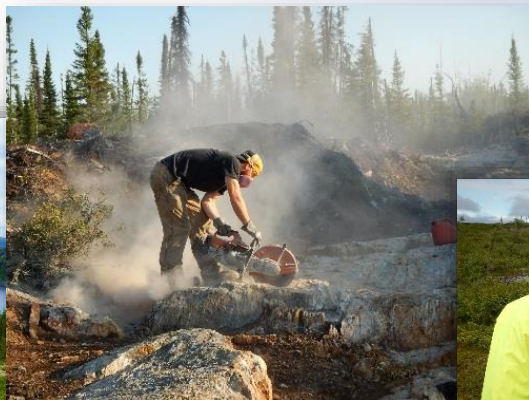
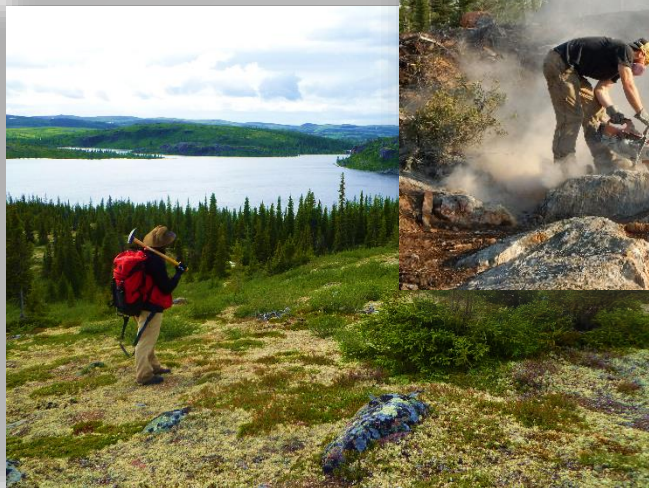


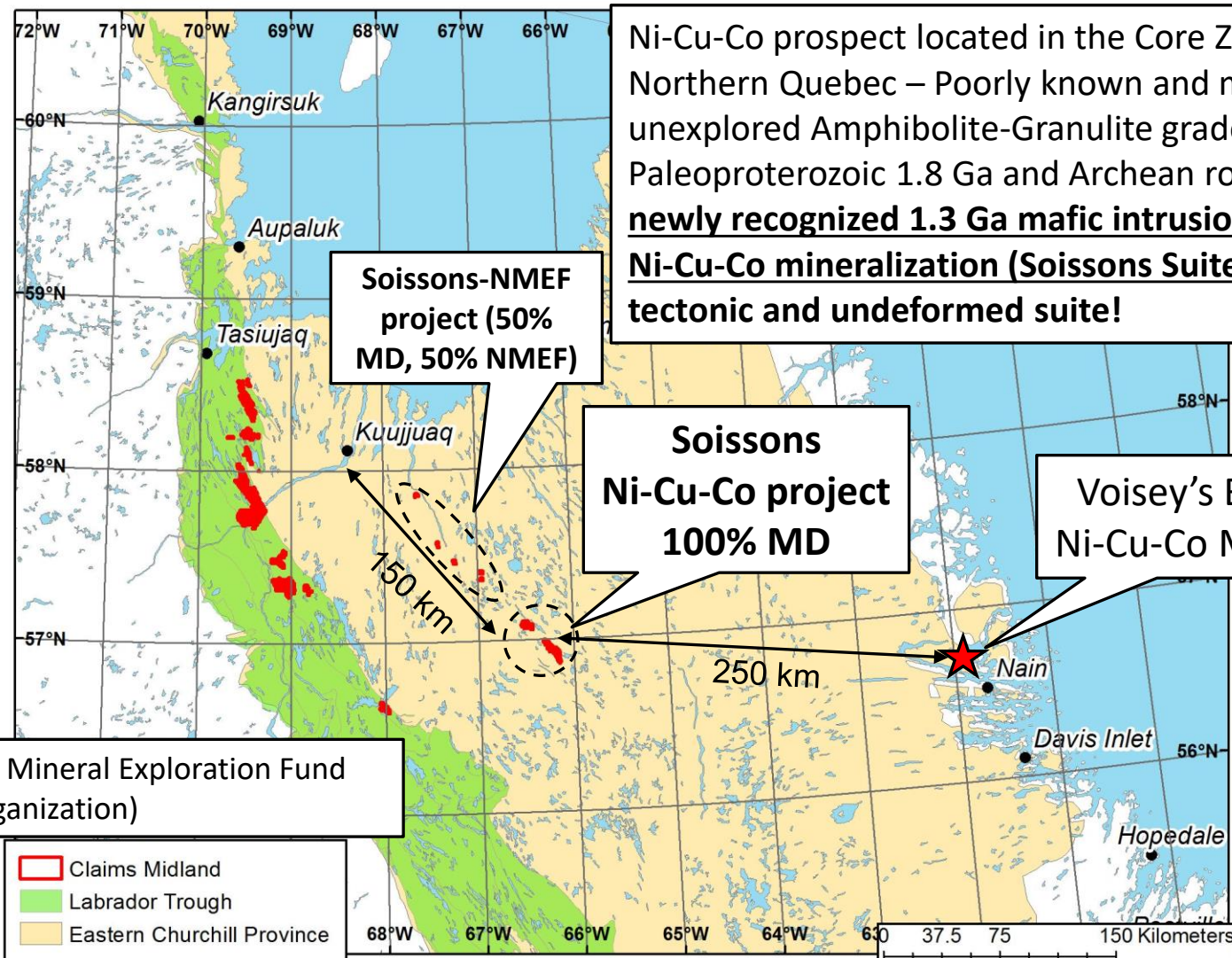


Soissons Ni-Cu-Co Project

June 2021



Soissons Project - Location



Ni-Cu-Co prospect located in the Core Zone of Northern Quebec – Poorly known and mostly unexplored Amphibolite-Granulite grade Paleoproterozoic 1.8 Ga and Archean rocks, **and newly recognized 1.3 Ga mafic intrusions, host to Ni-Cu-Co mineralization (Soissons Suite) → Post tectonic and undeformed suite!**

Soissons-NMEF project (50% MD, 50% NMEF)

