

Rockland Minerals

Retty Lake Drilling

Updated June 19, 2011

**Retty Lake Mineralization --Core Photos
Showing "Net-Texture" Sulfides**

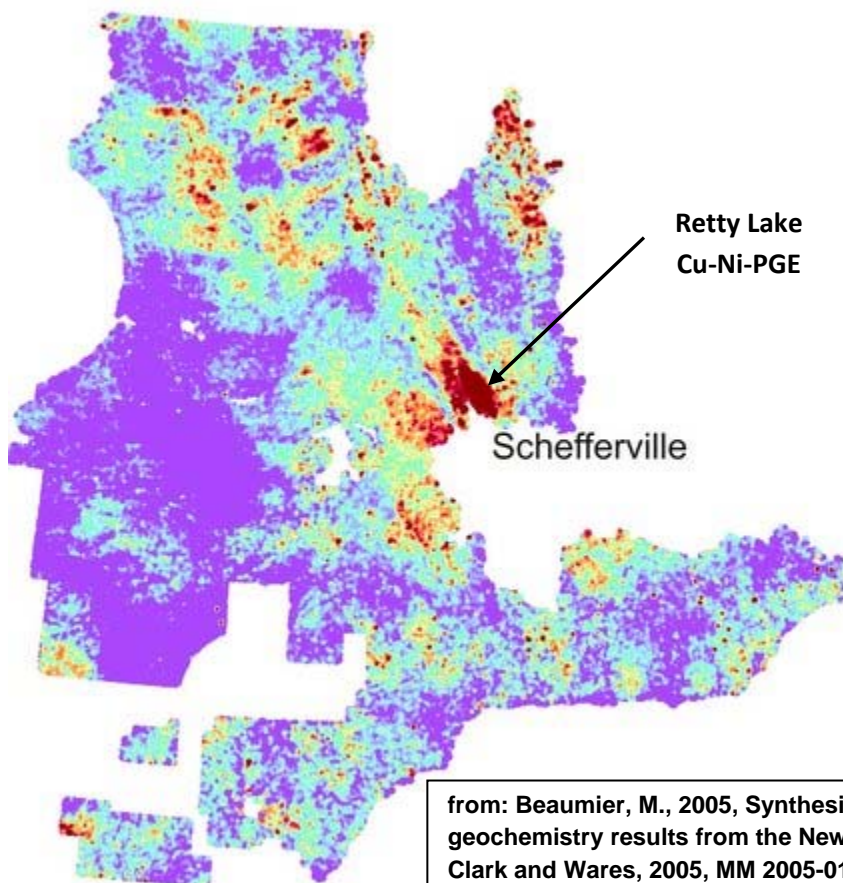
by: George F. Sanders, P.Ge

George F. Sanders, P.Ge, is a director of Rockland Minerals Corporation, and a Qualified Person under National Instrument 43-101 responsible for the technical content of this report.

The regional setting of Rockland Mineral's Retty Lake Project

The southern portion of the Labrador Trough is recognized as having a high discovery potential for Copper-Nickel

Northern Québec Nickel Anomalies



from: Beaumier, M., 2005, Synthesis of lake sediment geochemistry results from the New Québec Orogen, in Clark and Wares, 2005, MM 2005-01.

