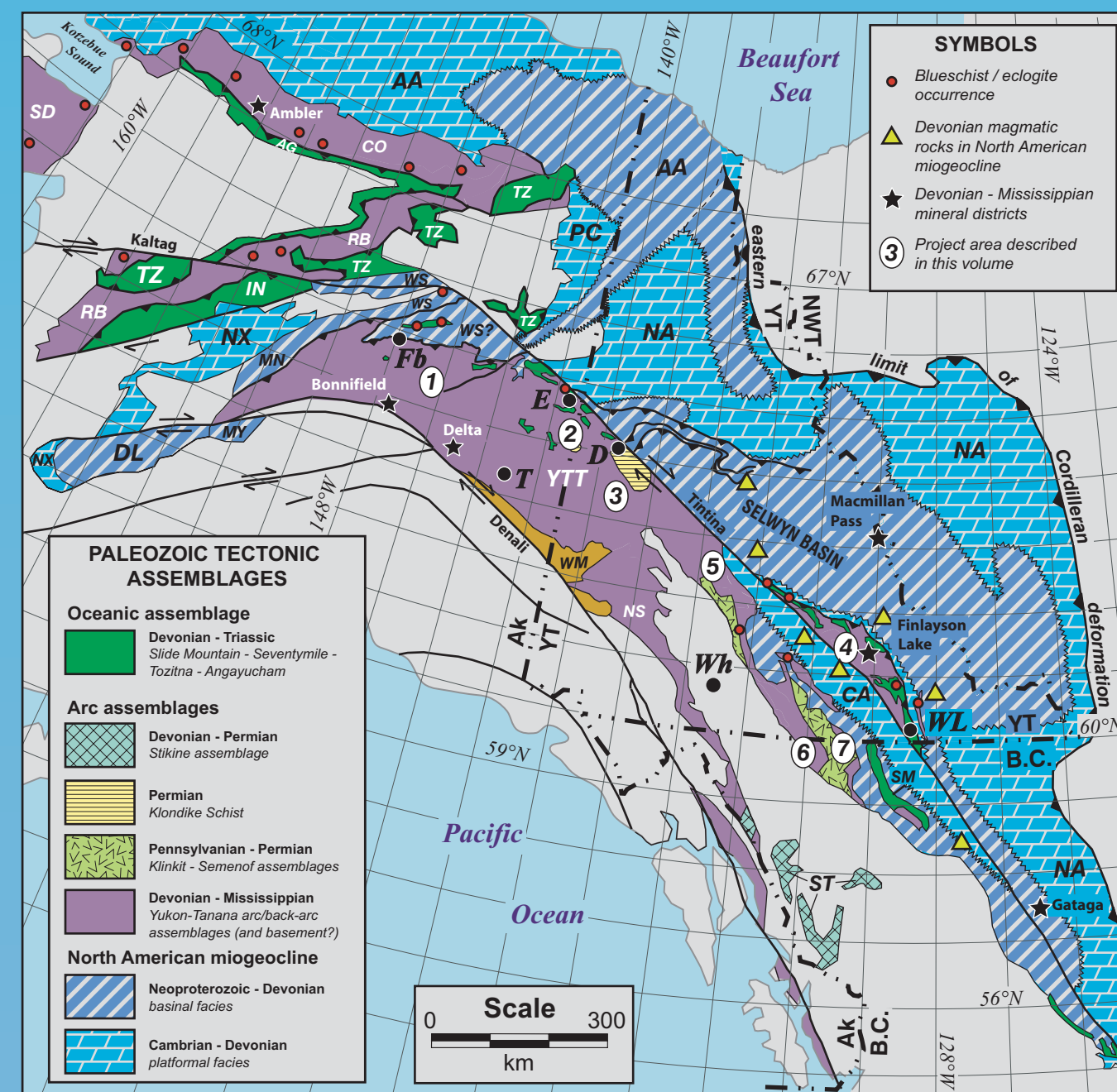
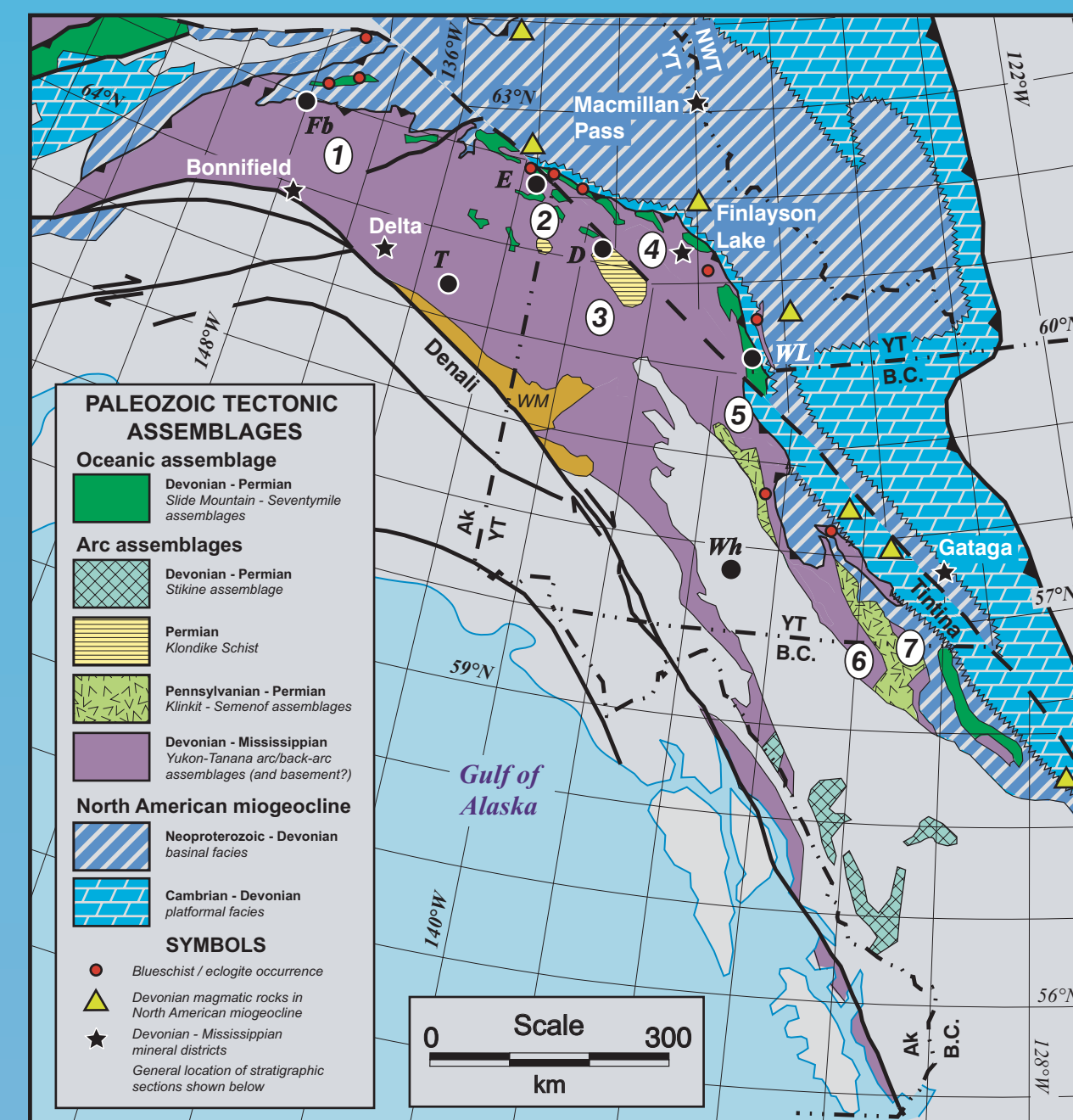