Soissons Ni-Cu-Co project 100% MD

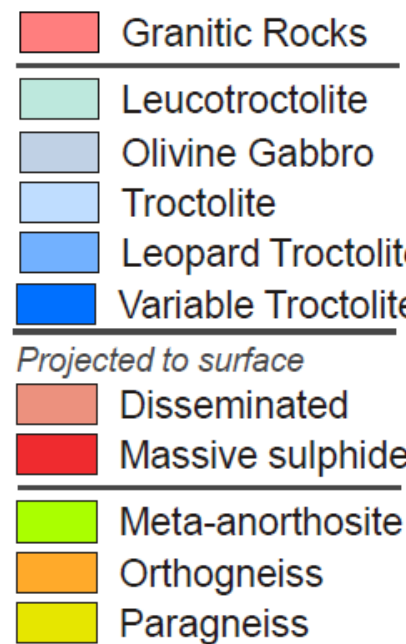
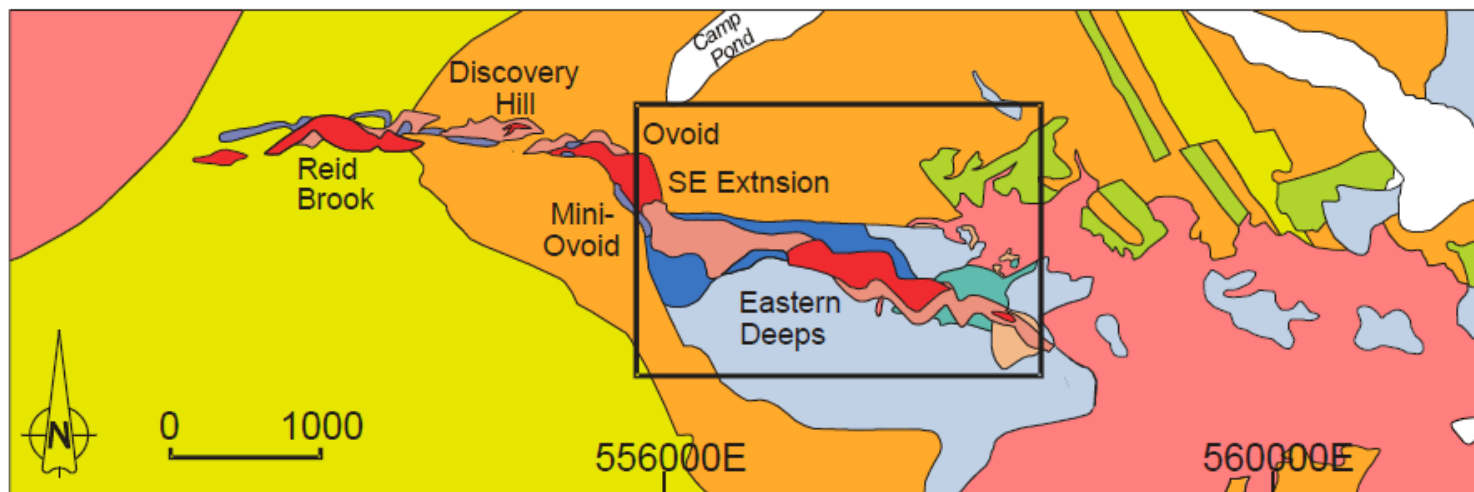
Voisey's Bay Ni-Cu-Co Mine

NMEF: Nunavik Mineral Exploration Fund (native Inuit organization)

Voisey's Bay Mine

136.7 Mt @1.59 % Ni, 0.85 % Cu

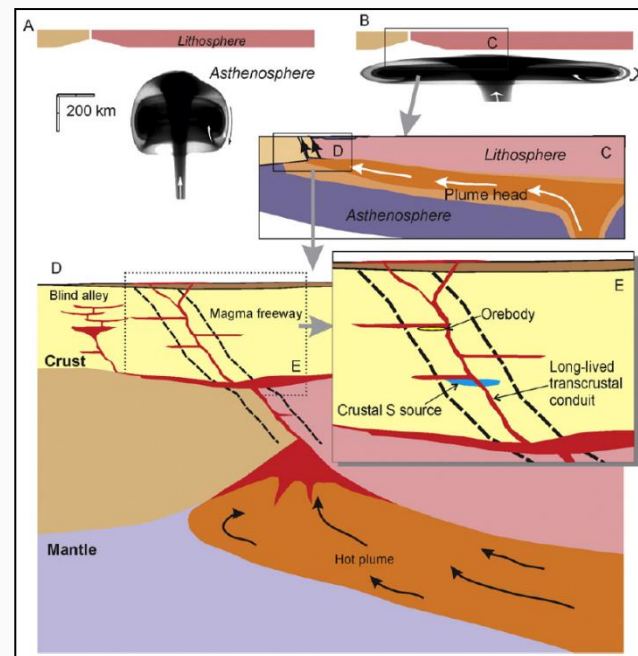
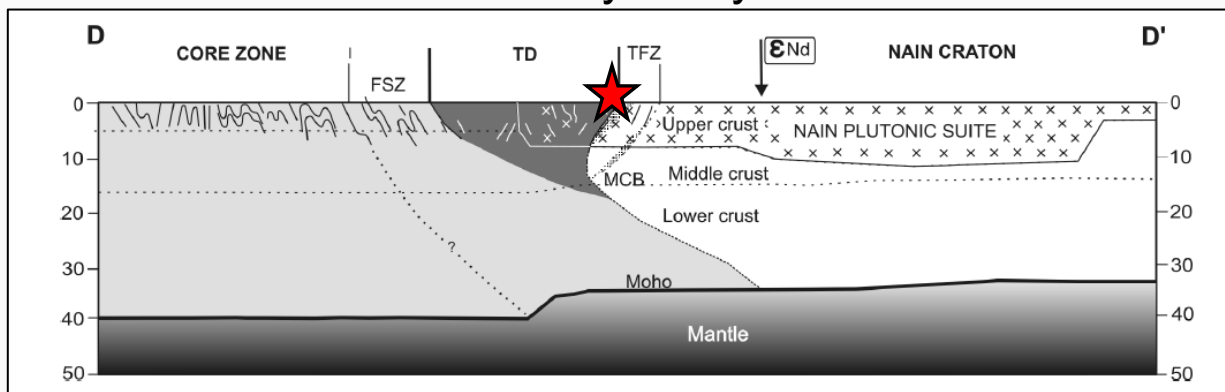
Geology of the Voisey's Bay Deposit



Dykes and sills of troctolite, olivine gabbro, leucotroctolite, **1.33 Ga**
 Part of **1.3 Ga Nain plutonic suite** → Post-tectonic, undeformed and
 unmetamorphosed → very attractive from an exploration
standpoint