NICKEL IN THE UNGAVA AND NEW QUÉBEC OROGENS



THOMAS CLARK
ABDELALI MOUKHSIL
SERGE PERREAULT

QUÉBEC EXPLORATION 2004

Ressources
naturelles,
Faune et Parcs
Québec

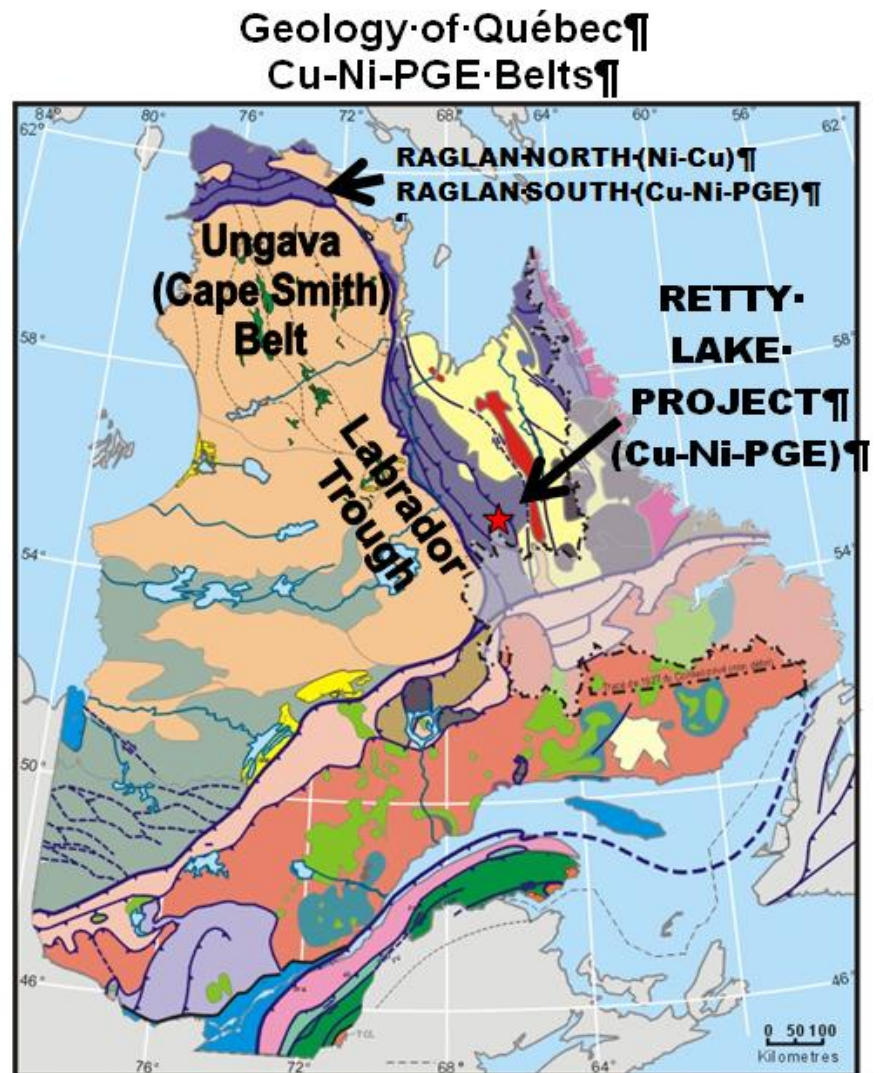
From: Clark, et. al. (2004) used with permission

from: Clark, Moukhsil and Perreault, 2004,
"Nickel in the Ungava and New Québec
Orogens": Québec Exploration 2004

