

SEG WHISTLER 2013: GEOSCIENCE FOR DISCOVERY
Mesothermal Vein Hosted Gold – Bralorne Mining Camp: Western BC
Whistler to Bralorne
Saturday Sept 28, 2013

LEADERS:

Mike Tucker – Mineral Deposits Research Unit (MDRU) (mtucker@eos.ubc.ca)
Britt Bluemel – Mineral Deposits Research Unit (MDRU) (bbluemel@eos.ubc.ca)
Dr. Matt Ball – Bralorne Gold Mines LTD. (drmattball@bralorne.com)

WHERE: Bralorne, BC

WHEN: Saturday, September 28th, post-conference

COST: Covers transportation to and from site with lunch.

MINIMUM PARTICIPANTS: 10

MAXIMUM PARTICIPANTS: 24

GEAR: Comfortable hiking boots and outdoor clothing is recommended





Summary:

The Bralorne gold mine is located 241 kilometres north east of Vancouver and 11 kilometres northwest of Gold Bridge, British Columbia. The town of Bralorne is a historic town constructed to support mining operations. Historic mine workings include the Pioneer, Bralorne, King and Taylor-Bridge areas in the Bridge River gold district. A total of 30 veins were developed at the mines through a number of shafts and 80 kilometres of tunnels on 44 levels, the deepest of which traced the 77 vein to a depth of 1900 metres. From 1928 to 1971, the Bralorne, Pioneer and King mines produced 4.15 million ounces of gold from 7.9 million tons of ore processed through two 500tpd operations, the only deposit in the Canadian Cordillera to approach the production of major Precambrian Shield gold deposits.

The Bralorne Pioneer property is situated within the Bridge River mining district in southwestern British Columbia. The Bridge River district is located at a tectonic boundary between the Cache Creek and Stikine terranes. The Bridge River Terrane is comprised of Mississippian to Middle Jurassic accretionary complexes of oceanic basalt and gabbro and related ultramafic rocks, chert, basalt, shale and argillite. It is juxtaposed with Late Triassic to Early Jurassic island arc volcanic rocks and mostly marine, arc-marginal clastic strata of the Cadwallader Terrane (Hart et. al. 2008). The region has been intruded by cretaceous and tertiary volcanic rocks with the most significant bodies from the Coast Plutonic Complex. The district has been deformed by mid-Cretaceous contractional deformation and by oblique-sinistral deformation associated with the Bralorne-Eldorado fault system. Mineralization pre-dated or was synchronous with the emplacement of the Bendor batholith with the gold event overlapping initiation of dextral strike-slip on the regional fault systems in the region. The abundance of Au, Sb and Hg deposits and occurrences along the various main structures in the district indicated that the onset of dextral strike-slip in this part of the Cordillera facilitated wide spread fluid flow along the reactivated fault systems (Hart et. al. 2008).

Detailed Itinerary

- Depart Whistler at 6:30 am for Bralorne.
- Stop in Pemberton for Gas
- Travel to Bralorne, arrive at 9:00am
- Underground orientation at mine site
- Split in two groups of 12 for underground tour and surface tour.
- Lunch at Mineshaft Pub in Gold River at 12:00 pm
- Groups switch for afternoon for underground and surface tours.
- Depart Bralorne at 4:00 pm
- Return to Whistler for 7:00pm

