

GAC - CORDILLERAN SECTION

<http://www.gac-cs.ca>

Exploration Series “Early stage active Projects”

7:15 – 8:30 am, Tuesday June 5, 2012

BCIT Downtown Campus

Rooms 282-284, 555 Seymour Street, Vancouver, BC

Cost: \$15, Students \$5 – Pay at Door

RSVP: please pre-register by email at: morning_talks@gac-cs.ca

PYRAMID PORPHYRY CU-MO-AU PROJECT

**Discussion Leader: Jodie Gibson, P. Geo.
Full Metal Minerals Inc.**

The Pyramid Project is a significant new copper-gold-molybdenum porphyry discovery located near tidewater on the southwest Alaskan Peninsula. The project is a joint venture operation between Full Metal Minerals and Antofagasta Minerals and is entering its third year of activity. A total of 4244 m of diamond drilling in 17 holes have been completed to date; including 2576 m of drilling over 12 holes in 2011. Highlights from the 2010 & 2011 drilling programs include:

- . PY10-01: 467.6 metres @ 0.43% Copper Equivalent
- . PY10-05: 194.78 metres @ 0.63% Copper Equivalent
- . PY11-07: 104.0 metres @ 0.72% Copper Equivalent
- . PY11-010: 310.29 metres @ 0.53% Copper Equivalent
- . PY11-012: 208.00 metres @ 0.54% Copper Equivalent
- . PY11-014: 100.00 metres @ 0.76% Copper Equivalent
- . PY11-016: 155.94 metres @ 0.97% Copper Equivalent
- . PY11-017: 117.54 metres @ 0.81% Copper Equivalent

Porphyry Cu-Mo-Au mineralization at Pyramid is hosted within early Cretaceous siliciclastic sediments and late Miocene age quartz diorite to quartz feldspar porphyry stocks and dikes. Multiple porphyry centers have been identified through detailed mapping and drilling. The heart of the system is a magnetite rich potassically altered quartz diorite flanked asymmetrically and dominated by phyllic alteration in strongly hornfelsed sediments and intrusive rocks. Mineralized rocks are locally cut by a series of intra-mineral to late-mineral dikes and small stocks ranging in composition from quartz rhyolite porphyry to gabbro. The most important intra-mineral intrusives appear to be feldspar and quartz feldspar porphyry dikes.

Paragenetically, copper±gold mineralization appears to be an early event and developed within both intrusive and surrounding hornfels as diffuse sericite-quartz-chalcopyrite-clay-feldspar stockwork veins and veinlets, or ‘early halo veins’, similar to EDM (early dark micaceous) veins in well-known deposits such as Bingham Canyon, Butte, Chuquicamata, and Los Pelambres. The early halo veins are cross-cut by a series of “A” style quartz-feldspar-sulphide veins, “B” style quartz-molybdenite-pyrite veins, “C” style quartz-pyrite veins, and late “D” style pyrite-quartz veining. Anhydrite-sulphide veins are locally developed and appear to be part of a B-vein assemblage. Late stage chalcopyrite±pyrite veins are also developed in some portions of the hypogene mineralization. Molybdenum mineralization has been dated by Re-Os at approximately 6 Ma reflecting more recent igneous activity along the Alaska Peninsula.

Copper enrichment plays a vital role in the deposit as a supergene chalcocite±covellite±bornite blanket is well developed on the north, southwest, and southeast parts of the system. Enrichment true thickness is known to exceed 200m in some parts of the system and leached capping ranges between 0 and +100 m in thickness. Mineralization is open in all directions and the depth extent of hypogene mineralization has yet to be determined as most drilling has been focused on identification of the enrichment blanket.

A summary of the work and results, *intended to stimulate discussion of future efforts on the project*, will be presented.