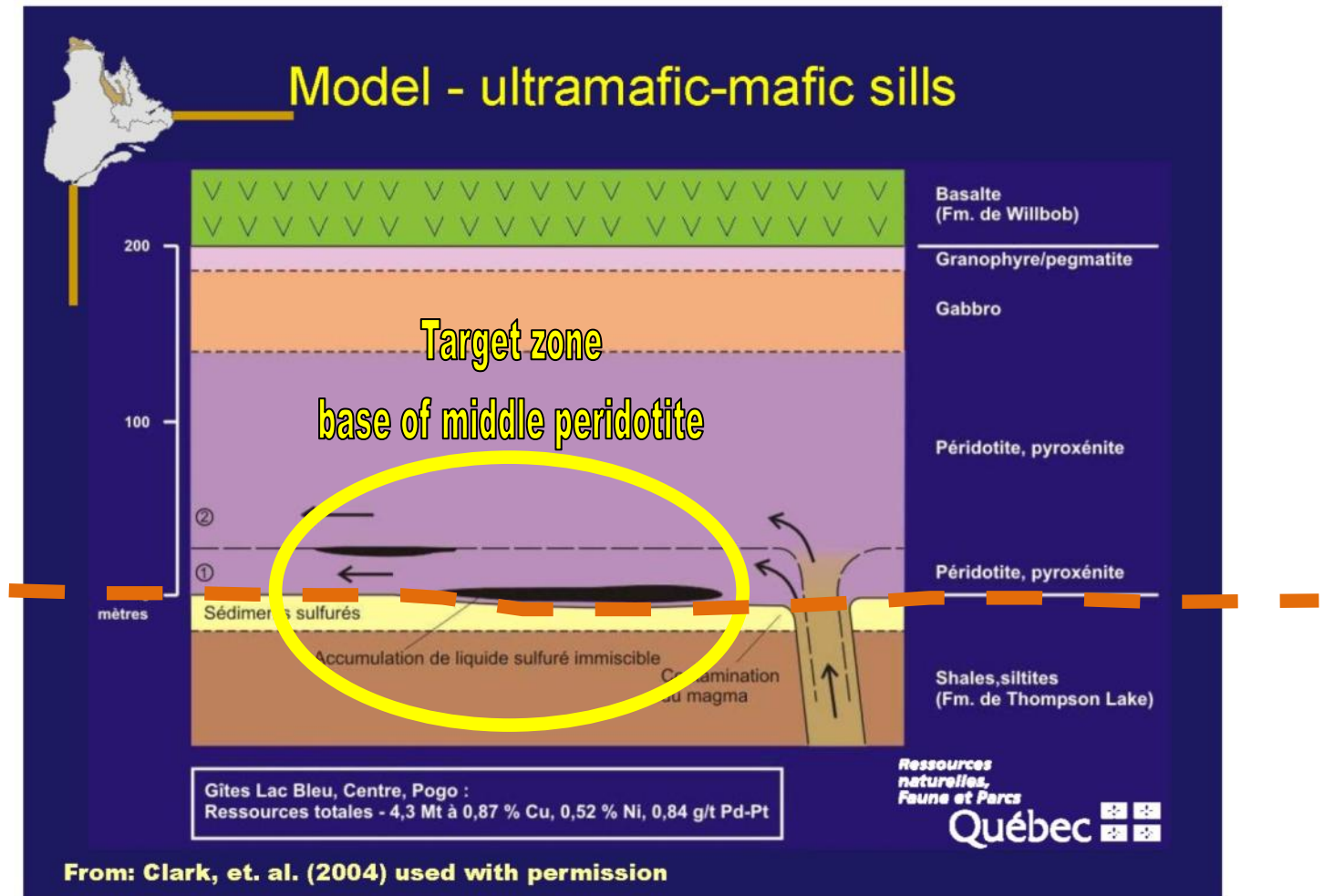
Rockland's Retty Lake Project shares the same age, and same geological history, as the Cape Smith Belt (Ungava) region -- where the Raglan Cu-Ni-PGE deposits occur.

What is the physical nature of these apparently sheet-like Retty Lake peridotite sills(?) Are they intrusive sills? Or, are they sea-floor submarine lava flows, the "komatiites"?

A word about "peridotites" and "komatiites", and "picrites", and "melagabbros". These are all terms that describe the hottest, most primitive igneous rocks in the world -- the ultramafic rock suite. They were emplaced in this continent-scale rift system at roughly 1.8 Ga -- the same approximate age as the Sudbury magmatism to the west. The Retty Lake peridotites (picritic composition olivine-bearing ultramafic rocks with small and variable amounts of plagioclase feldspar) were the immediate precursors to the more widespread and voluminous Willbob Fm. basalts. This basaltic eruptive event deposited over 5 kilometers of basalt in the upper portion of the Labrador Trough sedimentary sequence, which today comprises the folded but surprisingly un-metamorphosed Doublet tectonic terrane.