Transcrustal Shear Zone at Voisey's Bay

Voisey's Bay

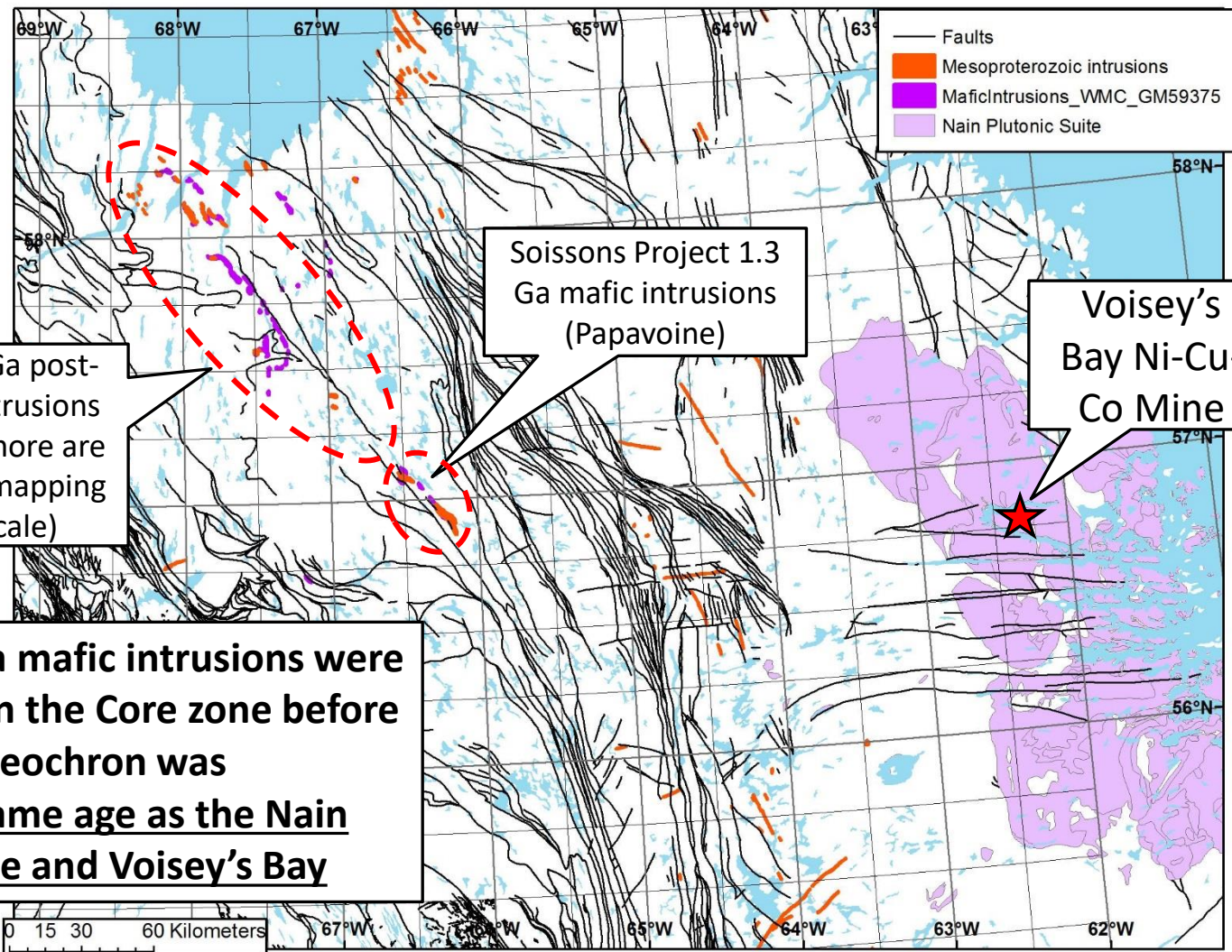


Voisey's Bay is located in an older Paleoproterozoic transcrustal shear zone (Ablaviak shear zone) at the boundary between two Archean cratons (Nain and Core zone) → critical to channel mafic-ultramafic magmas

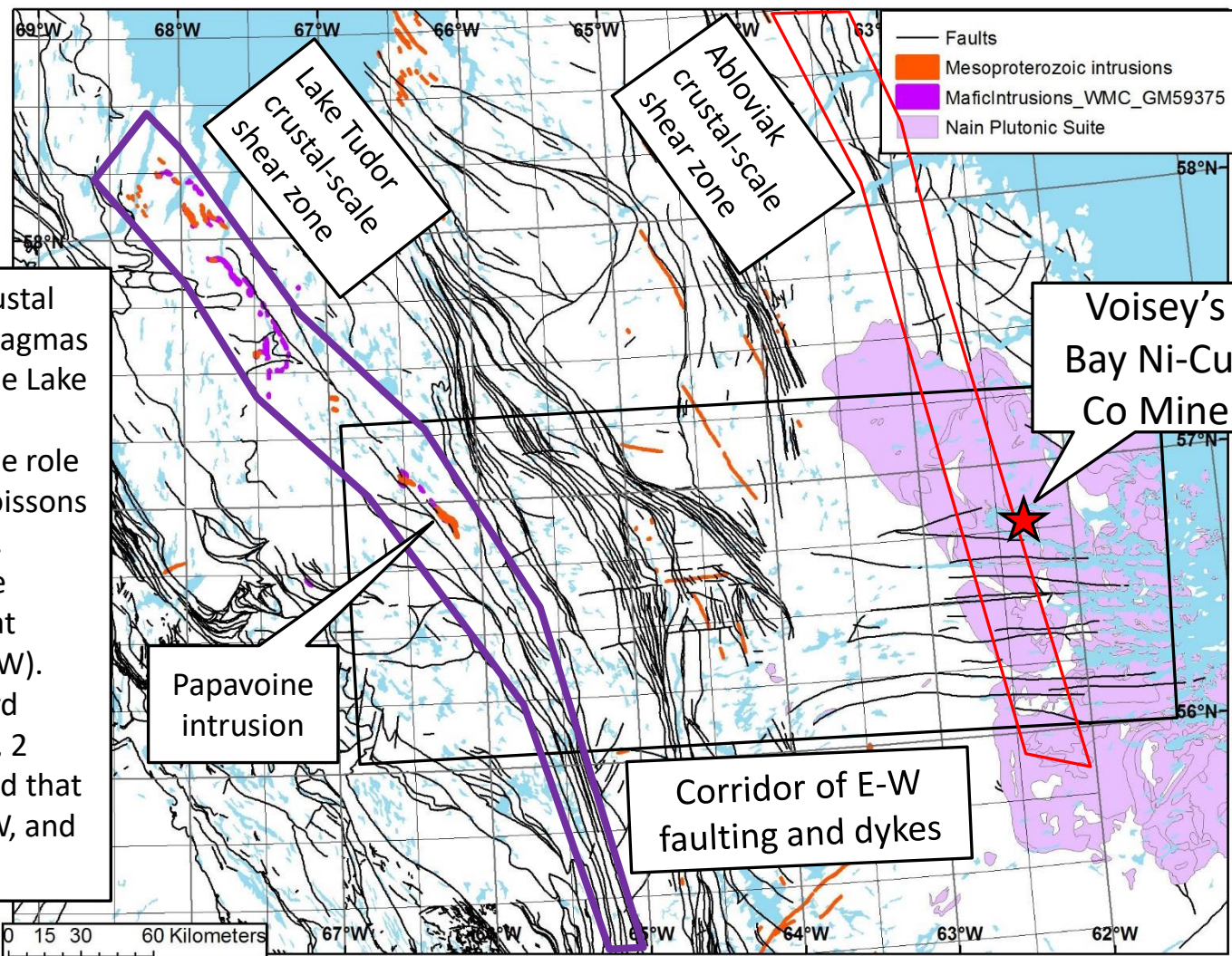
Soissons Intrusive Suite

- **Soissons Suite, identified by Qc government mapping 2013-2016 (recent!):**
 - Series of undeformed, post-tectonic mafic intrusions;
 - Troctolites, olivine gabbro-norite, monzonites, minor peridotites;
 - Dated at **1,311.1±1.1 Ma (Papavoine intrusion, Corrigan et al., in preparation)**, in >1.8 Ga high-grade metamorphic host rocks (granites, paragneisses with Gp-Sulf);
 - Series of km-scale intrusions found scattered over about 150 kilometers length;
 - Additional intrusions found by the QC government during 250K scale mapping, **many more to be discovered.**
- Nain plutonic suite: **1,330 Ma – 1,290 Ma.**
- Voisey's Bay: **1,332.7±1 Ma** (Amelin et al., 1999).
- **The Soissons suite (and Papavoine intrusion) is similar in age to the Nain plutonic suite.**

