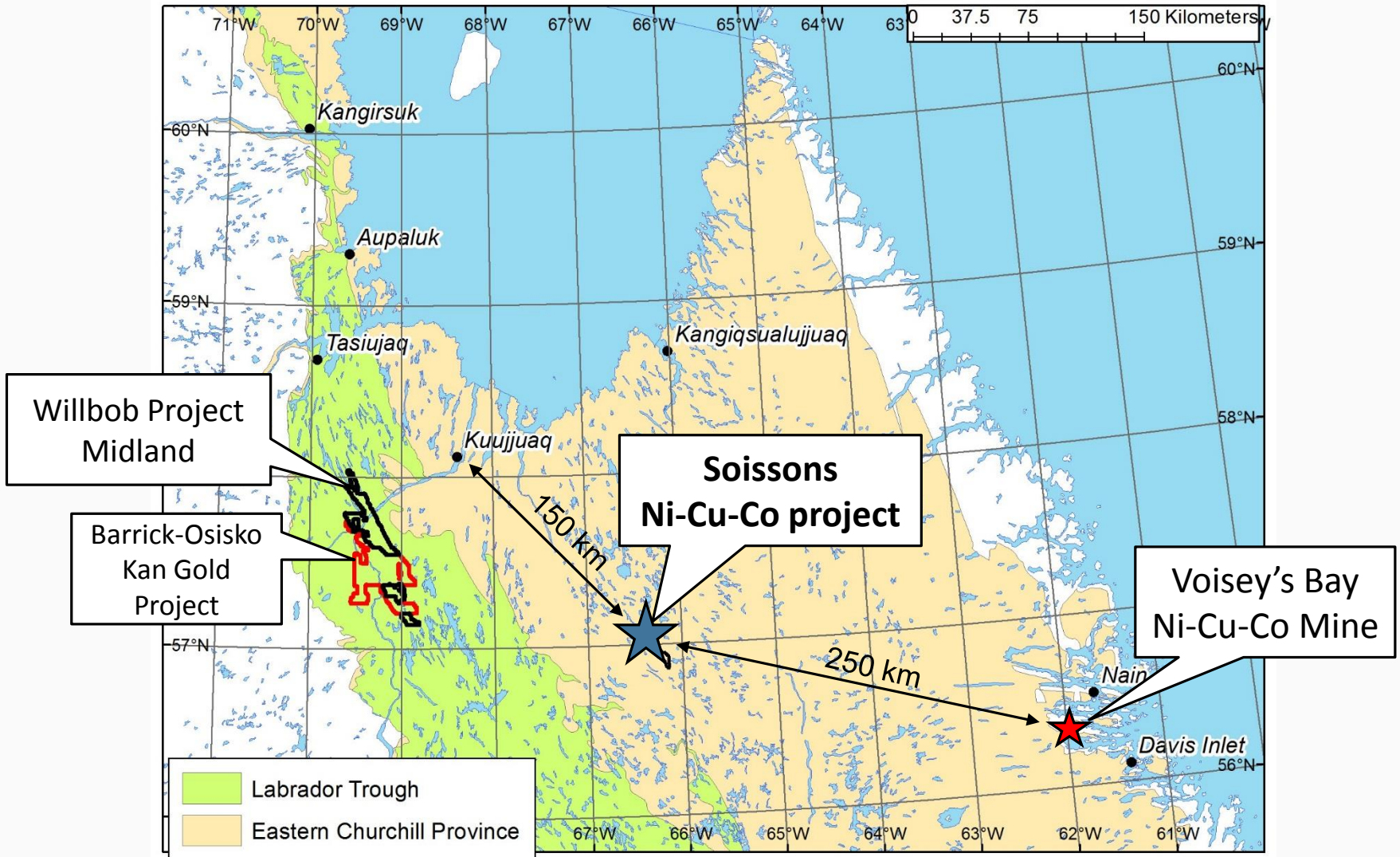