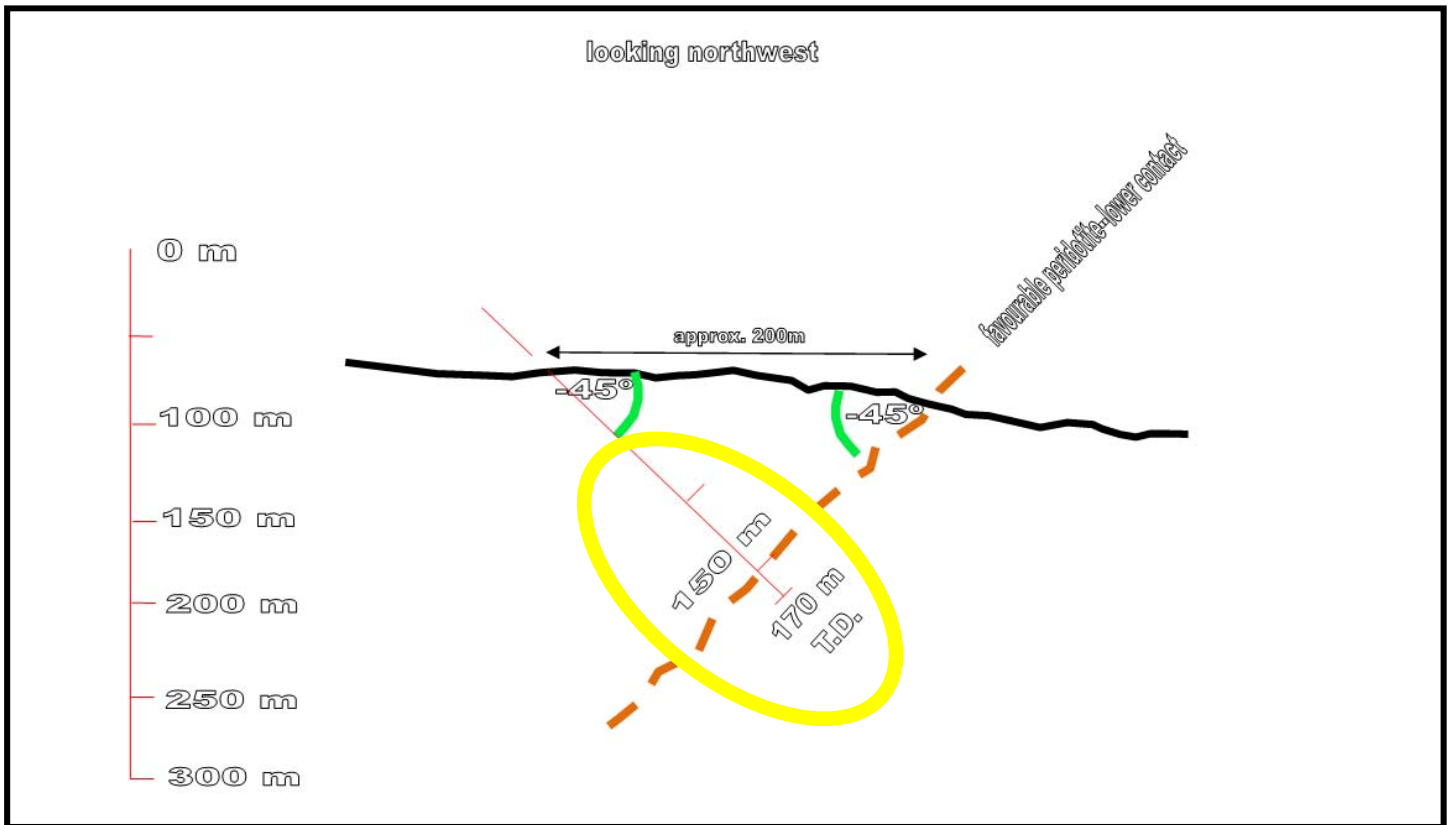


Where the Cu-Ni-PGE mineralization is expected to lie within the middle peridotite sill:



from: Clark, Moukhsil and Perreault, 2004,
"Nickel in the Ungava and New Québec
Orogens": Québec Exploration 2004