Mesoproterozoic 1.3 Ga Mafic Intrusions in Quebec



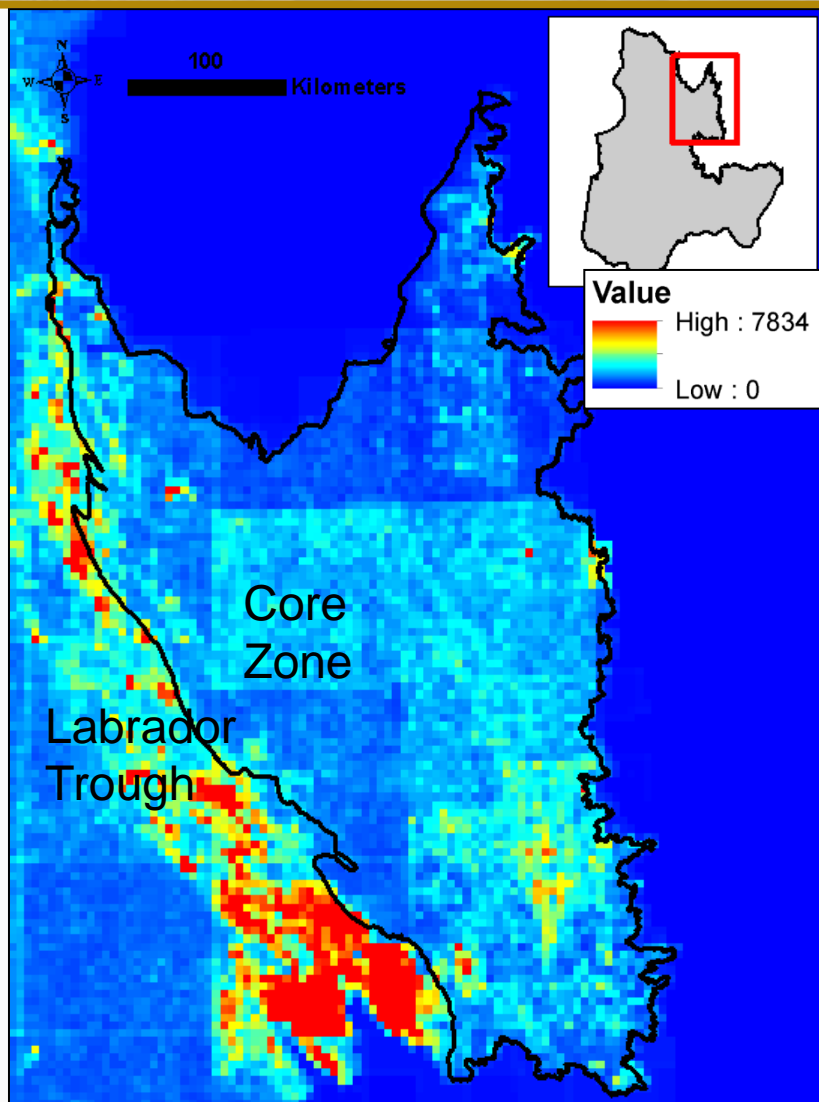
Crustal-scale Controls for 1.3 Ga Rocks in Quebec and Labrador



At Voisey's Bay, the Abloviak crustal shear zone (older) channeled magmas from the Nain plutonic suite. The Lake Tudor crustal-scale shear zone appears to have played the same role on our side, with most of the Soissons suite intrusions aligned along it. A corridor of E-W fractures have provided an additional control at Voisey's Bay (dykes at VB are E-W). These extend to the west toward Papavoine. On the Quebec side, 2 series of ~1.3 Ga dykes are dated that support that interpretation: E-W, and NW-SE



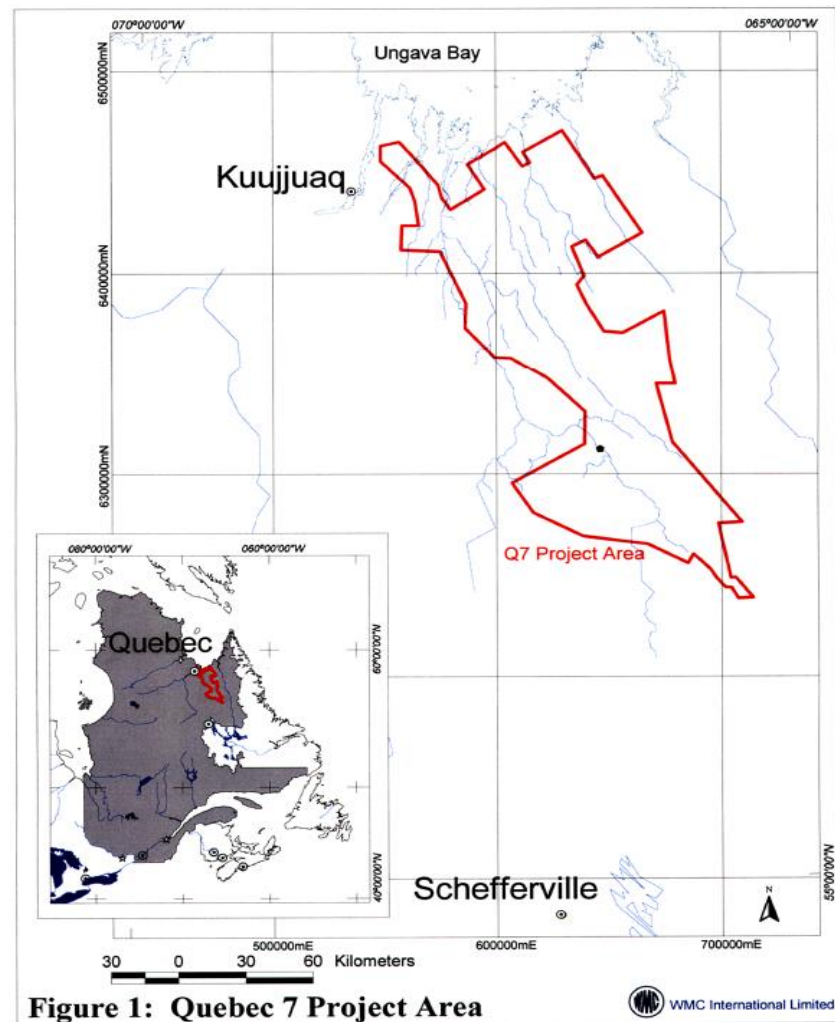
Density of Geoscience Data



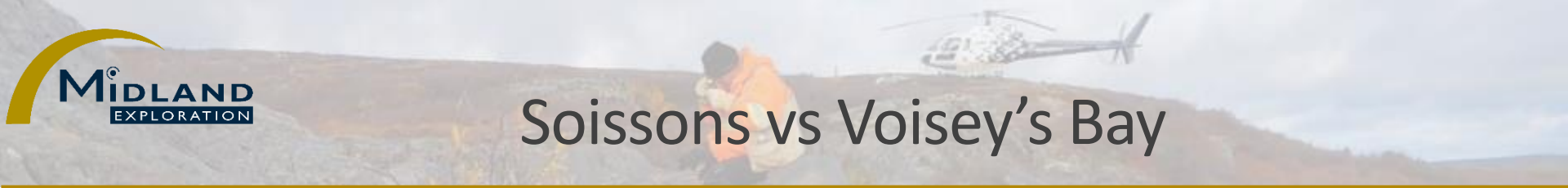
The Core zone has been very little explored

Soissons: Historical Work WMC

- Project by WMC in 2000-2001.
- Model: look for the dykes that would be the root of the Labrador Through gabbros in more metamorphosed rocks.
- Found several nickel showings in previously unmapped mafic intrusions.
- Large mag and EM surveys.
- Limited prospection.
- Soil geochemistry.
- 9 DDH 2001, 3,056 m.

