

*Field Excursion*  
**Active and Extinct Geothermal Systems  
& Epithermal Environments  
of the North Island, New Zealand**

In affiliation with the AusIMM Conference, Auckland, 2010

**28 November to 4 December, 2010**

***Leaders: Stuart F. Simmons & Tony Christie***

Contact for more information: [stuart@hotsolutions.co.nz](mailto:stuart@hotsolutions.co.nz)

Maximum Cost: \$NZ 2750 (ex-Auckland) includes transport (by bus or coach), accommodation (twin share), meals, and entry to thermal areas.

Field trip starts and finishes in Auckland.

**SCOPE**

The goal of this excursion is to provide an overview of the volcanic-tectonic setting, hydrology, fluid chemistry, alteration and mineralization of sub-aerial hydrothermal systems and their energy and mineral resources. The itinerary includes visits to hydrothermal systems in the Taupo Volcanic Zone, Tongariro National Park, and epithermal Au-Ag deposits in the Coromandel peninsula.

**Provisional Itinerary**

28 November: Coromandel Peninsula site of ~50 epithermal Au-Ag deposits; drive Auckland to Waihi (overnight Waihi).

29 November: Examine Tertiary epithermal mineralization in andesitic volcanics. Visit to Martha Hill is planned pending permission from mine operations. Drive Waihi to Rotorua (overnight Rotorua).

30 November: Drive to Whakatane and take helicopter to White Island (20 minute flight, 90 minutes on the Island). Alternate dates will be utilized if weather is inclement for air transport.

1 December: Visits to Orakeikorako and Waiotapu thermal areas to see a diversity of thermal features including the Champagne Pool where gold and silver are now actively precipitating; (overnight Rotorua).

2 December: Visits to producing steam-fields at Wairakei and Broadlands-Ohaaki; visit Waimangu in the afternoon which formed new hot springs, geysers and hydrothermal eruptions in the aftermath of the 1886 volcanic eruption of Mt Tarawera; (overnight Rotorua).

3 December: Overview Rotorua thermal area and visit to the Ohakuri epithermal Au prospect where geothermal activity extinguished about 30,000 years ago. Drive past Taupo Volcano to the Tongariro National Park; (overnight National Park).

4 December: Tongariro National Park to Auckland, return by late afternoon.