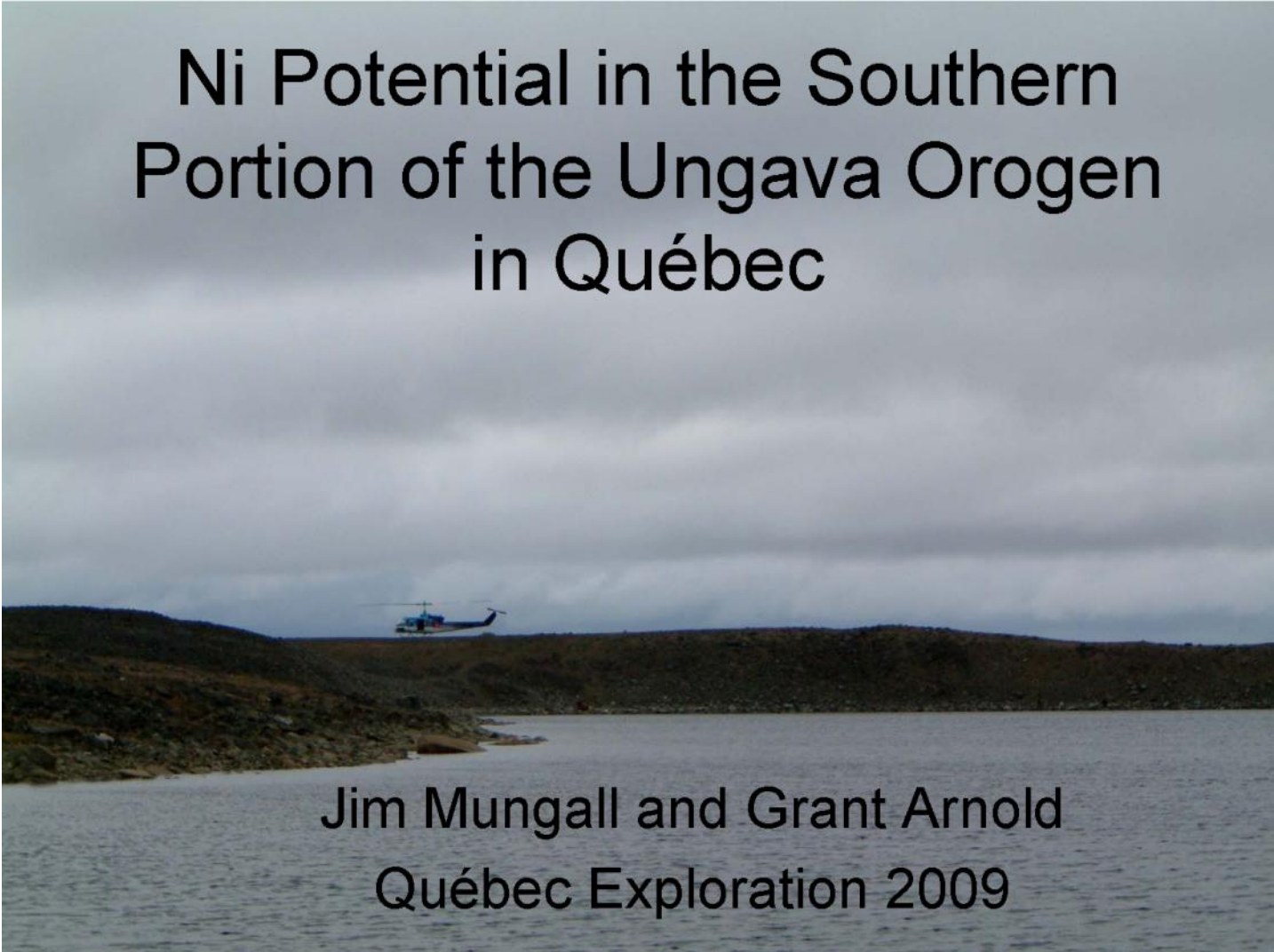
Drilling was successfully focused, and the target horizon was encountered in every hole:



