



Copperlode Property Overview

Red Lake, Ontario

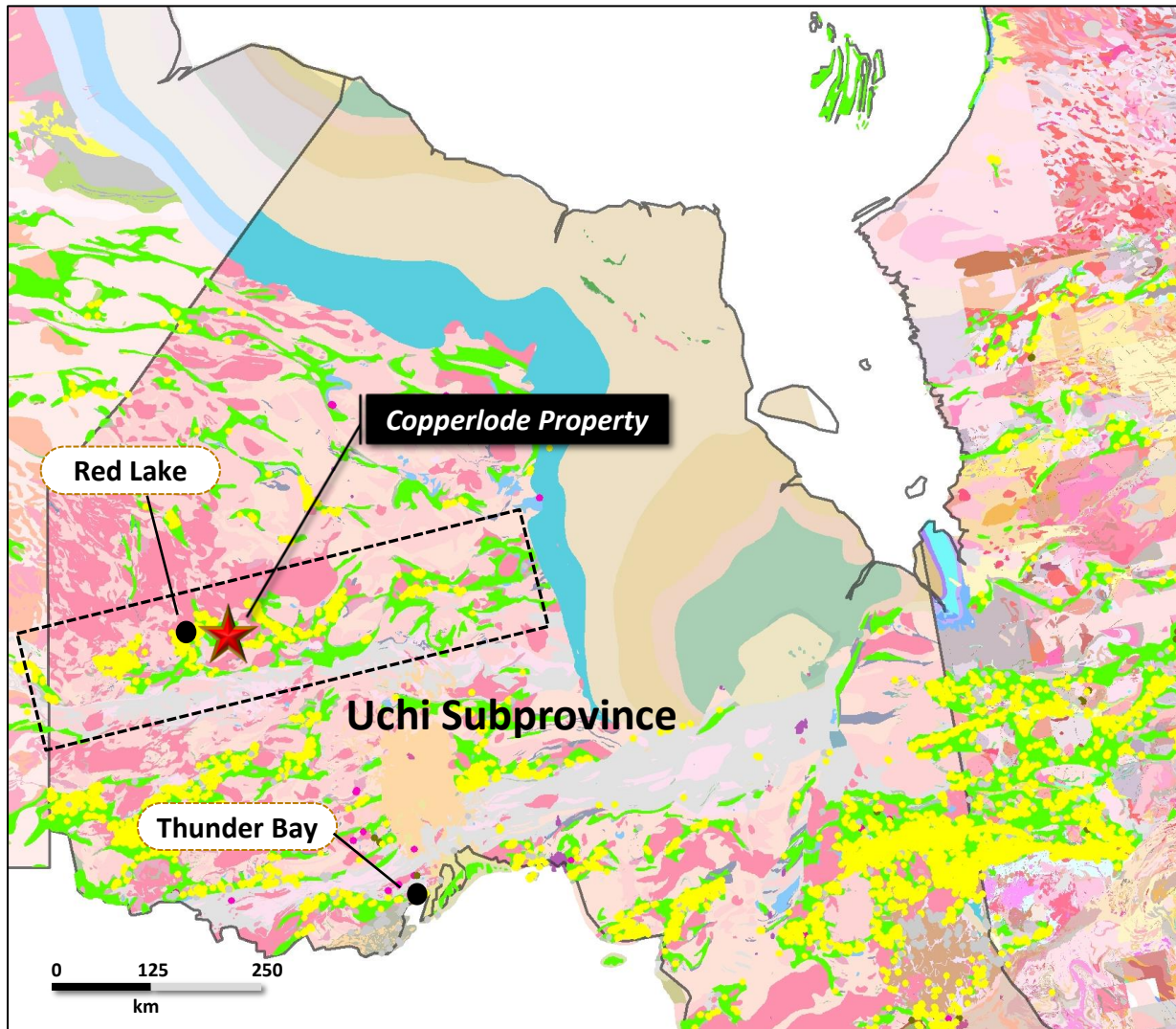
Property Summary

- The Copperlode Property consists of 25 claim cells and 7 boundary cells totaling 540 hectares.
- The Property is strategically located 65 km east of Red Lake and 45 km northeast of Ear Falls, Ontario. The South Bay mine road and logging roads provide excellent access.
- The claims are contained within the Confederation Greenstone Belt which hosts the former South Bay Cu-Zn mine and several VMS-style occurrences and deposits.
- The Cycle III volcanic sequence of the Confederation Greenstone belt underlies the property and is the only volcanic cycle to host significant Cu-Zn deposits. Litho-geochemical sampling of altered volcanics indicates widespread Na-depletion and Mg-enrichment typical of VMS footwall hydrothermal alteration.