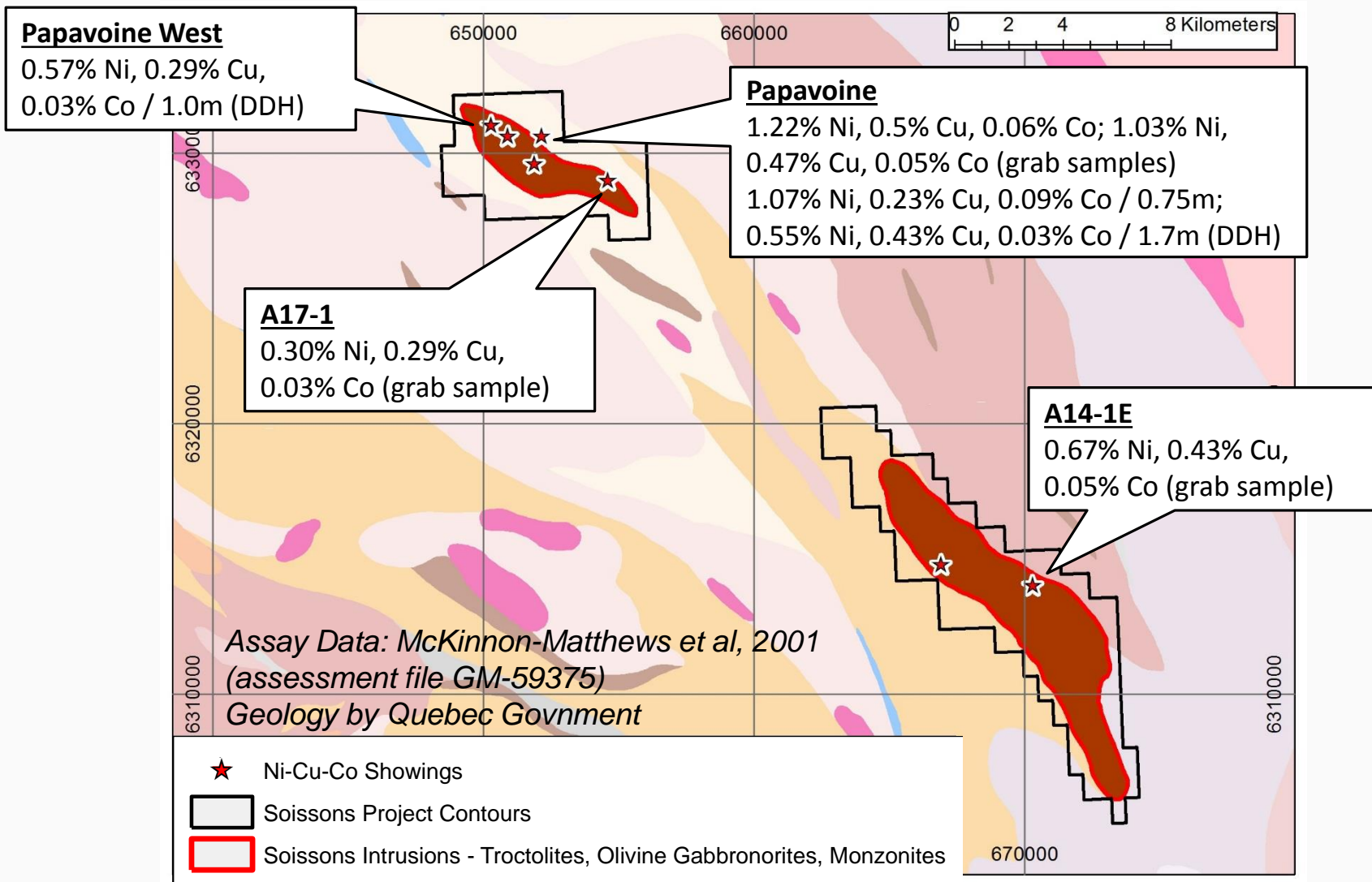