This program was designed to investigate only the lower portion of the Retty Lake middle peridotite sill. The final two holes were drilled into the upper peridotite sill, and encountered thick disseminated sulfide intercepts. Assay results are pending.

The black shales on Rockland's Retty Lake Project are very organic-rich, and they contain meter-thick horizons of solid, bedded iron sulfides, believed to be syngenetic in origin. Where the base of the middle peridotite, (presumably a "fertile" magma for Cu-Ni-PGE), lies in direct contact with these sulfur-rich black shales, the best disseminated "net texture" sulfides tend to occur. This target zone gives the best potential to develop tonnage of Cu-Ni-PGE mineralization on Rockland's Retty Lake Project. Assay results are pending (as of 19Jun11). This recent presentation is critical to the understanding of Rockland Minerals' Retty Lake Project:

Ni Potential in the Southern Portion of the Ungava Orogen in Québec

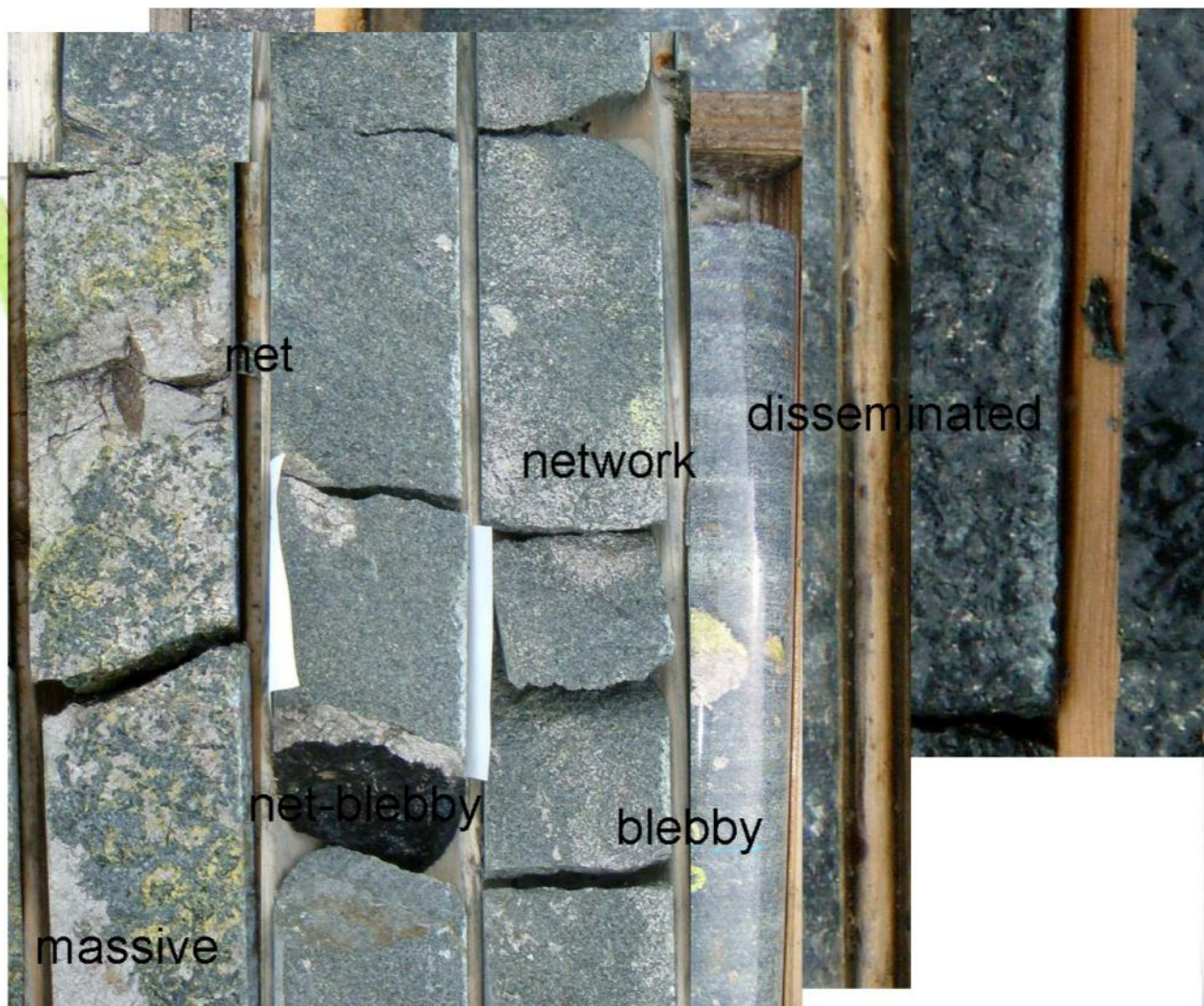


Jim Mungall and Grant Arnold
Québec Exploration 2009

from: Mungall and Arnold, 2009, "*Ni Potential in the Southern Portion of the Ungava Orogen in Québec*": Québec Exploration 2009

Ungava Core Photos --

Sulfide Textures at the Tootoo Deposit, southern Raglan District



from: Mungall and Arnold, 2009, "*Ni Potential in the Southern Portion of the Ungava Orogen in Québec*": Québec Exploration 2009

Compare to Retty Lake Core Photos (below)

Retty Lake Drill Core Sulfide Textures

Rockland, Retty Lake--DDH 849-3

Serpentinized, coarse grained peridotite with massive sulfide.



NOTE: in this photo and all subsequent photos, for approximate scale, core sticks are BTW diameter (44 mm)