# FINLAYSON LAKE MASSIVE SULPHIDE DISTRICT, YUKON-TANANA TERRANE, SOUTHEASTERN YUKON

## Yukon -Tanana Terrane in the Northern Cordillera

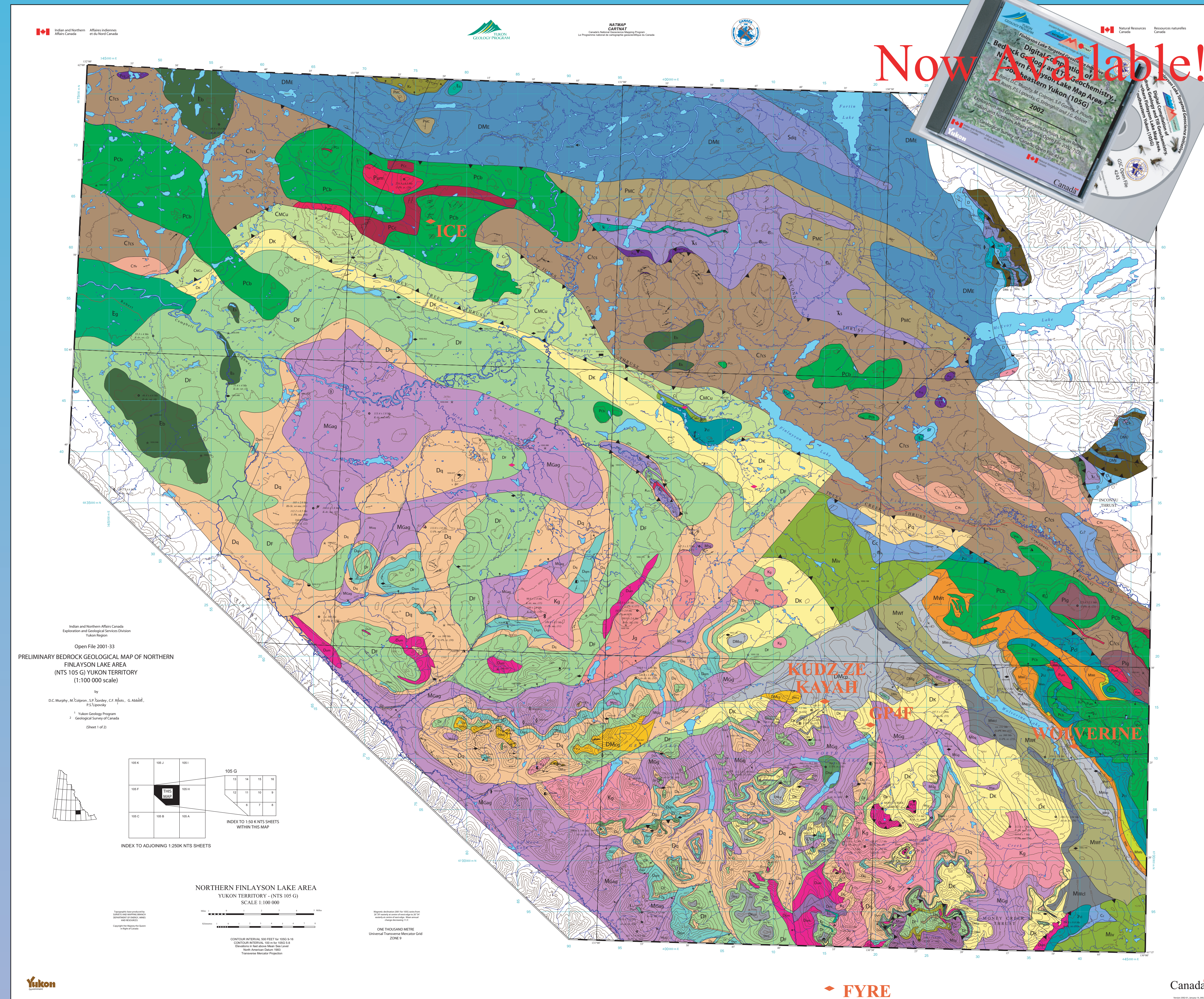


Current Distribution



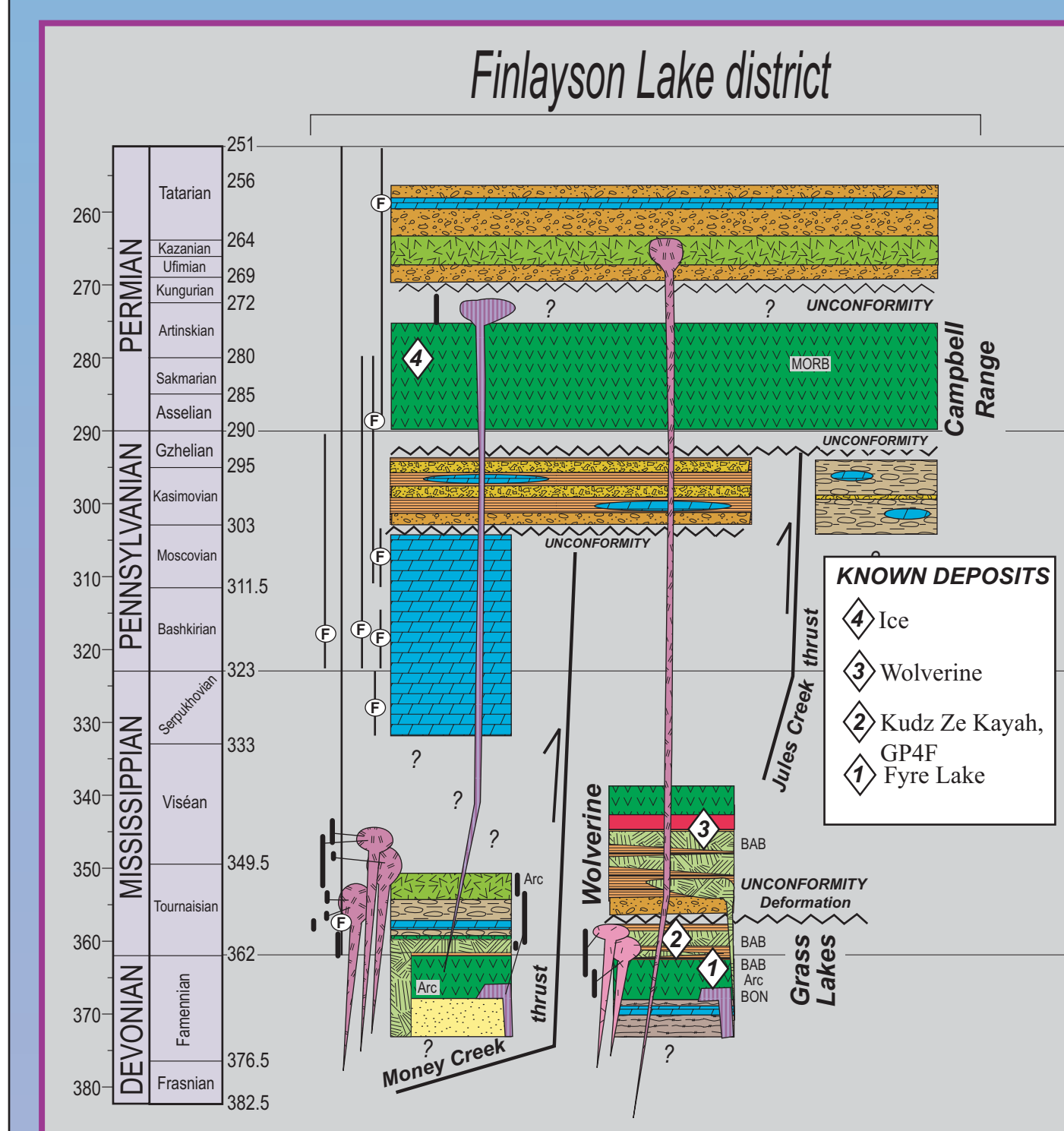
Pre-Tintina Fault

Extending from east-central Alaska to northern British Columbia, Yukon-Tanana Terrane (YTT) is one of the so-called peri-cratonic terranes of the Canadian Cordillera. It comprises mainly Upper Paleozoic poly-deformed and variably metamorphosed meta-sedimentary and meta-volcanic rocks that were mainly deposited in continental arc and back-arc basin environments. Volcanic-hosted massive sulphide districts have been discovered in eastern Alaska (Delta and Bonifield) and more recently in the area near Finlayson Lake, southeastern Yukon.