Soissons Project - Location



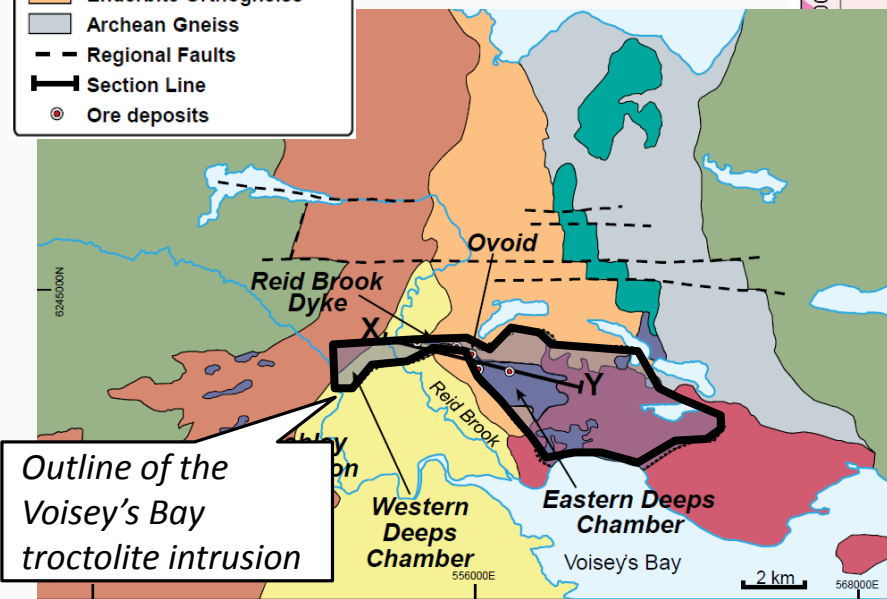
Local geology and Ni-Cu-Co showings



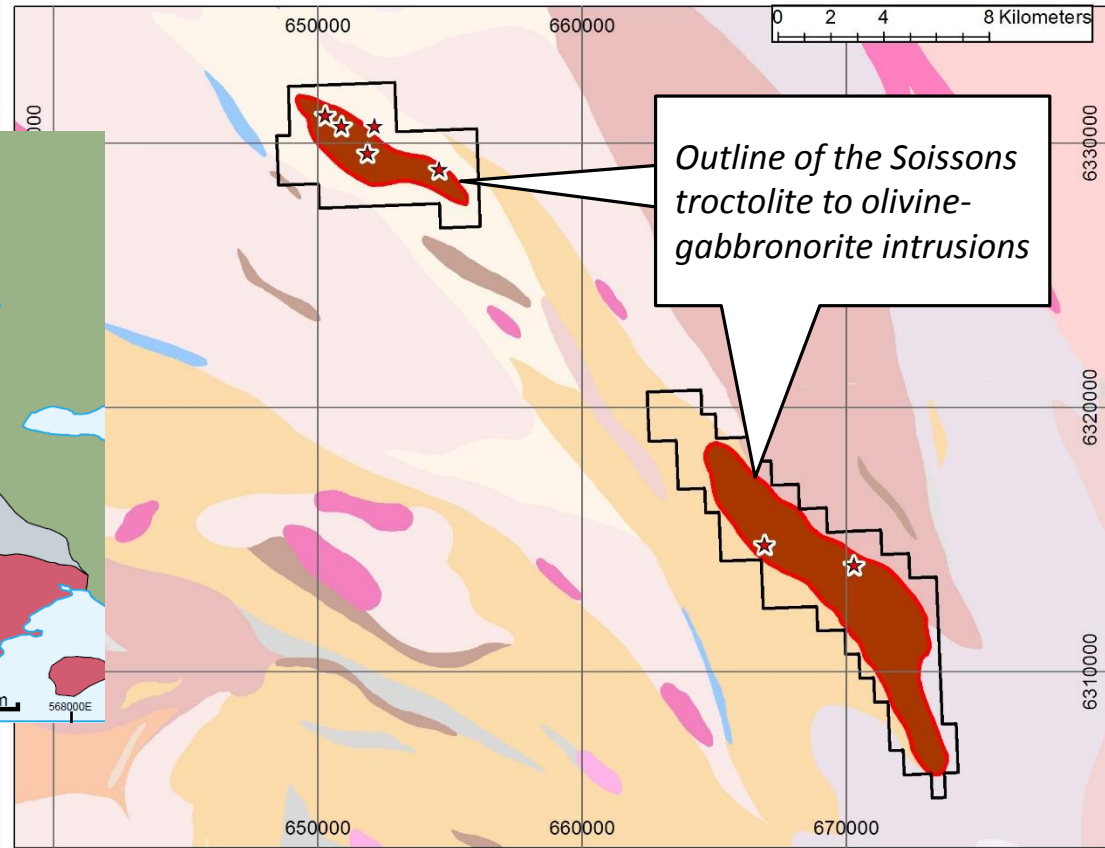
Soissons vs Voisey's Bay

SAME SCALES

- Makhavinekh Lake Granite Suite
- Voisey's Bay Granite Suite
- Anorthosite Suites
- Mushuau Intrusion
- Outcrop of VBI
- Subsurface extent of VBI
- Churchill Paragneiss
- Enderbite Orthogneiss
- Archean Gneiss
- Regional Faults
- Section Line
- Ore deposits



