

The University of British Columbia SEG Student Chapter



New Zealand, April 20 - May 7 2006

Join us on a process-oriented geology tour of Au-deposits in New Zealand

- tours of geothermal, epithermal & mesothermal Au-deposits
- exploring modern analogues of ancient hydrothermal systems in a convergent margin setting

Martha Hill Mine tour - low-sulfidation Au

Coromandel epithermal systems
White Island active volcanism
Taupo/Rotorua geothermal systems
Tongariro National Park volcanoes
Marlborough Valley wine tasting
Reefton mesothermal Au-system
Alpine Fault & hydrothermal flow
Otago mesothermal Au-systems

Macraes Mine tour
- mesothermal Au

New Zealand 2006

The Society of Economic Geologists (SEG) Student Chapter at the University of British Columbia is organizing a two week field trip to New Zealand from April 20 to May 7. We will visit ancient examples and modern analogues of the hydrothermal systems that form mesothermal and epithermal gold (± copper) deposits in a convergent margin setting. Trip highlights include,

- 1. Tours of New Zealand's two largest gold mines, the world-class Martha Hill Mine, a classic vein-hosted low-sulfidation epithermal deposit (~9M oz Au) and the Macraes mine, a shear-zone hosted mesothermal Au-deposit (~6M oz Au).
- 2. White Island volcano, an active example of a high-sulfidation porphyry-Cu magmatic-hydrothermal system.
- 3. Active geothermal systems of the Taupo Volcanic Zone where fluids are actively precipitating gold at the surface (e.g., Champagne Pool at the Waiotapu spring).
- 4. Otago schists, containing several mesothermal gold deposits.
- 5. The Alpine fault system in the Southern Alps where recent gold mineralization from mesothermal depths is being actively exhumed.

The UBC SEG Student Chapter would like to extend an invitation for industry geoscientists to join us in this unique opportunity to gain an insight into character of, and controls on, Au-mineralization in the mesothermal, epithermal and geothermal environments of an active convergent margin. The industry price will include return airfares to New Zealand, ground transportation and accommodation, and will help subsidize the cost for students.

PROPOSED ITINERARY

Day	Date	Location	Activity
1	April 20	Depart Vancouver	Fly to NZ - lose day crossing International Dateline
2	April 22	Arrive Auckland	Sightseeing in Auckland; welcome dinner
3	April 23	Waihi	Tour of Martha Hill Mine - low sulfidation system
4	April 24	Coromandel	Visit Karangahake and Golden Cross Au-deposits
5	April 25	White Island	Boat trip out to White Island - high sulfidation system
6	April 26	Rotorua	Sightseeing - Mt Tarawera - hot springs
7	April 27	Rotorua-Taupo	Visit to Wairakei and other geothermal fields
8	April 28	Tongariro national park	Tour of modern volcanic processes and products
9	April 29	Ohakune to Picton	Drive to Wellington - ferry to Picton
10	April 30	Marlborough	Tour of wineries
11	May 1	Reefton-Greymouth	Mesothermal Au-deposit at Reefton; Transcurrent faults
12	May 2	Westcoast-Haast	Alpine Fault system
13	May 3	Queenstown	Sightseeing, bungee jumping, jet boating
14	May 4	Ranfurly	Mesothermal -Au-deposits
15	May 5	Macraes Mine	Tour of Macraes Mine - shear zone hosted mesothermal-Au
16	May 6	Christchurch	Travel to Christchurch, sightseeing
17	May 7	Christchurch-Vancouver	Fly to Canada - gain day crossing International Dateline

Estimated industry price CN\$3900

For more information visit our web site at, http://www.mdru.ubc.ca/home/resources/2006nz.php or email Ken Hickey at khickey@eos.ubc.ca