"Net-Texture" Disseminated Sulfides

These massive, net, network, blebby and disseminated network, blebby textures are widely reported in the southern Raglan District, and many of the same textures were observed in the Retty Lake drilling. It is a widely held belief among geologists who work with these rocks that when sulfur-rich rocks are assimilated by the ultramafic magma, it causes trace amounts of Cu-Ni-PGE to "rain-out" as tiny droplets of dense sulfide liquid, which accumulates by gravity, and sometimes form economic metal deposits. Rockland believes that the "net texture" disseminated sulfides shows that these processes were at work to form the mineralization being sought after at Retty Lake.

Intrusive Sills (?) or Komatiite Flows (?)

The experts in worldwide Precambrian Cu-Ni-PGE deposits point out that this variable amount of plagioclase in the Retty Lake peridotites lead to their being classified as "picrites" instead of "komatiites". Despite the presence of significant Cu-Ni-PGE mineralization in these Retty Lake picrites, companies like Falconbridge in the mid 70's did not carry out follow-up exploration because of the perceived unfavourable magma chemistry.

The picrite magmas had different viscosity than the komatiite magmas. Instead of reaching the sea floor and erupting (like the komatiites), they were intruded as very high-level sills, or sheet-like bodies (*filón couche*). Workers in the southern Ungava observe extensive assimilation of host rocks, sulfide saturation along dyke walls, and ubiquitous sulfide collection on lower terminations in their picritic ("basaltic komatiite") hosts of Cu-Ni-PGE.