PRELIMINARY BEDROCK GEOLOGICAL MAP OF NORTHERN FINLAYSON LAKE AREA (NTS 1:50 000) YUKON TERRITORY - DTS 101 G SCALE 1:50 000

NORTHERN FINLAYSON LAKE AREA YUKON TERRITORY - DTS 101 G SCALE 1:50 000

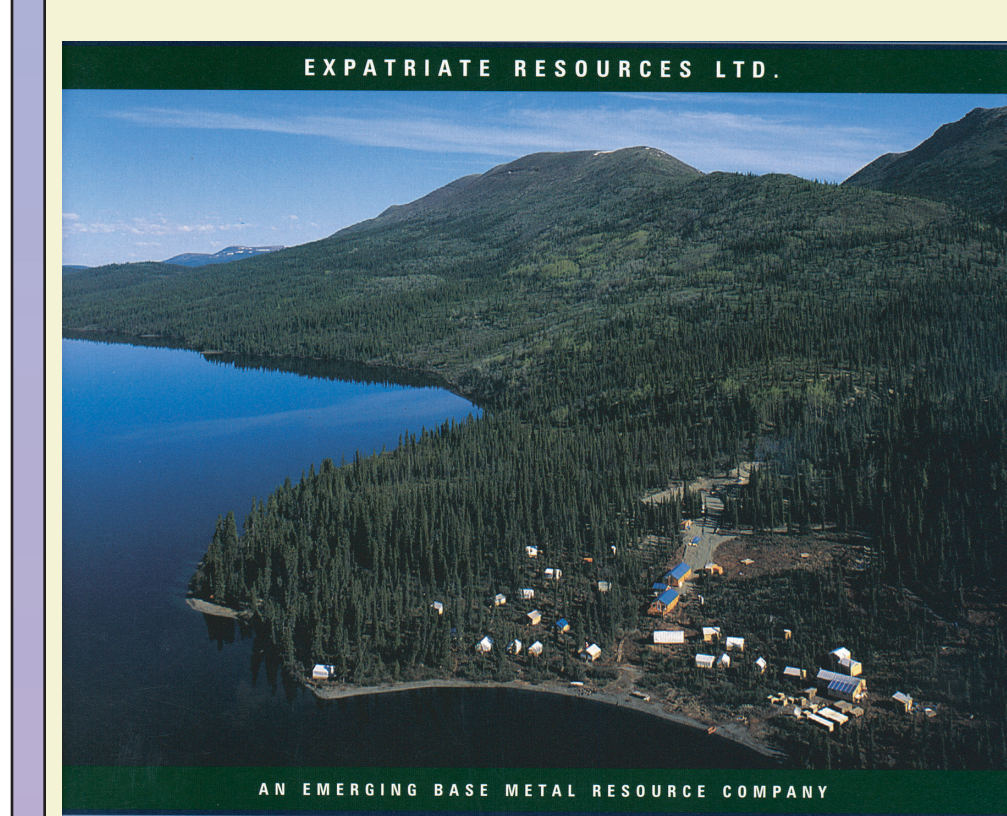


To date, 5 deposits and numerous occurrences have been discovered in the Finlayson Lake district. These include Kudz Ze Kayah (11.3 Mt, 5.9% Zn, 0.9% Cu, 1.5% Pb, 1.3 g/t Au, 133 g/t Ag); GP4F (1.5Mt, 6.4% Zn, 0.1% Cu, 3.1% Pb, 2.0g/t Au, 90g/t Ag); Wolverine Lake (6.2Mt, 12.7% Zn, 1.3% Cu, 1.5% Pb, 1.76 g/t Au, 371g/t Ag); Fyre (8.2 Mt, 2.1% Cu, 0.11% Co, 0.73 g/t Au) and Ice (4.56 Mt, 1.48% Cu).

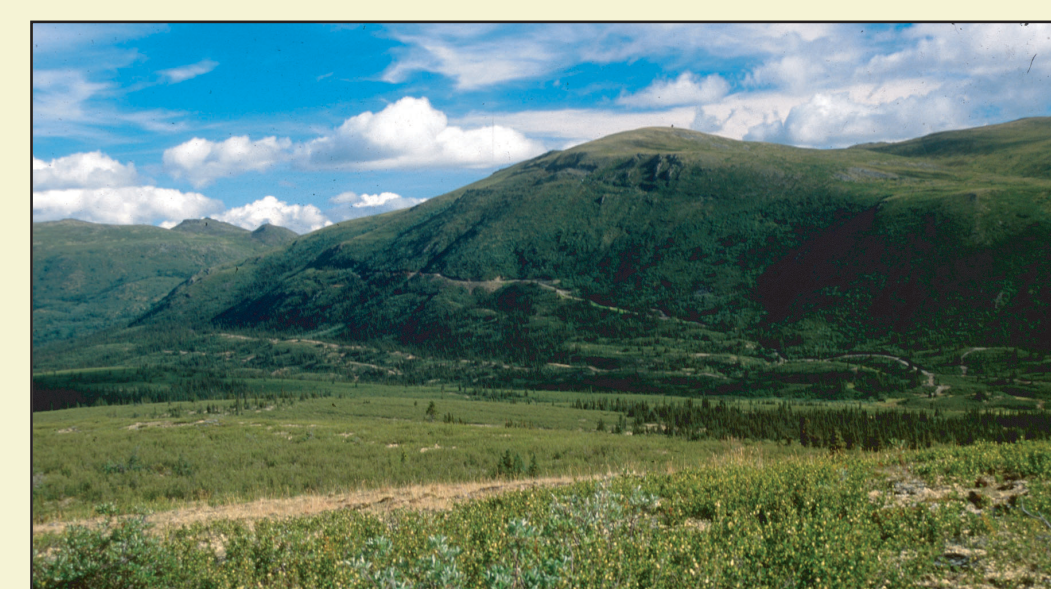
Most of the deposits occur in the Devonian-Mississippian Grass Lakes succession, in rocks with continental arc (Fyre) or back-arc affinities (Kudz Ze Kayah, GP4F and Wolverine). The Ice deposit occurs in the Permian Campbell Range basalt that was likely deposited in a back-arc environment.

## Felsic Meta-Volcanic-Hosted (Zn-Cu-Pb-Ag-Au)

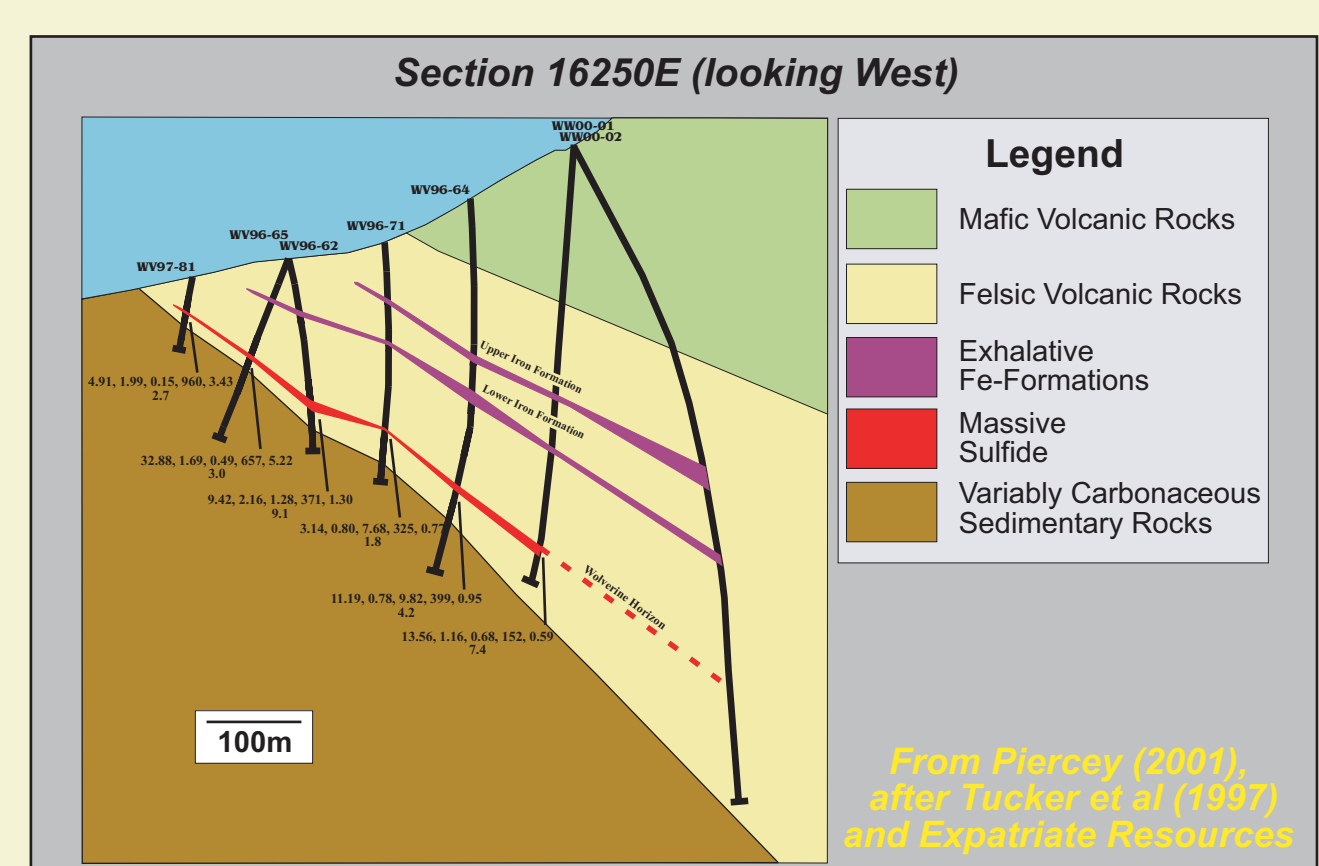
### Wolverine Lake (Expatriate Resources)