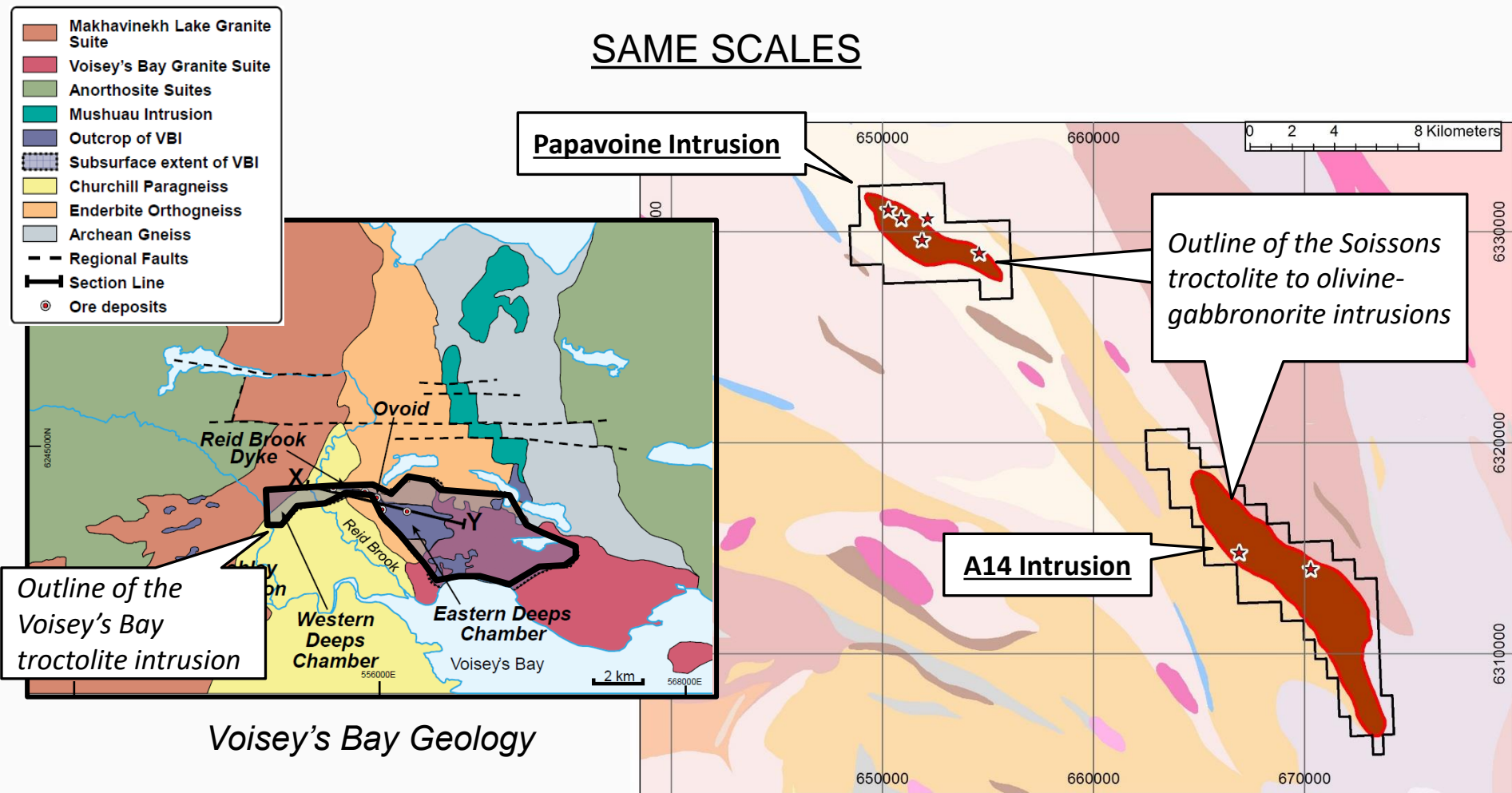






Soissons vs Voisey's Bay

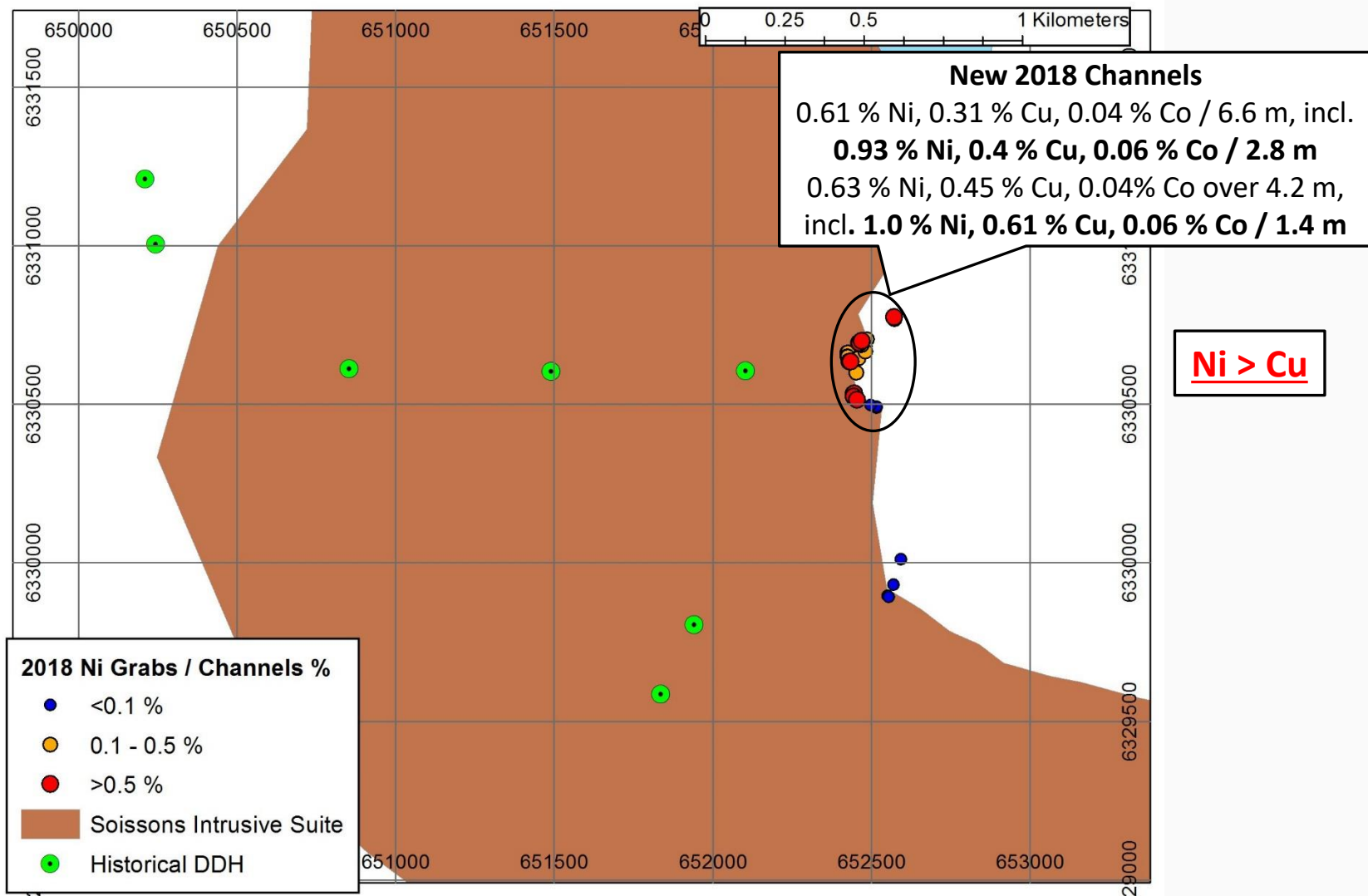
SAME SCALES



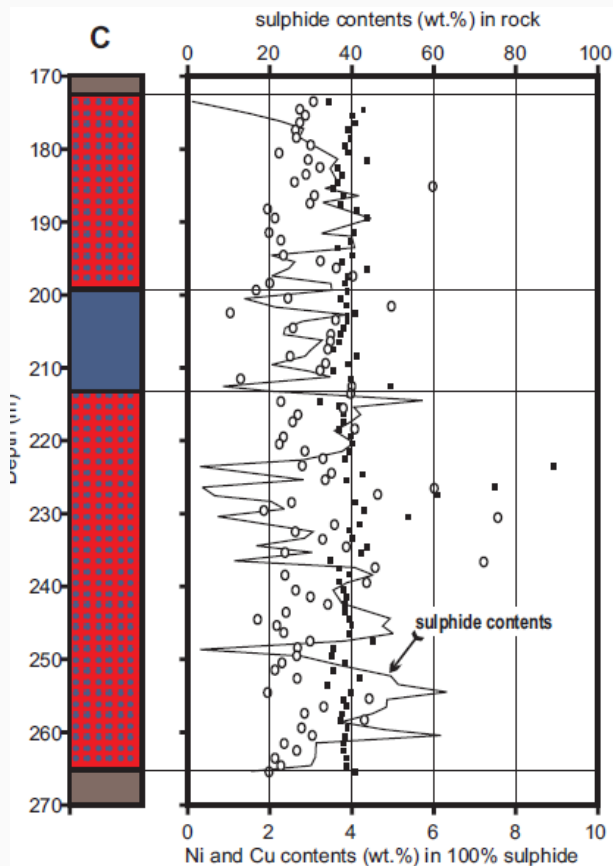
From Lightfoot, 2016



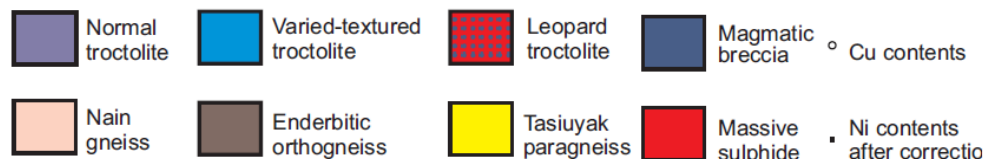
Papavoine Intrusion Area



Ni-Cu 100% Sulf – Voisey's Bay vs Papavoine



Papavoine: Median Ni and Cu values recalculated to 100% (“tenors”) :
3.6 % Ni* (range: 2.3 % - 4.4 %)
2.1 % Cu* (range: 1.2 % - 4.3 %) –
 All the 2018 Papavoine channel samples (for S > 2 %; n = 34).