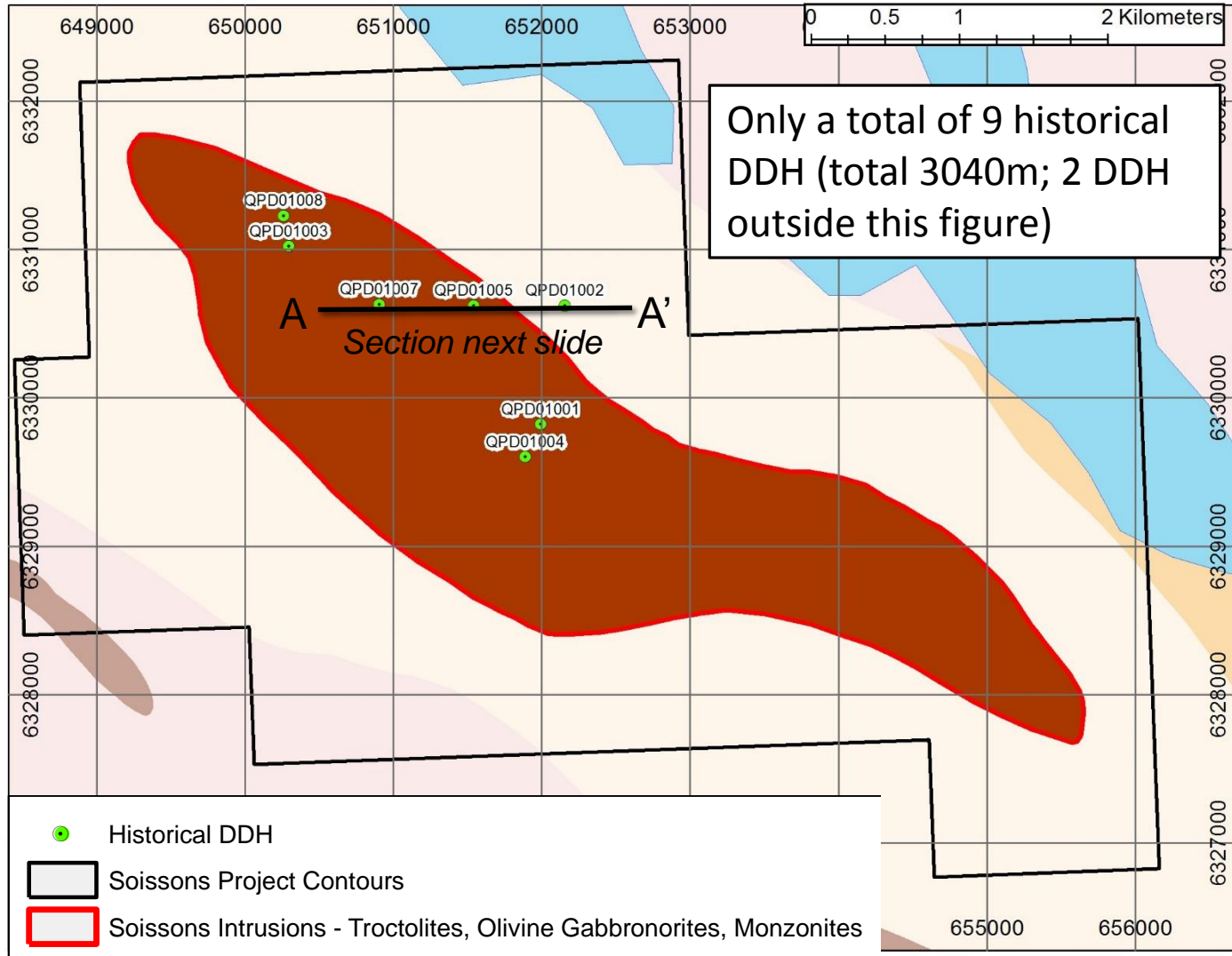
Voisey's Bay Geology



Soissons Geology

From Lightfoot, 2016

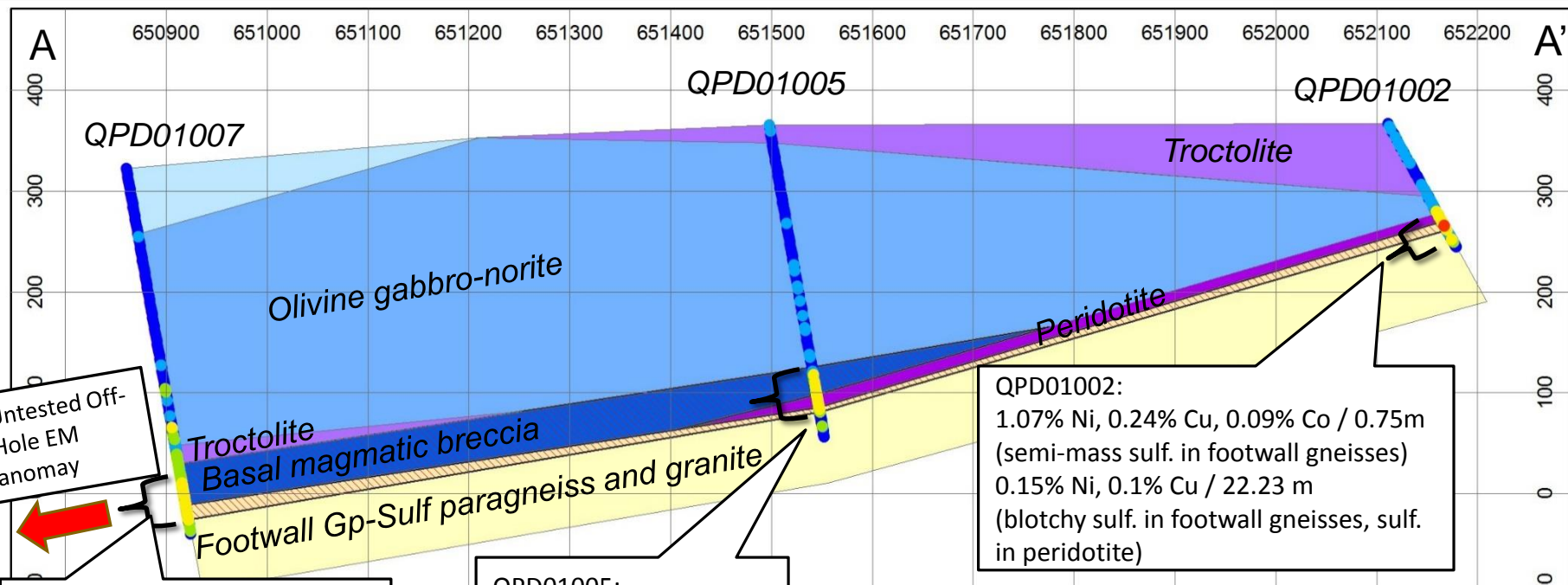
Soissons – Historical DDH



Soissons – Section DDH 2-5-7

West

East



Untested Off-Hole EM anomaly
←

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)

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)

The magmatic breccia thickens to the west, with large Ni-anomalous intervals → vector to a feeder zone?
Untested off-hole EM anomaly to the west.

Litho	Ni ppm
Olivine gabbro-norite with assimilated paragneiss and granite	8 - 250
Olivine gabbro-norite, gabbro-norite	251 - 500
Troctolite	501 - 1000
Serpentinized peridotite	1001 - 5000
Basal magmatic breccia / mixing zone with Ni-Cu-Co sulfides	5001 - 12655
Ni-Cu-Co blotchy sulfides in footwall paragneiss	
Footwall graphitic paragneisses and granites	