Sphalerite-rich core

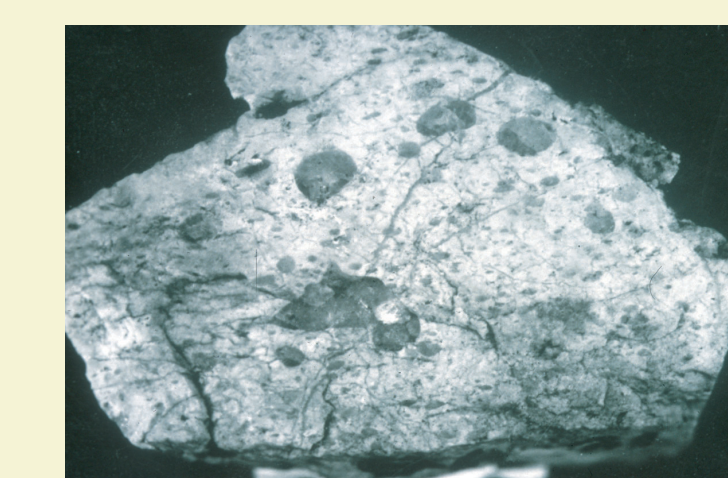
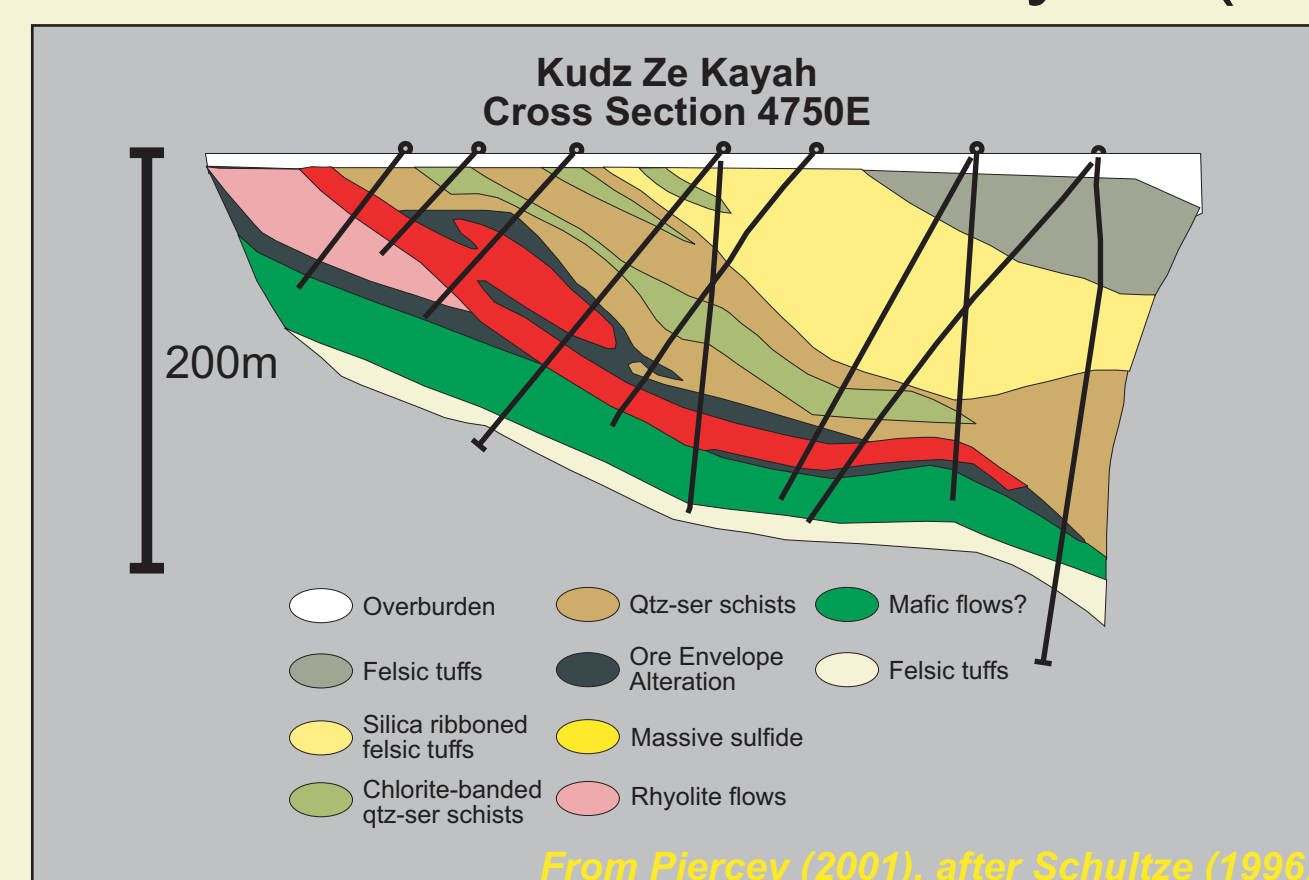