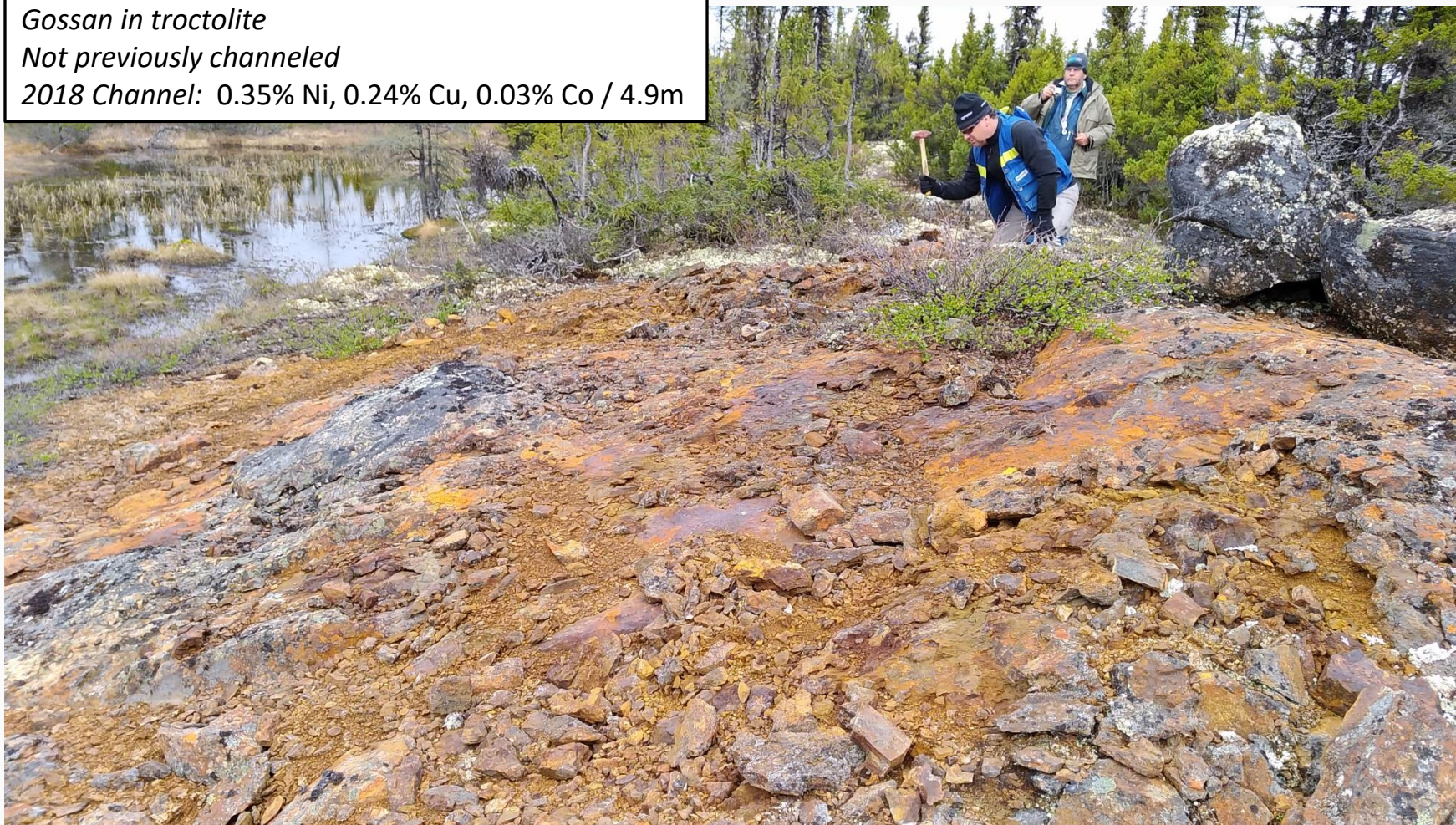
Naldrett and Li, 2007

Soissons Project – Papavoine Showing

Gossan in troctolite

Not previously channeled

2018 Channel: 0.35% Ni, 0.24% Cu, 0.03% Co / 4.9m

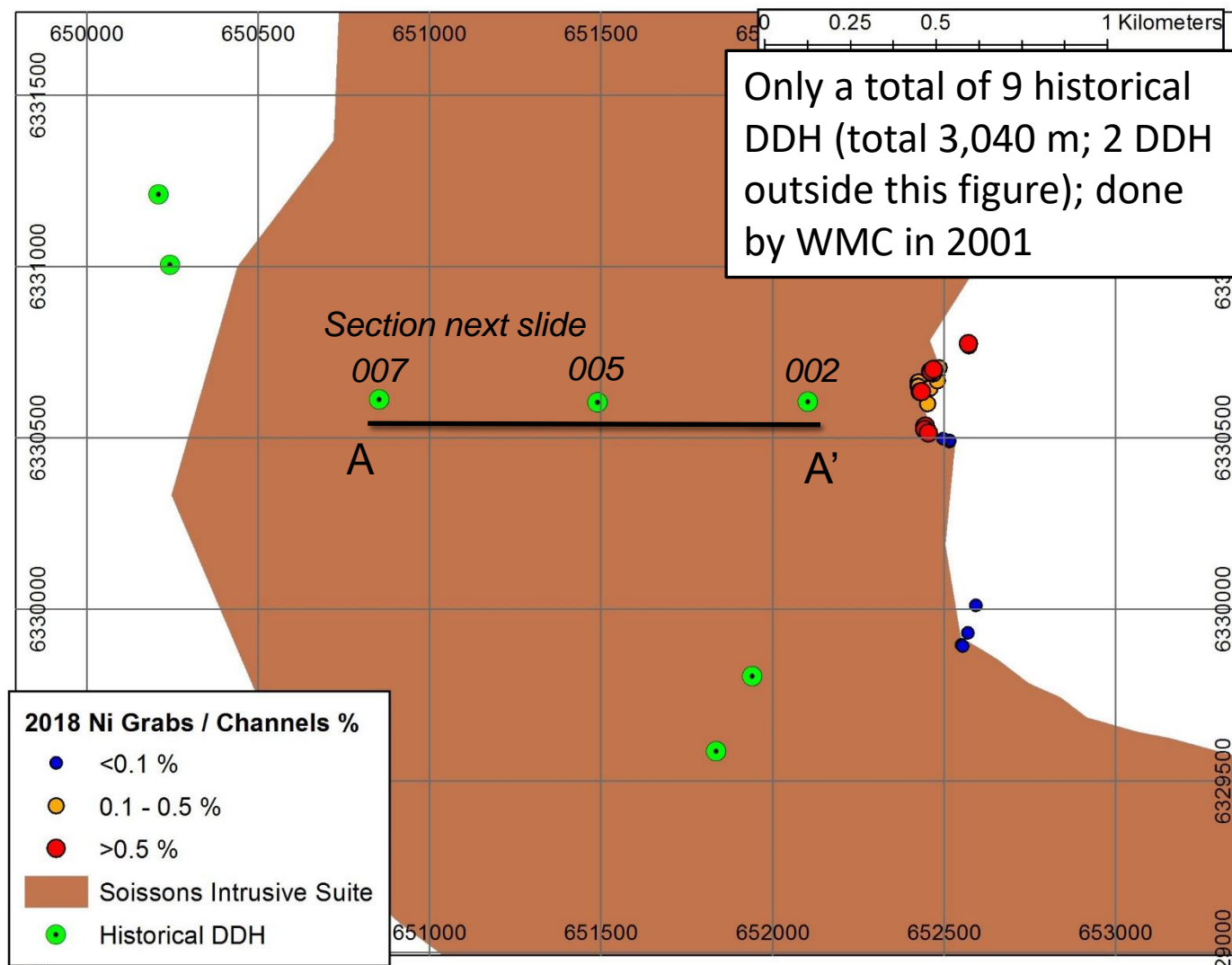


Soissons Project – Papavoine Area



Figure 26: Example of massive mineralization encountered in Papavoine channels. Massive pyrrhotite with clusters of chalcopyrite inside (sample X915634 from PPV-18-04).

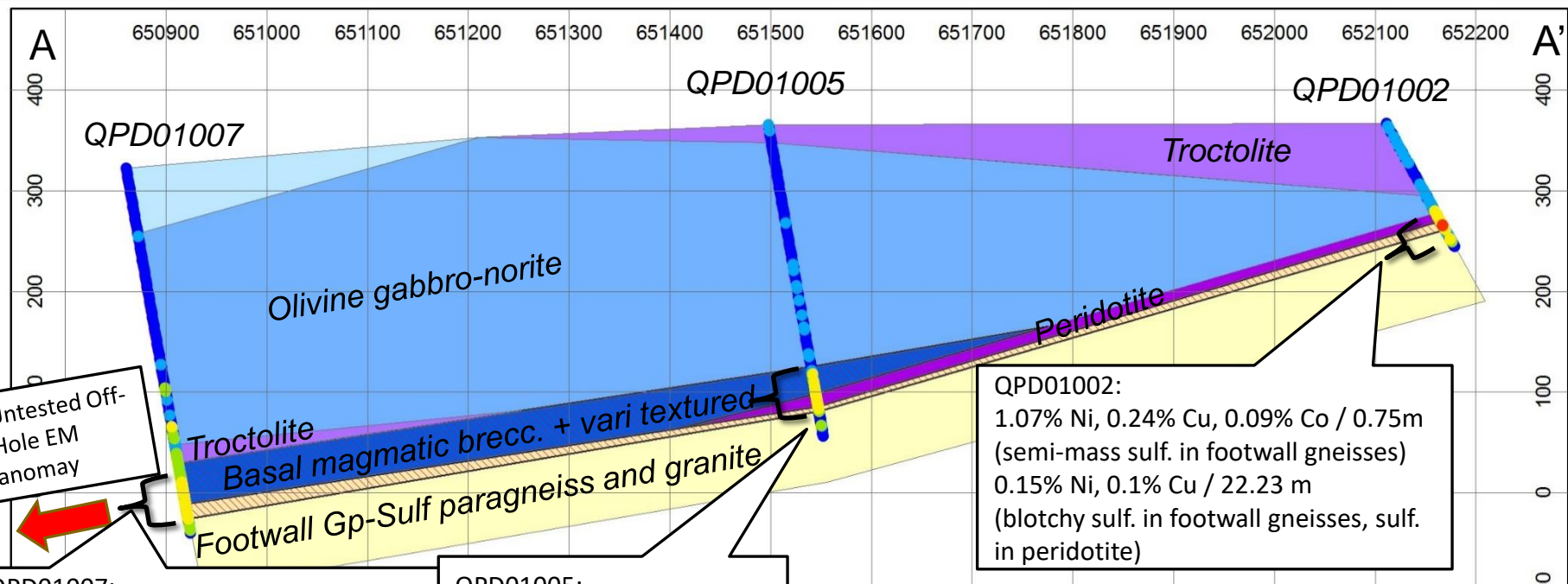
Papavoine Intrusion – Historical DDH



Papavoine – Section DDH 2-5-7

West

East



QPD01007:
0.13% Ni, 0.09% Cu / 26.4m (basal magmatic breccia)
0.13% Ni, 0.12% Cu / 15.55m (blotchy sulfides in footwall gneisses)

QPD01005:
0.13% Ni, 0.12% Cu / 18.9m (basal magmatic breccia and mixing zone, VTT)

QPD01002:
1.07% Ni, 0.24% Cu, 0.09% Co / 0.75m (semi-mass sulf. in footwall gneisses)
0.15% Ni, 0.1% Cu / 22.23 m (blotchy sulf. in footwall gneisses, sulf. in peridotite)

Litho

- Olivine gabbro-norite with assimilated paragneiss and granite
- Olivine gabbro-norite, gabbro-norite
- Troctolite
- Serpentinized peridotite
- Basal magmatic breccia / mixing zone with Ni-Cu-Co sulfides
- Ni-Cu-Co blotchy sulfides in footwall paragneiss
- Footwall graphitic paragneisses and granites

Ni ppm

- 8 - 250
- 251 - 500
- 501 - 1000
- 1001 - 5000
- 5001 - 12655

The magmatic breccia / variably textured rocks thicken to the west, with large Ni-anomalous intervals → vector to a feeder zone? Untested off-hole EM anomaly to the west. **DRILL-READY**

Very shallow dipping intrusion

Voisey's Bay – Basal Magmatic Breccia

- At Voisey's Bay, The basal magmatic breccia is thickening toward the feeder zones
- Massive sulfide lenses occur in the breccia close to the junction between the feeder zone and the main sill
- Magmatic breccia: highly dynamic system → upgrading of Ni-Cu tenors by continuous influx of new mafic magma. Present at Papavoine!