- The Copperlode Property contains 6 parallel en-echelon VMS horizons which have undergone very limited drilling. Of note is the Copperlode 'E' Zone with tonnage estimates of **300,000 tonnes grading 0.60% Cu, 4.36% Zn and 12.44 g/t Ag** with credits of gold and indium.
- Drilling by Noranda Mining in 1994-1995 was shallow (<100m vertical). Very little drilling and downhole EM has been performed on the Copperlode Property since then. The main orebody at South Bay didn't start to a vertical depth of 275m.


Regional Location



Metal Occurrences of the Superior Province



- The Copperlode Property is situated within the Uchi Subprovince, known for its prolific metal endowment. The Uchi has produced more metal by square kilometer greenstone lithologies than any other greenstone belt in the Superior Province.

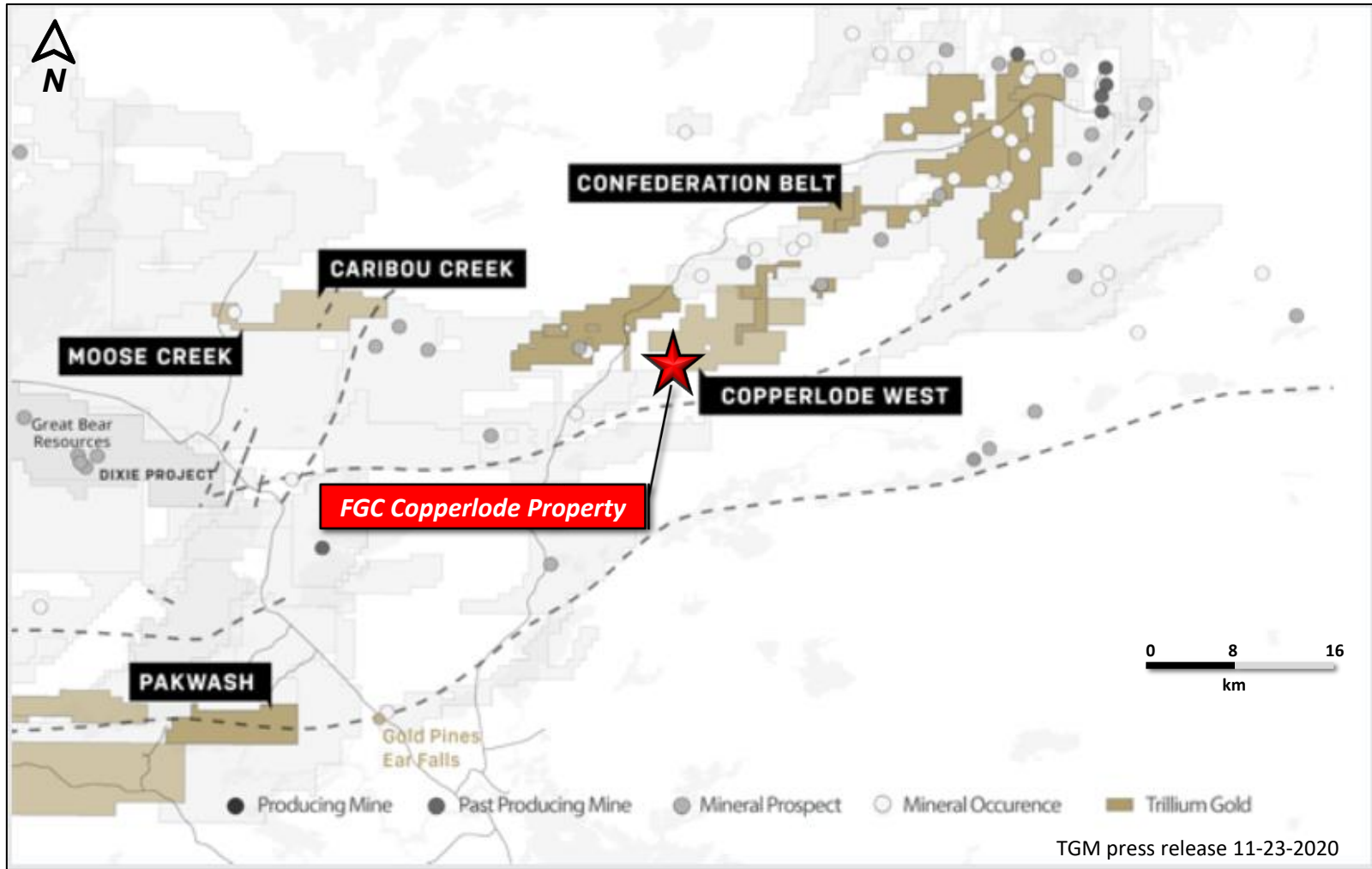
 Precious Metal Occurrences of Ontario/Quebec