Drill roads, Wolverine deposit

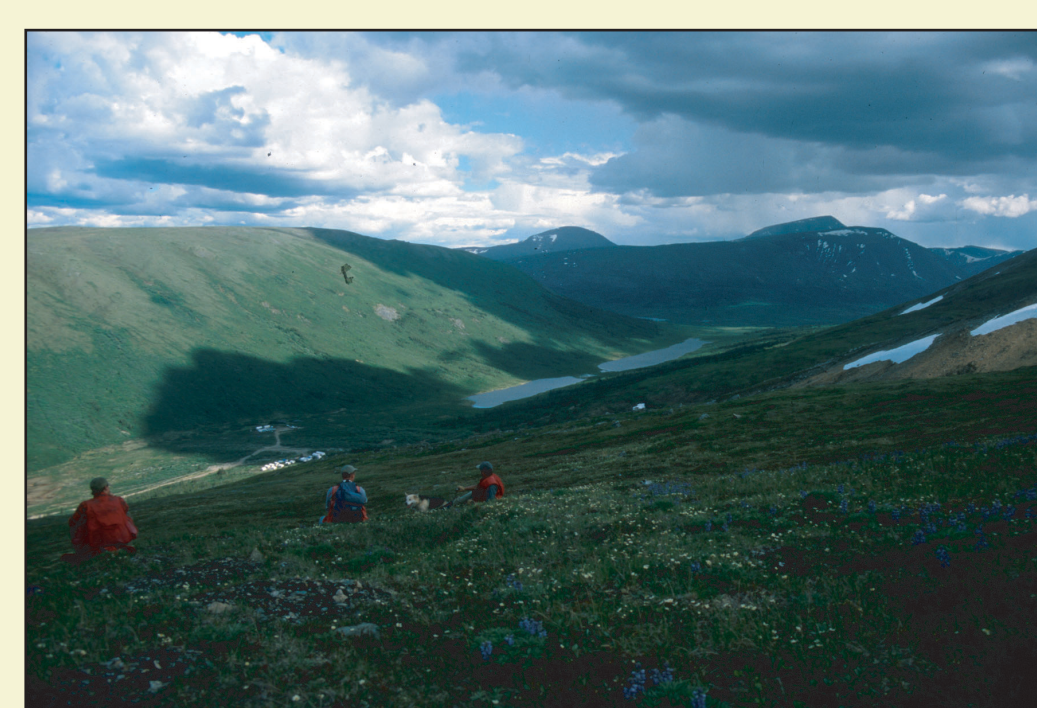


Surface expression of Wolverine deposit

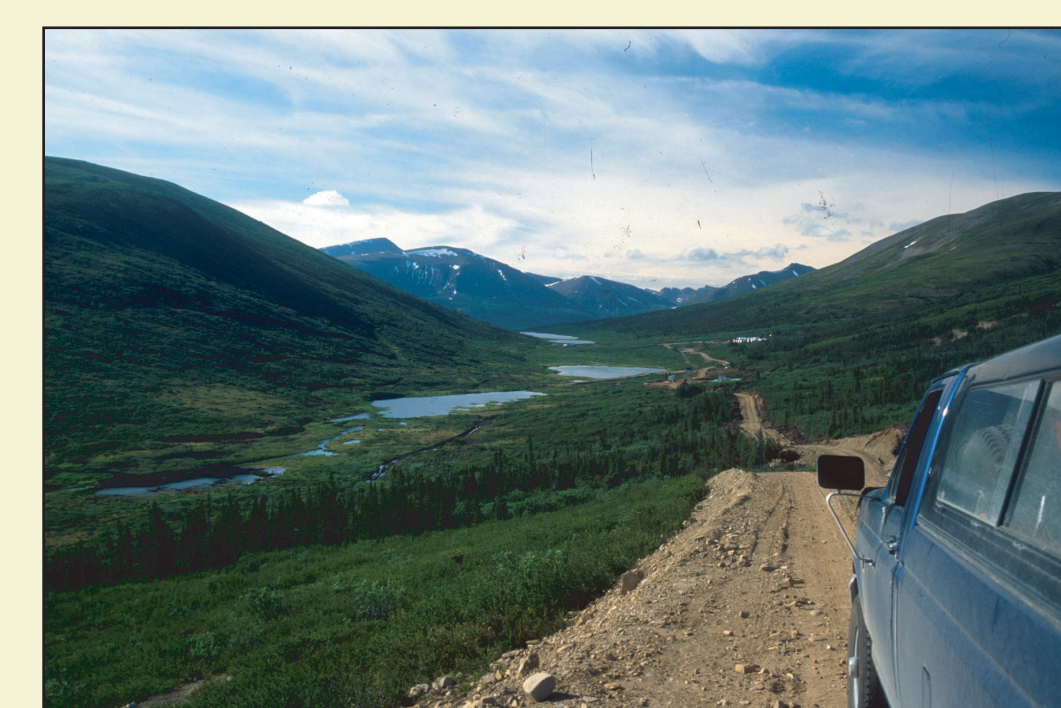
### Kudz Ze Kayah (Teck-Cominco)



Amygdaloidal meta-rhyolite in hanging wall



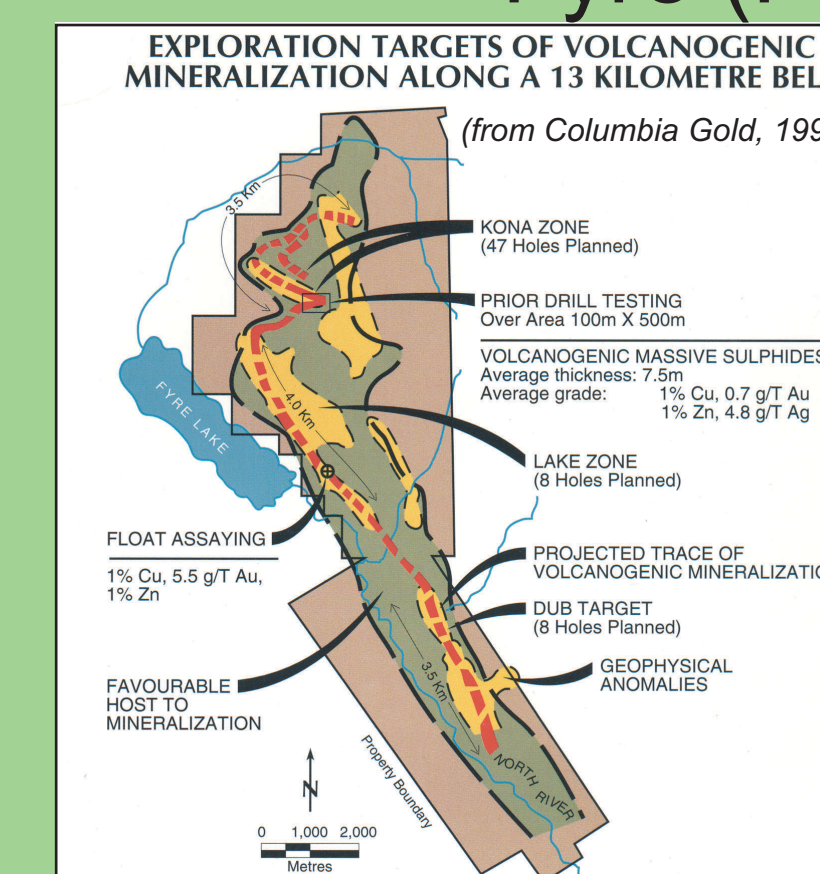
View to southeast obliquely across strike. GP4F deposit is on other side of hill behind the lakes.