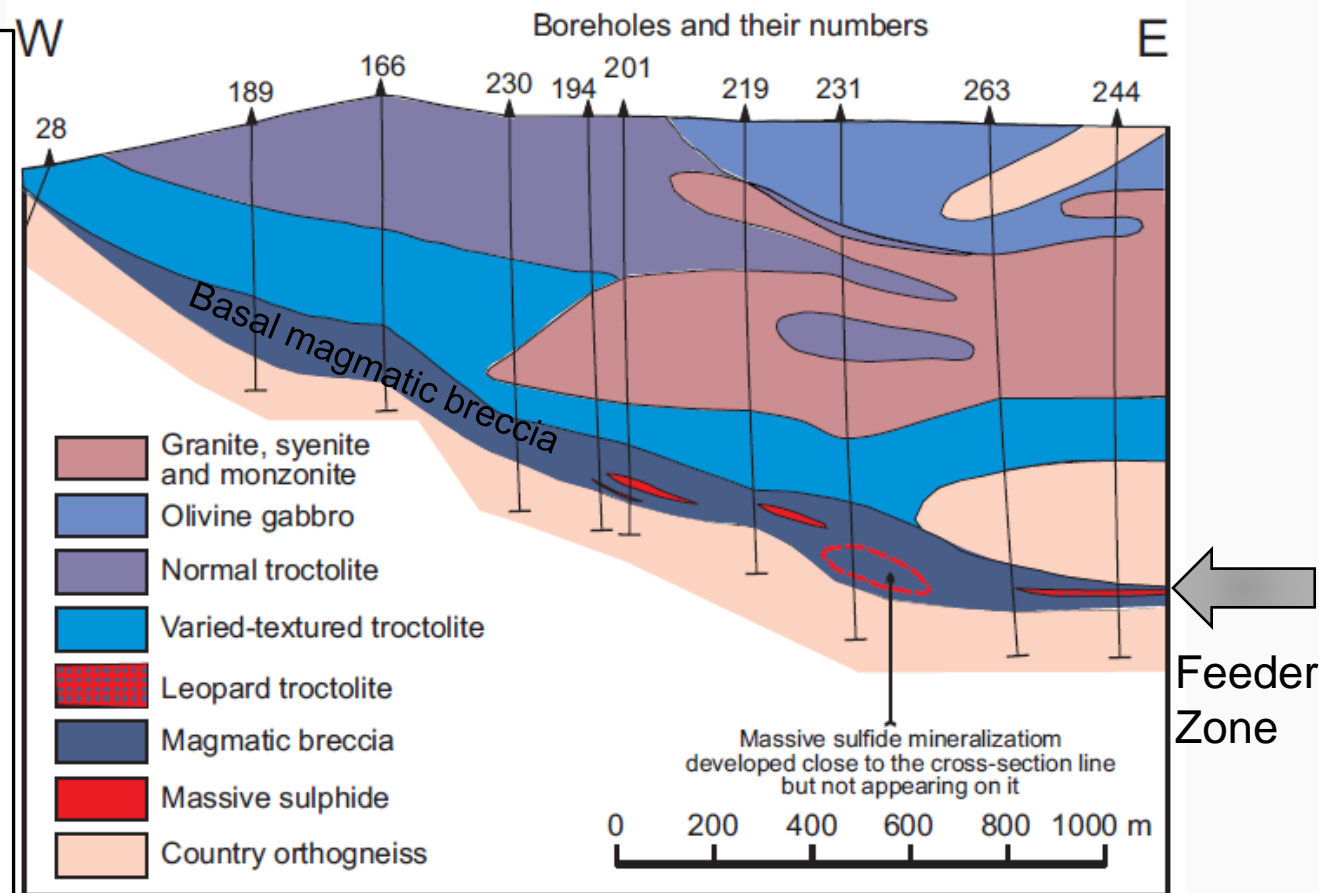
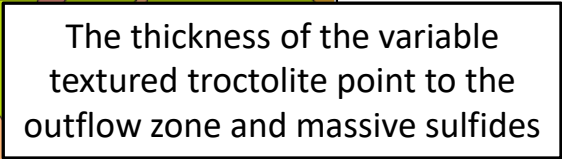


FIGURE 4. North-south cross-section across the northern part of the Eastern Deeps chamber. Note the vertical north wall of the chamber, the horizontal entry of the feeder sheet, the steepening in the dip of the sheet to the north, and the relationship between the entry line of the feeder and the distribution of varied-textured troctolite. This unpublished figure was very kindly provided by P.C. Lightfoot (pers. comm., 2006).

Naldrett and Li, 2007





Soissons Project: Highlights

- ✓ Covers a series of Ni-Cu-Co showings associated with two distinct troctolite to olivine-bearing gabbro-norites intrusions (Soissons intrusive suite). Same as the Nain plutonic suite, host to the Voisey's Bay world-class deposit.
- ✓ Previous exploration in 2001-2002 revealed the following Ni-Cu-Co grades in DDH:
 - ✓ 1.07% Ni, 0.23% Cu, 0.09% Co / 0.75m; 0.55% Ni, 0.43% Cu, 0.03% Co / 1.7m (Papavoine);
 - ✓ 0.57% Ni, 0.29% Cu, 0.03% Co / 1.0m (Papavoine West);
 - ✓ Large intervals (tens of meters) of disseminated sulfides with nickel values between 0.1% and 0.2%.
- ✓ Channels 2018 by Midland (Papavoine):
 - ✓ 0.61 % Ni, 0.31 % Cu, 0.04 % Co / 6.6 m, incl. 0.93 % Ni, 0.4 % Cu, 0.06 % Co / 2.8 m;
 - ✓ 0.63 % Ni, 0.45 % Cu, 0.04% Co over 4.2 m, incl. 1.0 % Ni, 0.61 % Cu, 0.06 % Co / 1.4 m.
- ✓ Ni-Cu values at 100% sulfides about 3.6 % Ni and 2.1 % Cu (2018 channels) → similar to Voisey's Bay.
- ✓ Unexplained and untested off-hole borehole electromagnetic anomalies have been identified from previous exploration, laterally from the zones of disseminated sulfides.
- ✓ Large intervals of magmatic breccias at the bottom of historical drillhole indicate a dynamic magmatic environment, very favorable for Ni-Cu-Co deposits, similar to that is observed at Voisey's Bay.