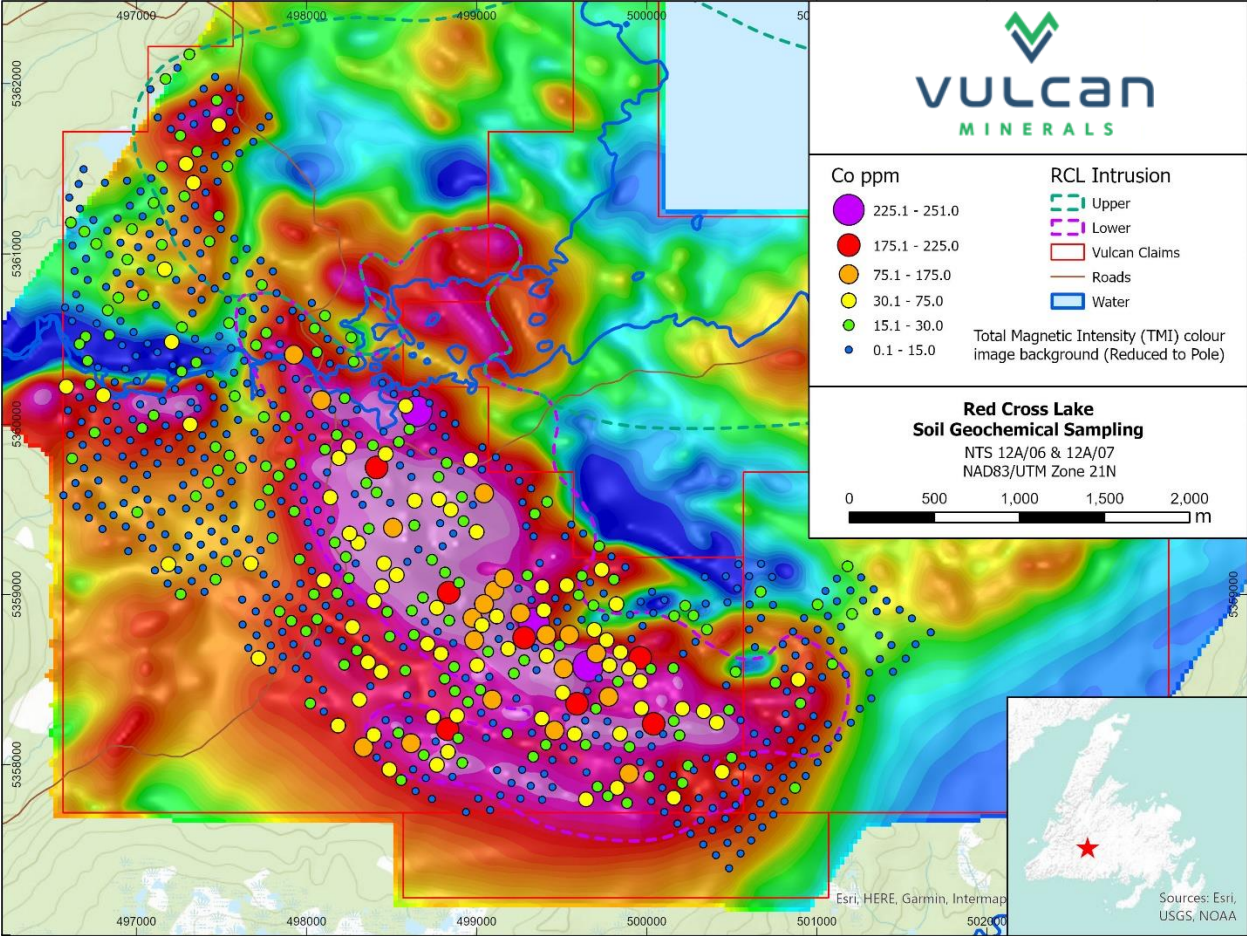
dBz/dt calculated Time Constant ( $\tau$ )  
image background (Conductivity)

**Red Cross Lake  
Soil Geochemical Sampling**

NTS 12A/06 & 12A/07  
NAD83/UTM Zone 21N



Esri, HERE, Garmin  
Sources: Esri, USGS, NOAA





Co ppm

- 225.1 - 251.0
- 175.1 - 225.0
- 75.1 - 175.0
- 30.1 - 75.0
- 15.1 - 30.0
- 0.1 - 15.0