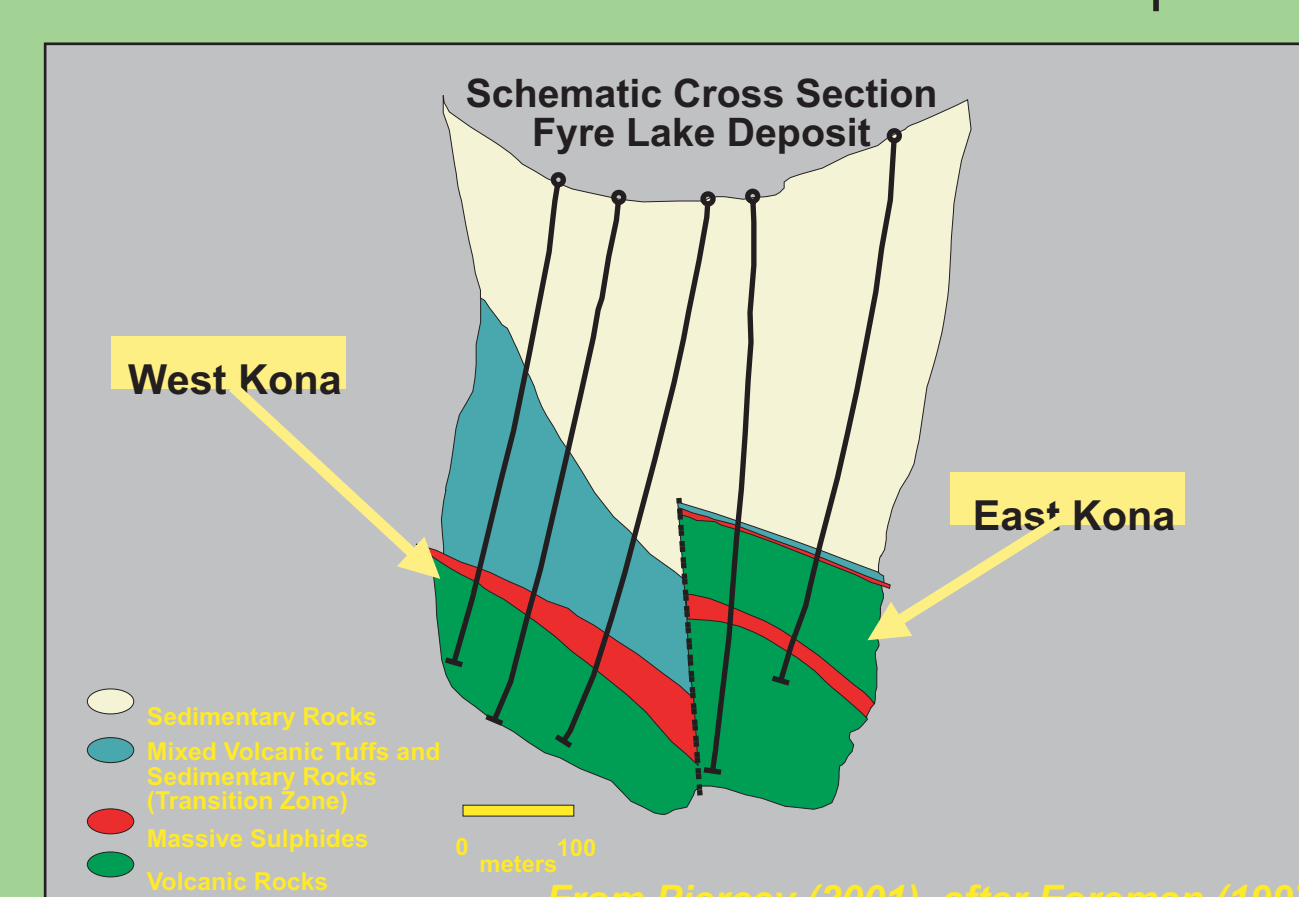
Deposit underlies far end of the nearer of the three lakes in stratigraphy dipping toward viewer

## Mafic Meta-Volcanic-Hosted (Cu-(Co-Au))

### Fyre (Pacific Ridge Resources)

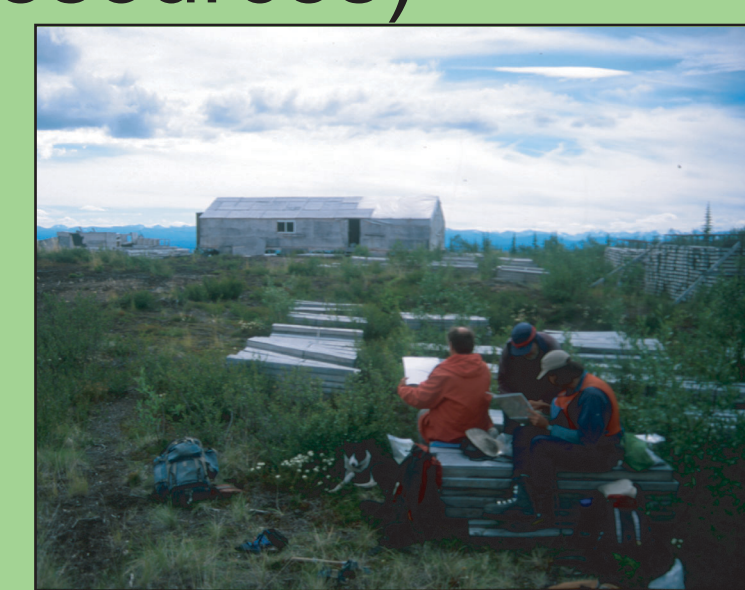
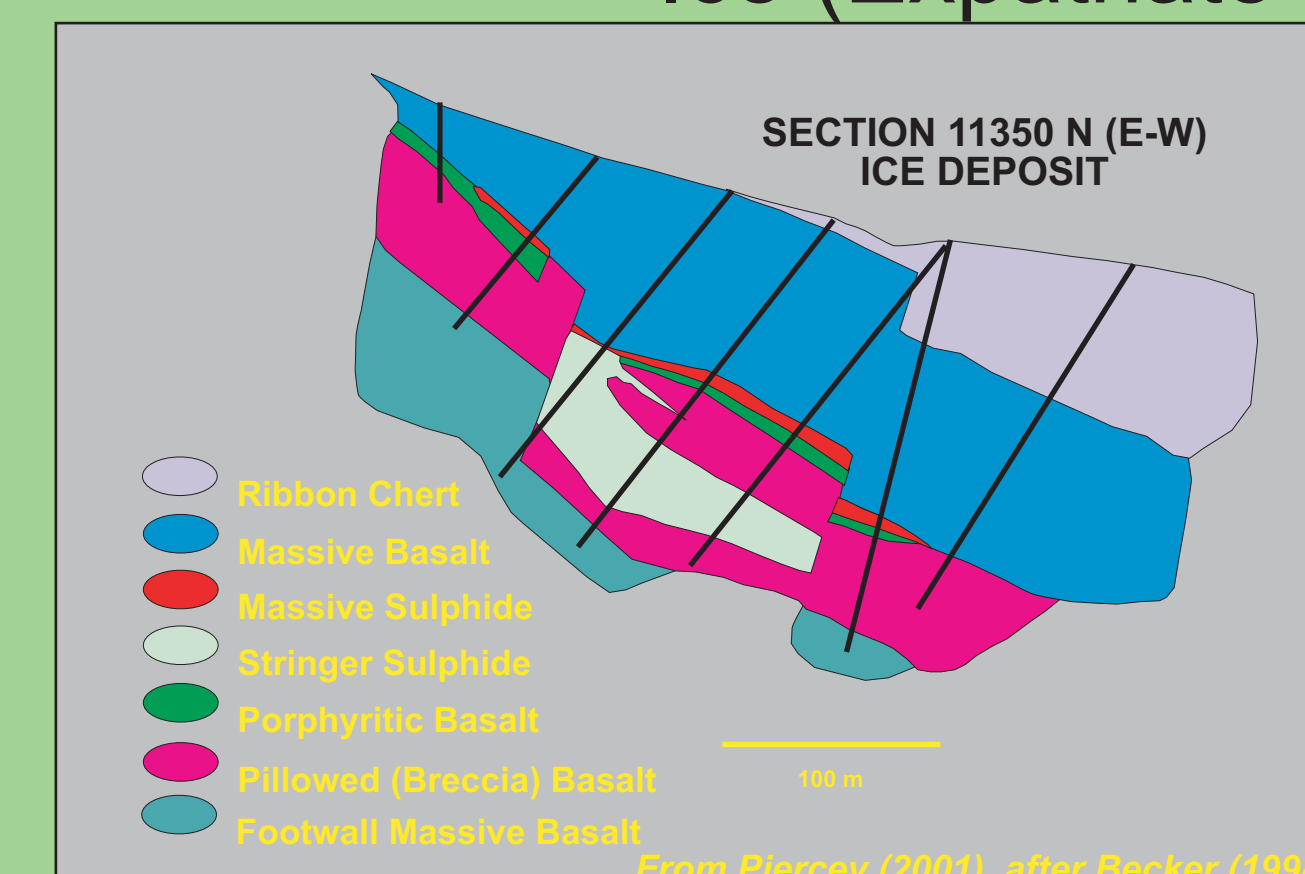


The Fyre deposit is hosted in chloritic schist of boninite composition.