Regional Location and Access



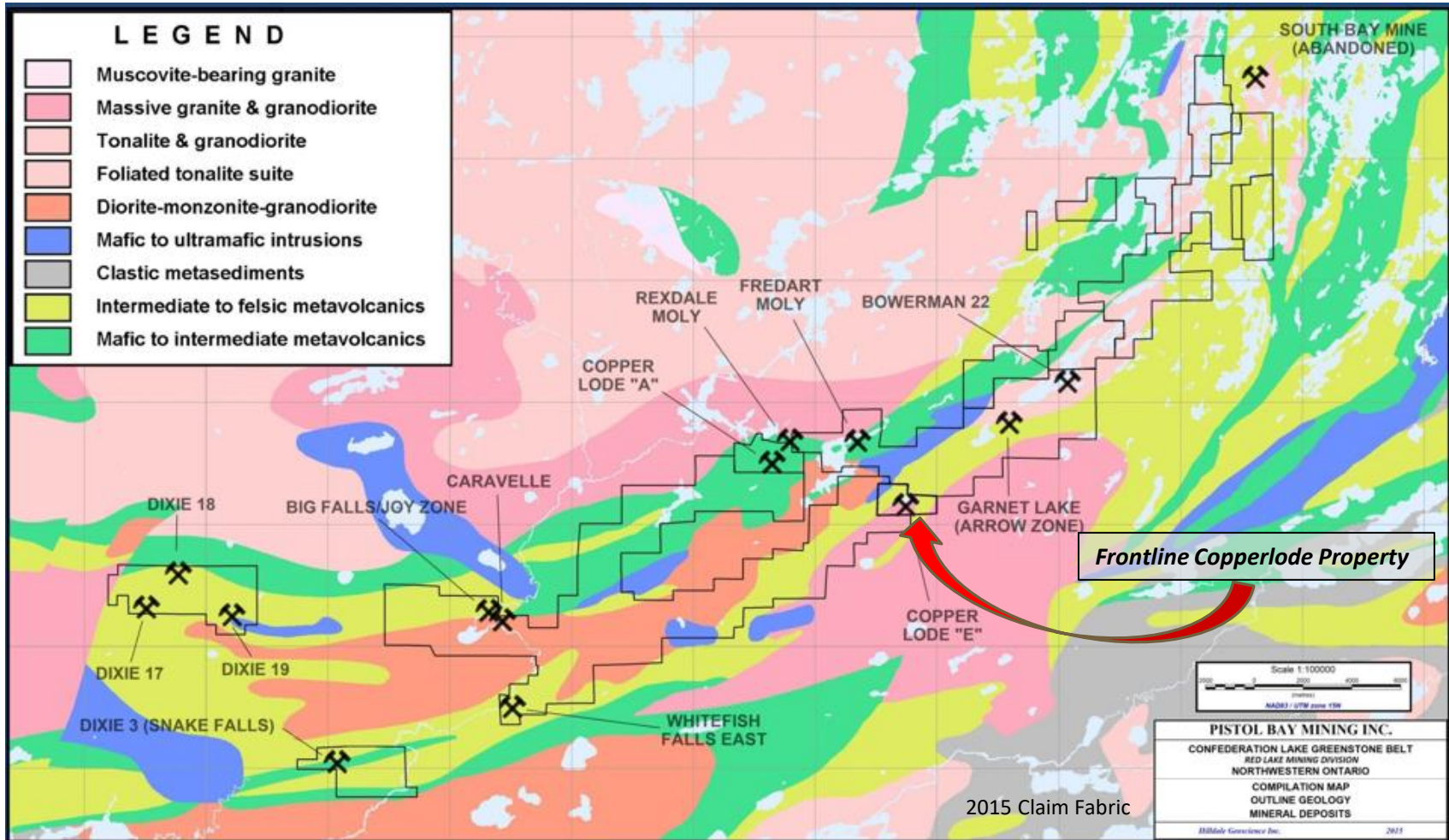
- Excellent all-season road access, logging roads, power lines and nearby infrastructure

