



FT06 - Active and Extinct Epithermal Environments of the North Island, New Zealand (Provisional, subject to booking confirmation)

Date: October 2-7, 2015

Location: Departing from and returning to *Auckland, New Zealand*

Leaders: Stuart Simmons, Tony Christie

Attendee Maximum: 35

This excursion provides an overview of the volcanic-tectonic setting, hydrology, fluid chemistry, alteration and mineralization of sub-aerial hydrothermal systems and their epithermal ore-forming environments. Unique is the opportunity to observe precious-metal transport and deposition in the Champagne Pool, and to see the interplay of magmatic and hydrothermal processes. The itinerary includes visits to hot spring areas and steamfields in the Taupo Volcanic Zone, Tongariro National Park, and epithermal Au-Ag deposits in the Coromandel peninsula.

The first two days include stops at the Karangahake gorge and Waihi in the Coromandel goldfields to view the world class Martha Hill deposit and to gain a 3D understanding of mineralization and alteration. The next two days are based out of Rotorua, with visits to the Orakeikorako, Waimangu, and Waiotapu thermal areas, the Broadlands-Ohaaki and Wairakei steam-fields, and the Ohakuri epithermal Au-Ag prospect. The last two days focus on the geology and hydrothermal activity of Taupo and Tongariro volcanic centers, providing spectacular views of a large rhyolitic caldera and tall andesitic stratacones.

Stuart F. Simmons
Hot Solutions Ltd, Auckland, New Zealand

Tony Christie
GNS Science, Lower Hutt, New Zealand



Friday, October 2, 2015 - Auckland Meeting Point

7:30am: Central Business District Auckland:
Cophthorne Hotel Auckland Harbour City
196-200 Quay Street, Auckland 1010, New Zealand
www.millenniumhotels.co.nz/cophthorneharbourcity, +64 93770349
Stop 1: Kawakawa Bay-Firth of Thames: Exposures of meta-sedimentary basement units
Stop 2: Karangahake gorge

Overnight: Waihi

Saturday, October 3, 2015

8:30am: Depart
Stop 1: Martha Mine, Waihi
Stop 2: Rotorua

Overnight: Rotorua

Sunday, October 4, 2015

7:30am: Depart
Stop 1: Orakeikorako thermal area
Stop 2: Waiotapu thermal area

Overnight: Rotorua

Monday, October 5, 2015

8:00am: Depart
Stop 1: Wairakei Steamfield
Stop 2: Craters of the Moon
Stop 3: Huka Falls
Stop 4: Broadlands-Ohaaki
Stop 5: Waimangu thermal area

Overnight: Rotorua



Tuesday, October 6, 2015

8:00am: Depart
Stop 1: Ohakuri Dam
Stop 2: Taupo Volcano
Stop 3: Tongariro National Park

Overnight: Tongariro National Park

Wednesday, October 7, 2015

8:00am: Depart
Stop 1: Silica Rapids
12:00pm: Depart
6:00pm: Arrive to Auckland and drop off at Copthorne Hotel

Copthorne Hotel Auckland Harbour City
196-200 Quay Street
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