West Kona East Kona

### Ice (Expatriate Resources)



Camp and core, Ice property



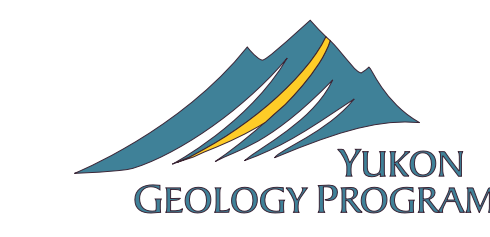
Exploration road, Ice property



Pillow basalt, MORB composition



Donald C. Murphy  
Yukon Geology Program  
Box 2703 (K-10)  
Whitehorse, Yukon  
Canada Y1A 2C6  
don.murphy@gov.yk.ca



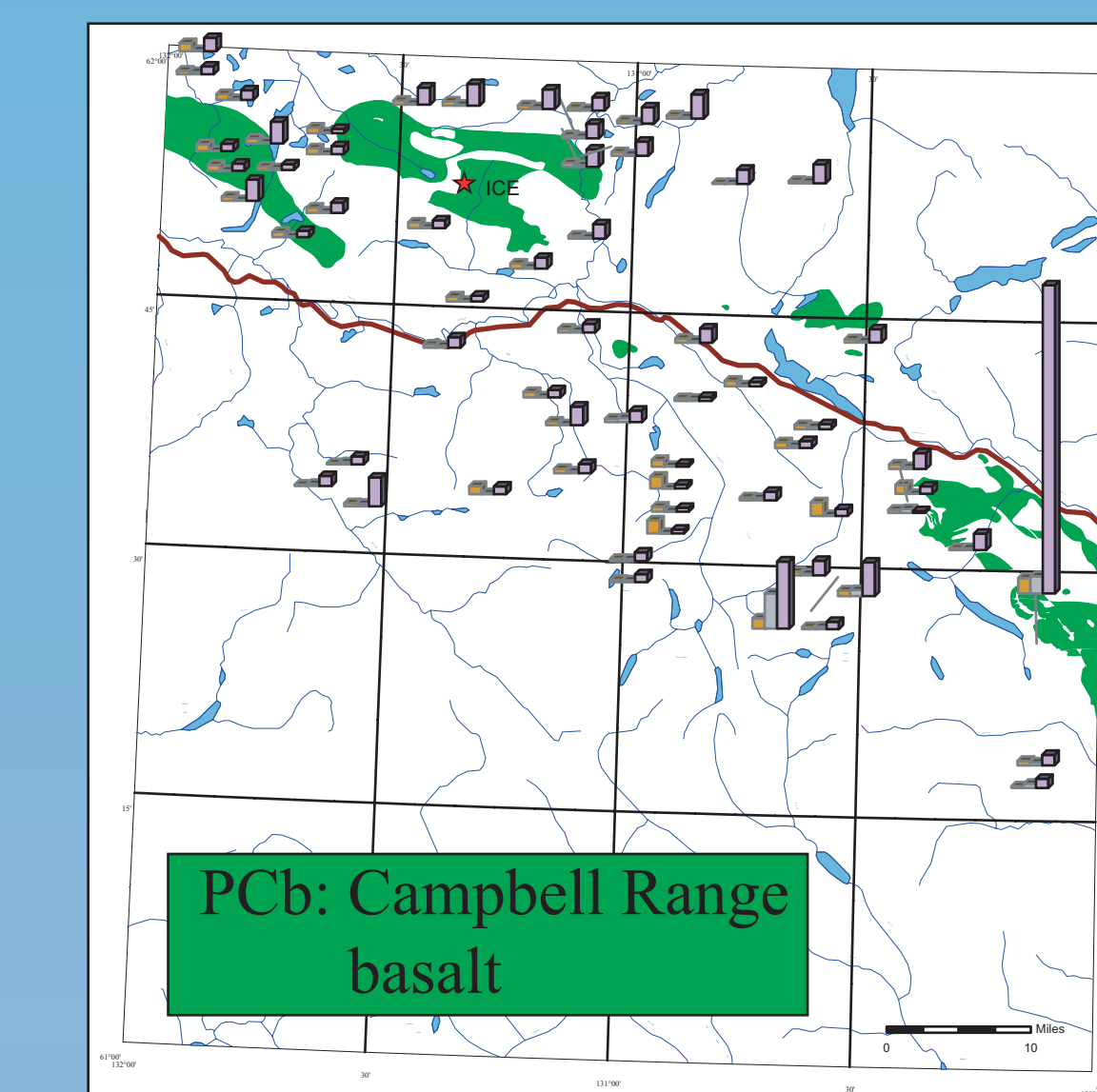
Maurice Colpron  
Yukon Geology Program  
Box 2703 (K-10)  
Whitehorse, Yukon  
Canada Y1A 2C6



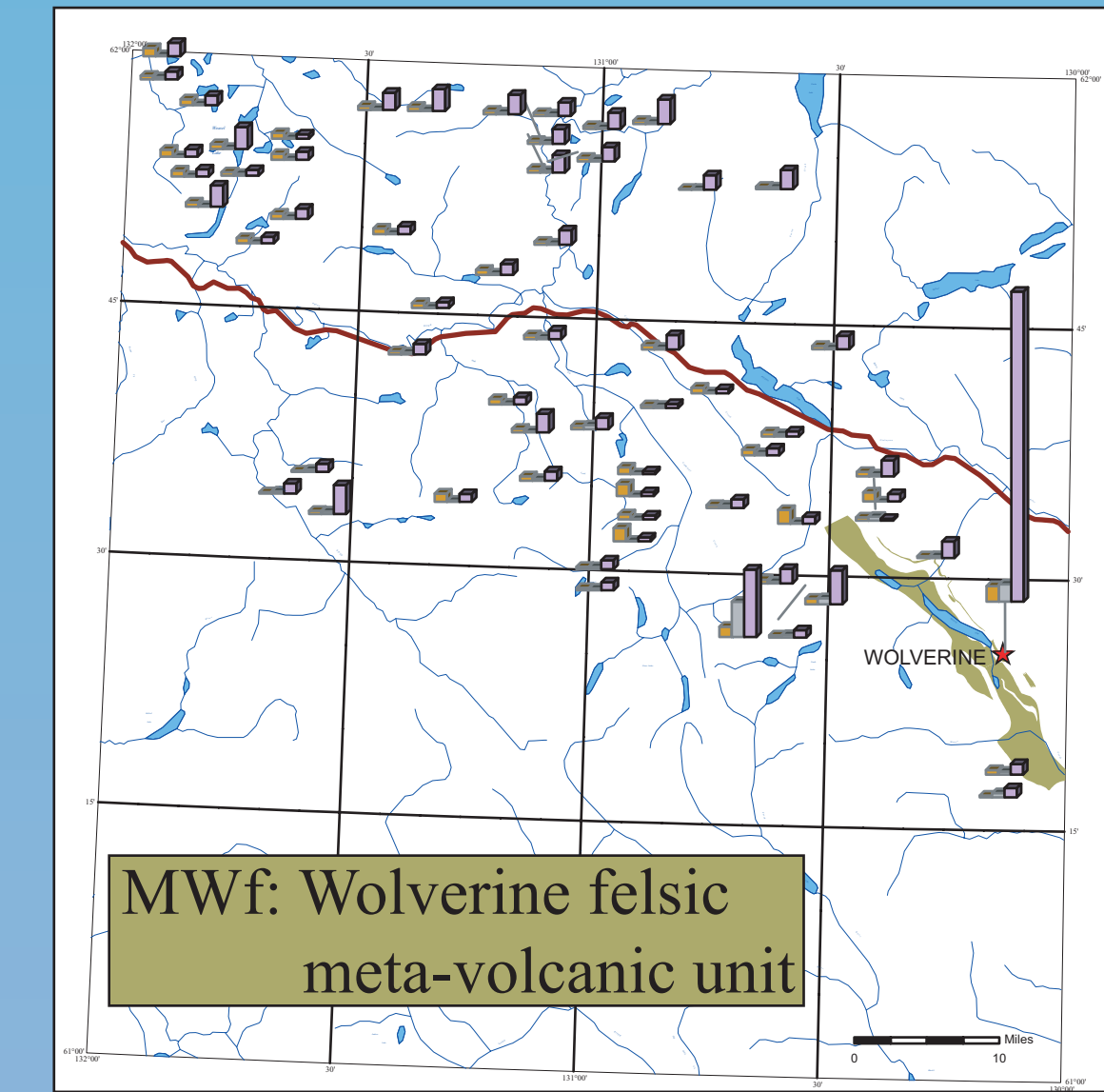
Stephen J. Piercey  
Dept. of Earth Sciences  
Laurentian University  
Sudbury, Ontario  
Canada P3E 2C6