Regional Property Holders



➤ Trillium Gold just acquired a large land package contiguous to Frontline's Copperlode Property

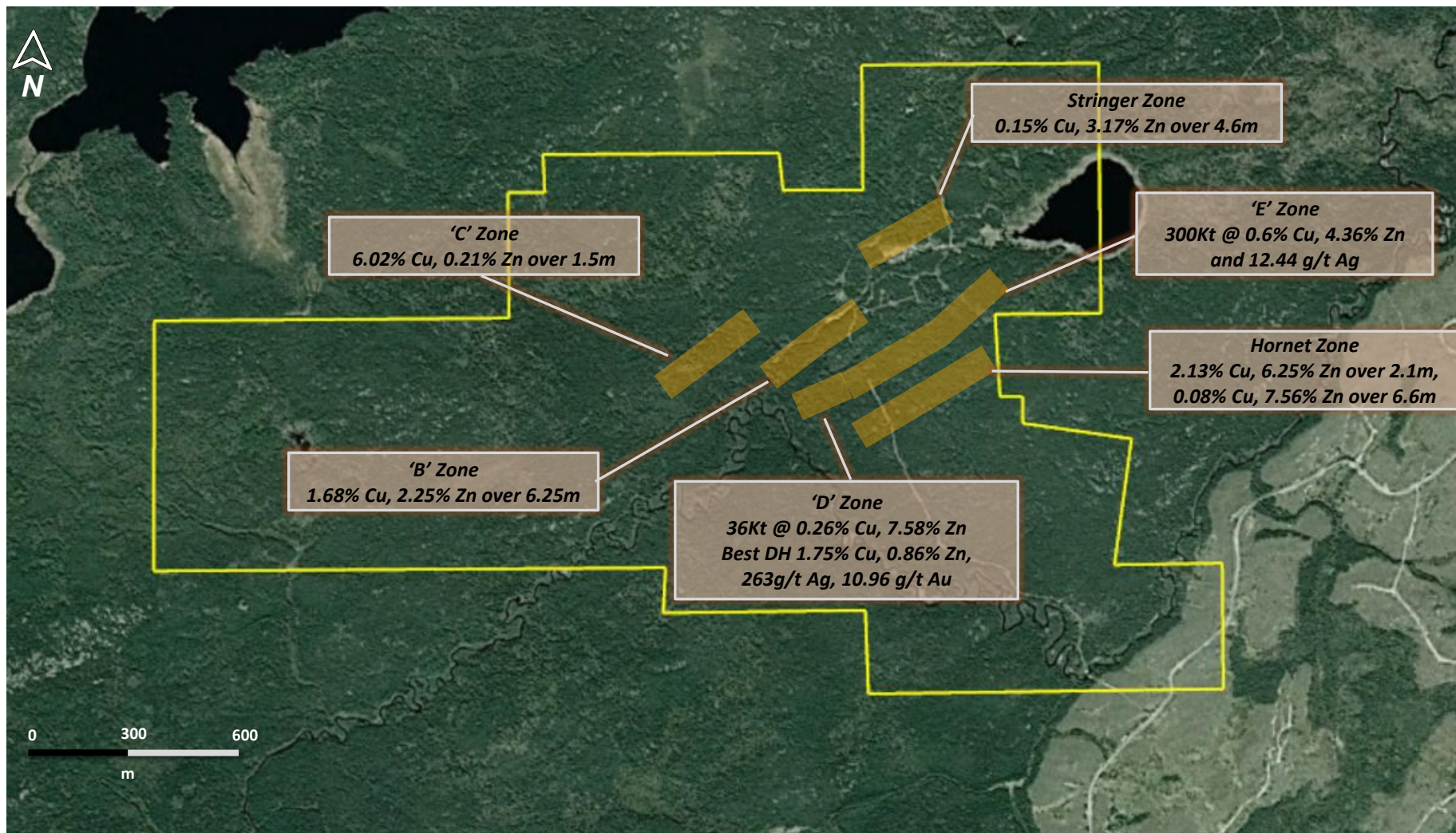
Regional Geology and Mineral Occurrences



- The Copperlode Property is situated within a favourable belt of felsic volcanics host to the former South Bay mine and numerous VMS-style occurrences and deposits