At Retty Lake we must pay careful attention to the lower contact of the middle peridotite. This is where the falling droplets of Cu-Ni-PGE sulfides end up.

Economic concentrations can occur if 1) the magma assimilated sulfur, and 2) there was sufficient refreshing of flowing magma to bring new metals.

Sulfides will accumulate in low areas along the floor of the magma chamber -- in this case the magma chamber is a cooling sheet of magma 50 meters or more thick. Workers observe what they interpret to be erosion of the lower sill contacts, and this is the place where assimilation of the sulfur-rich black shales occurs. Any irregularities along this surface can host sulfide accumulations -- hopefully economic.

The Geometry is Critical

From the Expo-Ungava Intrusive Suite drill core textures, geologists interpret disseminated "net-texture" sulfides to occur within the peridotites on dyke walls, and massive mineralization to occur on dyke bases. We have not identified any vertical, dyke-like or pipe-like structures at Retty Lake.

The Rockland Minerals Retty Lake Project drill core clearly shows assimilation textures in two places. The target middle peridotite changed composition to a "melanocratic gabbro", with strong evidence of assimilation of black shales. (These shales were very rich in sulfur.) This could indicate proximity to a feeder structure.

In addition to the assimilation textures, Rockland's Retty Lake Project drilling showed a "stacked" distribution of mineralized horizons in multiple sills -- another suggestion that there is probably some kind of feeder structure in the area.

Rockland, Retty Lake--DDH 849-4

Serpentinized, coarse grained peridotite with massive sulfide.



Rockland, Retty Lake--DDH 849-5

Cumulate-texture in coarse-grained peridotite, with disseminated "net texture" sulfides, oriented plagioclase seen in one case (poss. indicator of flow?).



Rockland, Retty Lake--DDH 849-6

Melanocratic gabbro -- contaminated peridotite, possibly at the border of a feeder structure(?). Note "salt-and-pepper" texture with tiny white plagioclase, and black shale fragments in melanocratic gabbro.



Summary:

Rockland Minerals has completed its 1,500 meter drilling program at the Retty Lake Cu-Ni-PGE Project in northern Québec. A total of 10 holes were drilled to explore for zones of disseminated and massive sulfide within the targeted middle peridotite sill in the NW Retty Lake area. The core is being shipped off-site to a core processing facility to be saw cut and sampled. Assay results are pending.

Initial logging of the core has revealed widespread disseminated sulfide mineralization with visible chalcopyrite (copper mineral) within the lower portion of the middle peridotite sill. In several instances, favourable "net-texture" sulfides were observed to be crystallized within cumulate-texture peridotite. Two drill holes found an unexpected rock type in place of the middle peridotite horizon. Instead of the ultramafic peridotite, there was a melanocratic gabbro, which indicates assimilation of the wall rock by the peridotite intrusion. This typically happens adjacent to feeder dykes, and suggests they may be nearby, although they have never been described at Retty Lake. Mineralization was also drilled in the upper sill, in addition to the widespread disseminated mineralization found in the middle sill. This confirms the presence of "stacked" mineralization at Retty Lake.

The Retty Lake property is on-trend with four adjacent copper-nickel-platinum group metal (PGM) lenses known as the "Blue Lake Deposits" -- originally outlined by Hollinger North Shore Exploration (Iron Ore Company of Canada) in the 1950's. Evidently, the Blue Lake Cu-Ni-Pt-Pd deposits were formed at or near the basal zone of the ("Middle") ultramafic peridotite, where the sill intrudes sulfur-rich metasediments. This favourable stratabound horizon runs for some ten kilometers or more, throughout the Rockland property, in a northwest-southeast trajectory. Rockland is looking forward to discovery of additional base metal - precious deposits within its Retty Lake property. Rockland is earning a 100% interest in the property from E.D. Black, Geologist.

Photographs of Retty Lake drill core textures and a brief geological write-up have been posted on Rockland's website at www.rocklandminerals.ca.