## Exploration Potential

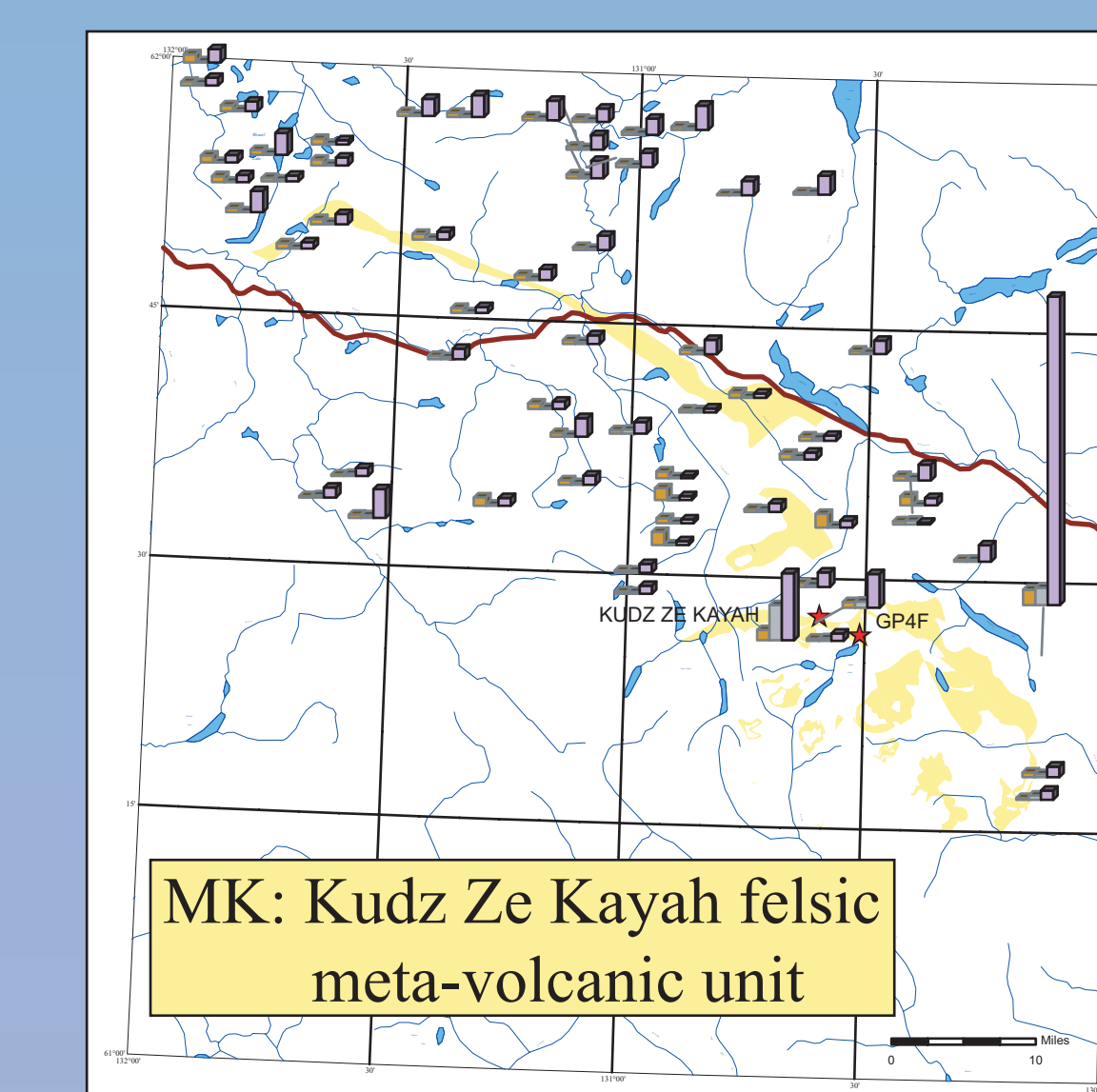
Cu-Pb-Zn Till Geochemistry With Respect to Distribution of Rock Units Hosting Deposits



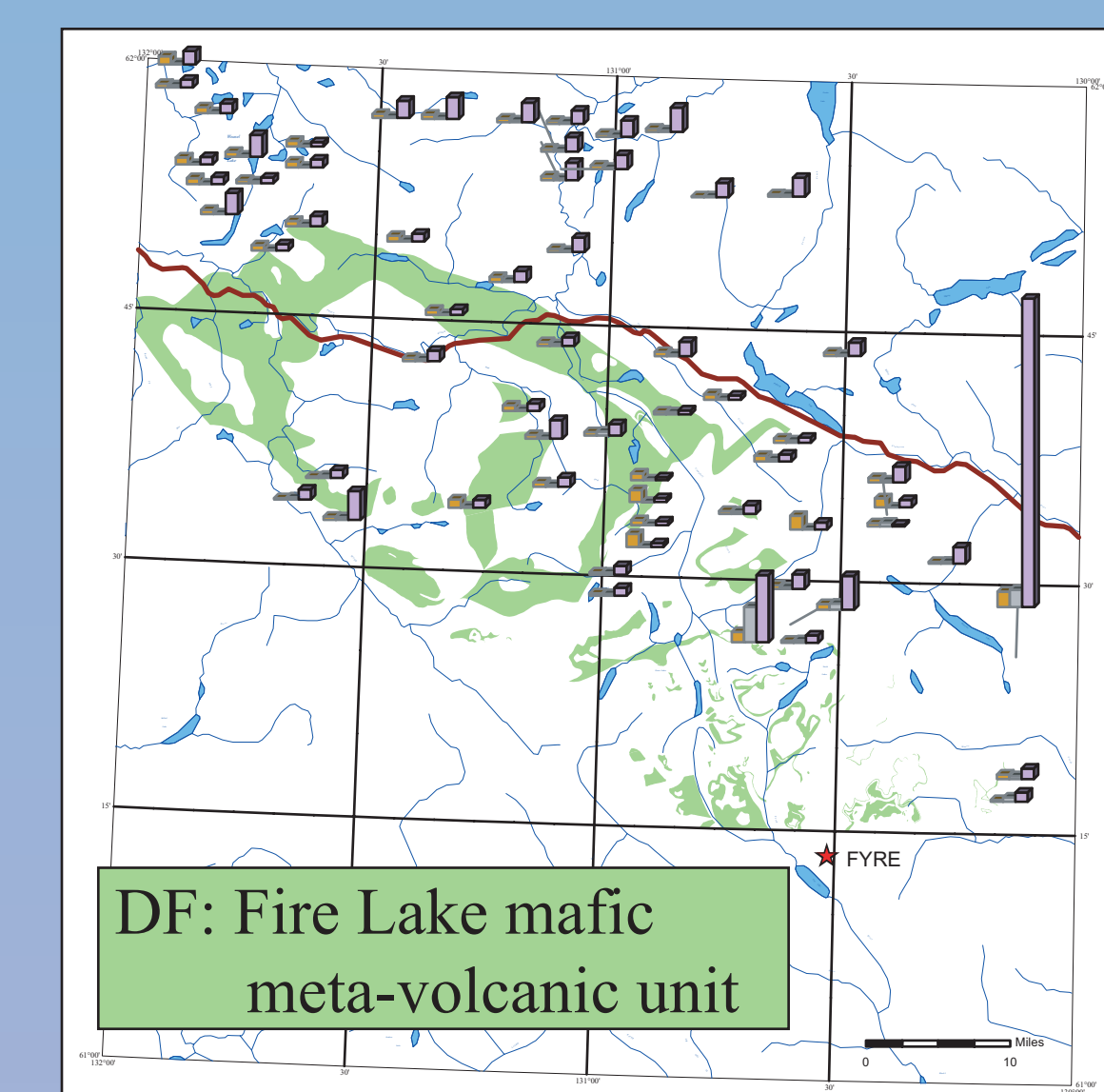
PCb: Campbell Range basalt



MWF: Wolverine felsic meta-volcanic unit



MK: Kudz Ze Kayah felsic meta-volcanic unit



DF: Fire Lake mafic meta-volcanic unit