- ✓ The greenstone belt consists of three mafic to felsic volcanic cycles referred to as Cycle I (lower sequence), Cycle II (middle sequence) and Cycle III (upper sequence), (Thurston, 1985). To date, Cycle III which underlies the property, is the only sequence with proven economic base metal mineralization as represented by the South Bay Mine (1.6 Mt grading 2.3% Cu, 14.7% Zn). In addition, the Cycle III sequence also hosts a number of significant Cu-Zn base metal deposits and prospects.
- ✓ The Cycle III volcanic sequence consists dominantly of intermediate to felsic pyroclastics and flows interbedded with minor mafic volcanic flows and lesser interflow sediments. Sulphide mineralization is hosted largely by altered felsic to intermediate pyroclastics exhibiting chlorite-biotite-garnet-anthophyllite footwall alteration mineral assemblages. Litho-geochemical sampling of altered volcanics indicates widespread Na-depletion and Mg-enrichment typical of VMS footwall hydrothermal alteration.

VMS Horizons within Copperlode Property



Zone Mineralogy

- i) **B-Zone** - delineated by diamond drilling for a strike length of 365 metres to a depth of **60 m**. The best drill intersection returned 1.68% Cu, 2.5% Zn, over 6.25 m. Mineralization consists of massive sulphide (Po, Sp, Cp) localized at the contact of a quartz-biotite-garnet sericite schist carrying 2-5% disseminated Py-Cp and garnetiferous amphibolite.
 - ii) **C-Zone** - delineated by diamond drilling for a strike length of 215m to a depth of **45 m**. The best drill intersection returned 6.02% Cu, 0.21% Zn over 1.5m. Mineralization consists of massive sulphide (Po, Cp, Sp) at the contact of an intermediate quartz feldspar tuff with an amphibolite.
 - iii) **D-Zone** - delineated by diamond drilling for a strike length of 165M, to a depth of **100m**. Best diamond drill hole intersections include: 1.75% Cu, 0.86% Zn, 7.7 opt Ag and 0.32 opt Au over 3.4 m; and 0.72% Cu, 12.6% Zn and 1.0 opt Ag over 2.25 m. Mineralization is localized within a siliceous rhyolite fragmental, proximal to a quartz feldspar porphyritic rhyolite.
 - iv) **E-Zone** - most significant historic sulphide zone on the property. The zone is traced by diamond drilling for a strike length of 300m to a vertical depth of **100 m** and appears to be plunging to the east. Tonnage estimates range up to 300,000 tonnes grading 0.60% Cu, 4.36% Zn, 0.40 opt Ag, which includes 160,000 tonnes grading 1.02% Cu, 8.28% Zn, 0.70 opt Ag. Mineralization consists of massive to stringer sulphide hosted by a siliceous rhyolite fragmental adjacent to quartz-feldspar porphyritic rhyolite/subvolcanic intrusive.
 - v) **Stringer Zone** - a zone of stringer sulphide mineralization intersected by five drill holes along a 100 m strike length, to a depth of 200 m approximately. The zone consists of stringer to massive sulphide mineralization consisting of pyrite-pyrrhotite and lesser sphalerite and chalcopyrite over a 57 m interval. Assays returned anomalous Cu, Zn values up to 0.34% Cu and 2.33% Zn. Interestingly a 25 foot section of massive sulphide mineralization including a 10 foot section with 2% chalcopyrite was lost and never assayed from hole C-74. A deeper hole drilled under C-74 reportedly intersected stronger increased sulphide mineralization with increased Zn values. Incomplete assays include 0.15% Cu, 3.17% Zn/4.6 m.
 - vi) **Hornet Zone** - a blind sulphide zone discovered in a 1994-95 program by Noranda. The zone is parallel to the E-Zone, extending at a vertical depth of 330 to 550 m for 600m strike length. Mineralization consists of massive to stringer sulphide composed of Po-Sp-Cp, hosted in an intensely altered (chlorite - biotite - garnet - andalusite - staurolite) felsic volcanic unit which defines the South alteration zone. The zone remains open at a depth and up dip below the -200m level. Notable drill holes intersections include 1.13% Cu, 4.07% Zn over 5.03m (including 2.13% Cu, 6.52% Zn over 2.1 m); and 0.08% Cu, 7.56% Zn over 6.6 m (including 0.08% Cu, 10.25% Zn over 3.8 m).
- **The above descriptions are from Noranda 1996. Drilling has only occurred once since then in 2007-2008 by Tribute Minerals completing 4,629.1m in 9 drill holes.**

Regional Magnetic Intensity