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

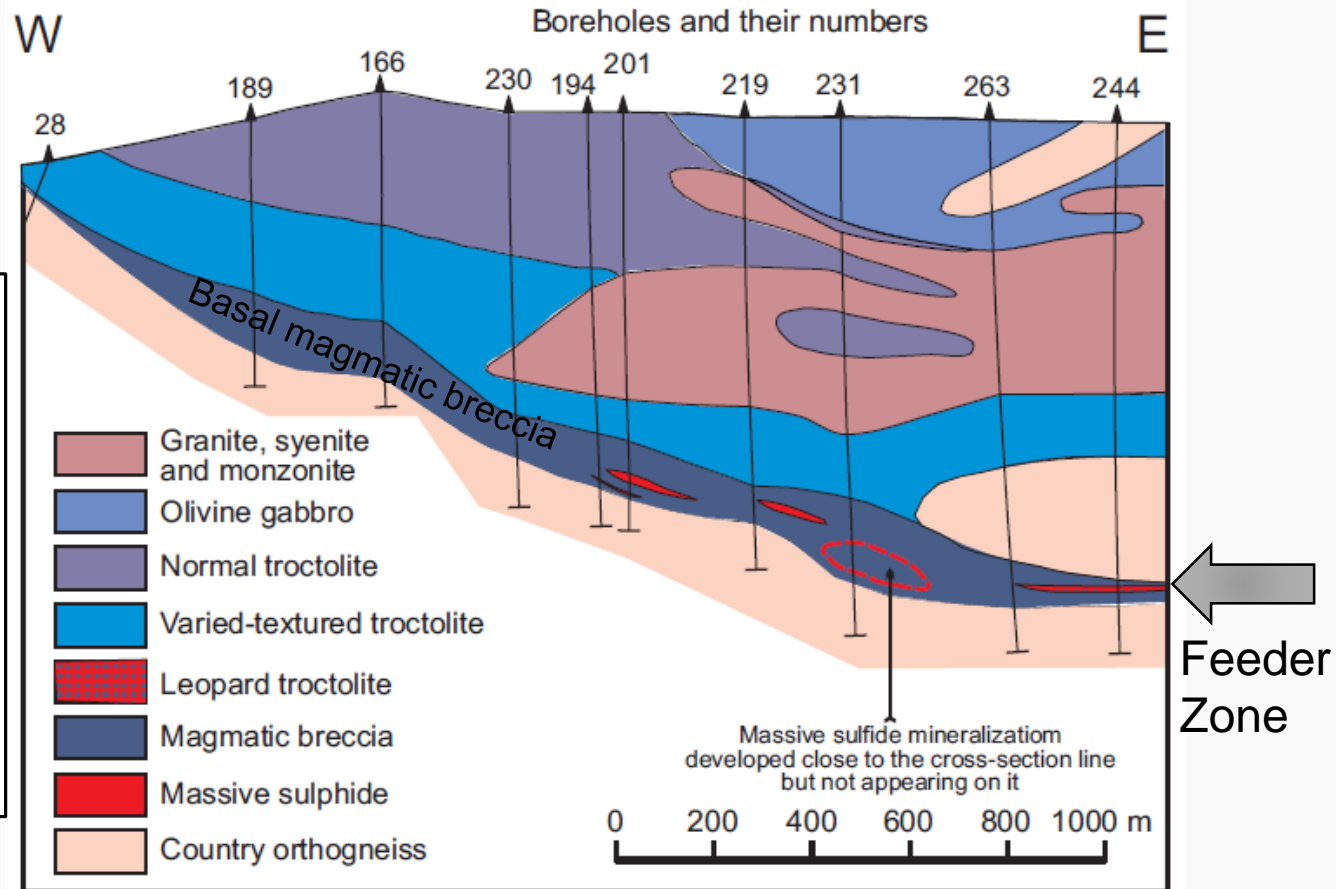


FIGURE 4. North-south cross-section across the northern part of the Eastern Deeps chamber. Note the vertical north wall of the chamber, the horizontal entry of the feeder sheet, the steepening in the dip of the sheet to the north, and the relationship between the entry line of the feeder and the distribution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