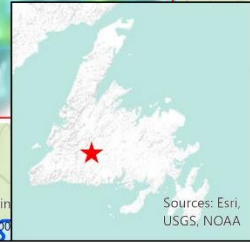
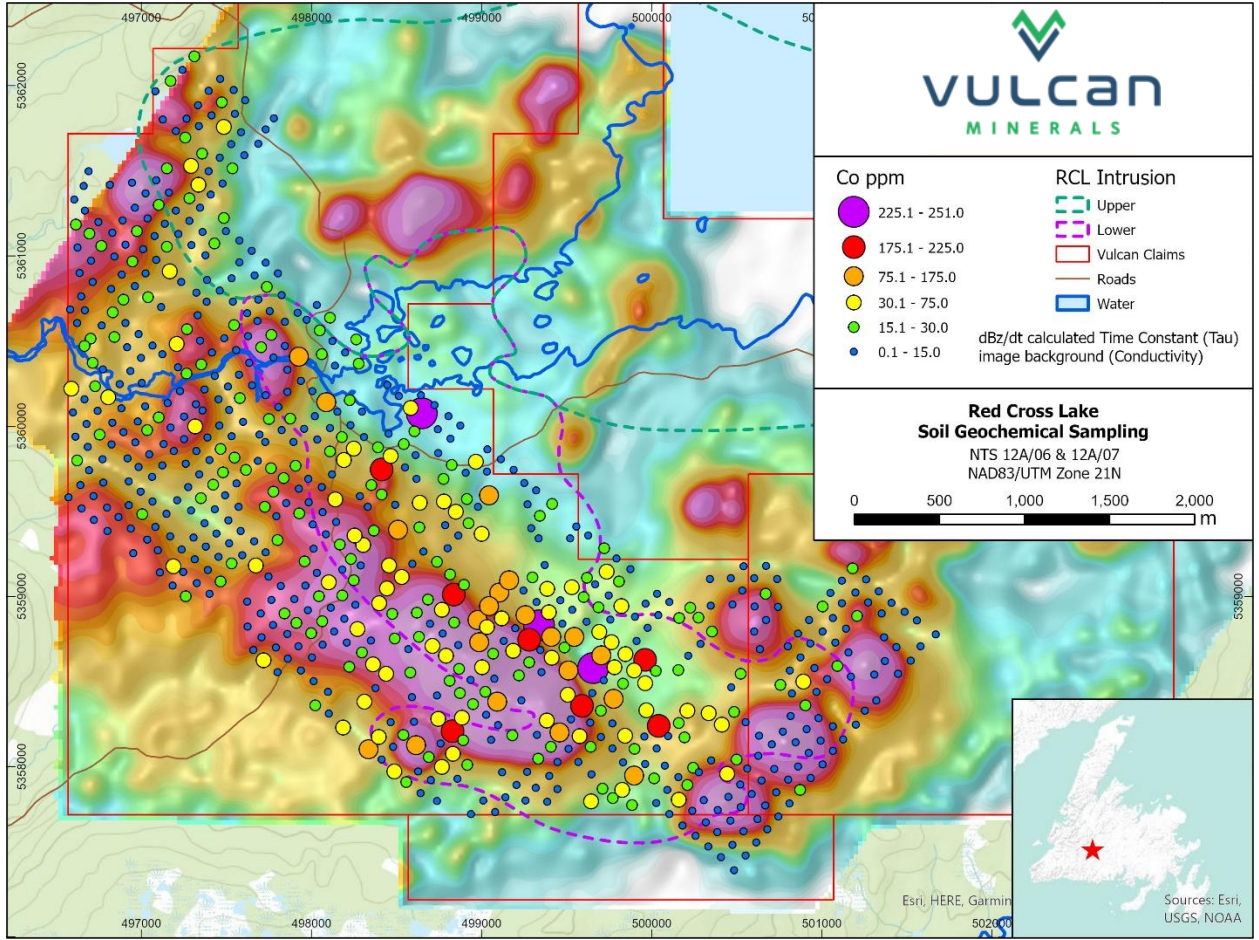
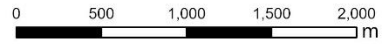
RCL Intrusion

- Upper
- Lower
- Vulcan Claims
- Roads
- Water

dBz/dt calculated Time Constant ( $\tau$ )  
image background (Conductivity)

Red Cross Lake  
Soil Geochemical Sampling

NTS 12A/06 & 12A/07  
NAD83/UTM Zone 21N



Esri, HERE, Garmin  
Sources: Esri, USGS, NOAA