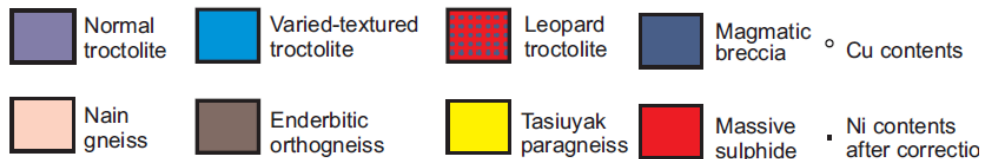
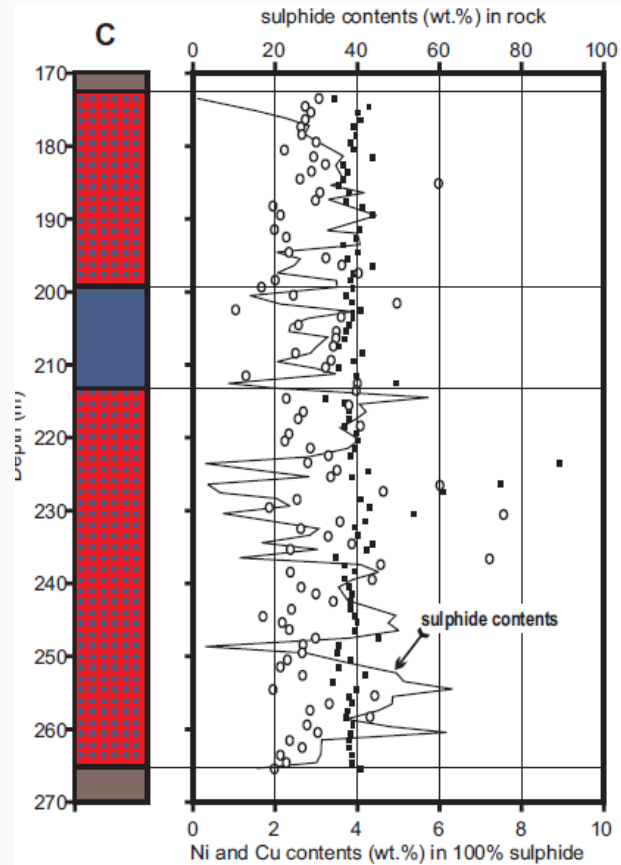
Naldrett and Li, 2007

Soissons – Metal tenors in historical DDH

DDH	Mineralisation type	Num. of samples	From	To	% Ni	% Cu	% S	%Ni at 100% sulf.*	%Cu at 100% sulf.*
QPD01001	Disseminated sulfides in olivine gabbro-norite	10	2.8	35.5	0.18	0.09	1.28	5.26	2.43
QPD01001	Disseminated sulfides in olivine gabbro-norite	22	56.6	89	0.02	0.02	1.67	0.57	0.54
QPD01002	Disseminated sulfides in serpentized peridotite	9	101.95	113	0.13	0.11	1.38	3.26	2.67
QPD01002	Blotchy sulfides in footwall paragneiss	8	113	118.83	0.13	0.09	1.85	3.10	2.20
QPD01003	Mix of olivine norite and brecciated paragneiss (basal magmatic breccia)	14	538	551	0.15	0.12	1.50	3.81	3.49
QPD01003	Felsic gneiss with sulfides in fractures	8	558	565.16	0.19	0.20	2.33	3.4	2.77
QPD01004	Disseminated sulfides in olivine gabbro-norite	16	111.25	123.53	0.13	0.07	1.57	3.12	1.89
QPD01005	Disseminated sulfides in olivine gabbro-norite	27	270	290.49	0.15	0.14	1.03	4.72	3.73
QPD01007	Irregular sulfides in olivine gabbro-norite and brecciated paragneiss (basal magmatic breccia)	50	285.50	342.45	0.08	0.05	3.5	0.88	0.57
QPD01007	Blotchy sulfides in footwall paragneiss and granite	18	342.45	358	0.16	0.17	1.44	3.70	3.45
QPD01008	Brecciated paragneiss with olivine gabbro-norite inject. (basal breccia)	12	593.56	594.3	0.18	0.11	1.76	3.86	2.58
QPD01008	Footwall graphitic paragneiss with injected sulfides	13	602.54	611.56	0.07	0.07	2.31	1.24	1.37

*Ni and Cu tenors were calculated according to Barnes and Lightfoot (2005), using the formula: Concentration (100% sulfides of a chalcophile element) = Concentration (whole-rock of the chalcophile element) * 100 / (2.527 * S% + 0.3408 * Cu% + 0.4715 * Ni%). Only for samples with S > 1%.

Voisey's Bay – Metal Tenors at Discovery Hill



Naldrett and Li, 2007