Epithermal gold field trips and workshop

Broken Hills epithermal gold deposit
Friday 14 September, pm

A half day (afternoon) visit to the Broken Hills underground gold mine located southeast of Tairua in the eastern Coromandel Peninsula. Gold-silver mineralisation is present in several north striking, narrow quartz veins hosted in rhyolite flow and pyroclastic rocks. Underground exposures of the veins provide a striking contrast in vein styles and minerals compared with the larger veins in andesite hosted deposits at Karangahake and Waihi visited by a separate field trip the following day (below). The tour provides background for the Epithermal Gold Forum workshop on Sunday 16 September.

Please register your interest and for additional details by emailing t.christie@gns.cri.nz
Karangahake and Waihi epithermal gold deposits  
Saturday 15 September, am and pm

Full day tour visiting the two largest gold deposits in the Hauraki Goldfield. At Karangahake, we will visit exposures of quartz veins and hydrothermally altered rocks in the Karangahake Gorge, particularly in the spectacular Windows Walkway. New Talisman Gold Mines is currently developing an underground mine above the gorge. At Waihi, we will have an overview of OceanaGold’s Martha open pit mine to view exposure of the Martha vein system and locations of other veins in the broader Waihi vein system. The visit will also include inspection of drill core from the Waihi vein system where exploration by OceanaGold continues to find new veins for underground mining. This tour provides background for the Epithermal Gold Forum workshop on Sunday 16 September.

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Discussion over drill core in OceanaGold’s core logging room, Waihi.

Rotowaro/Maramarua coal field trip

Sunday 16th of September

A day visit to the two major coal mining sites in the North Island, Maramarua and Rotowaro, both opencast mines operated by BT Mining.

The Rotowaro Mine, with an annual production of 700 Kt, is the second largest opencast coal mine in New Zealand. It is located in an area that has had a long history of both opencast and underground mining. The coalfield was first mined in 1915 after a branch railway and a bridge were established over the Waikato River. The current opencast mine opened in 1958 and
produces low ash, low sulphur thermal coal. Both the lower seam and upper seam of the moderately complex Waikato coal measures are present.

Maramarua has a long history of coal mining with an opencast mine first being developed at the site in 1948, with modest quantities extracted since that time. The current operation commenced in June 2015, with significant project capital being injected into the site infrastructure to re-establish operations. Coal mining recommenced in October 2017 and has an annual production of 150 kt. The coal produced at Maramarua has a low sulphur and ash content, making it ideal for steel production. The most significant customers for Maramarua’s coal are local dairy plants and the Glenbrook steel mill.

Figure 1: Rotowaro coal mine
Epithermal gold workshop
Sunday 16 September, am and pm, Tauranga

This one-day workshop will follow a similar format to the highly successful Otago Explorer’s Forum at the 2017 AusIMM NZ Branch Annual Conference and will consist of three sessions of presentations, each followed by a discussion session, and then a final discussion session in breakout groups. The day will end with the groups coming together for reporting and a final discussion session. The workshop will address key features of New Zealand’s epithermal deposits and their exploration, with several case histories. A focus will be the controls on localisation and style of mineralisation at district and local scales, identifying exploration challenges and knowledge gaps that could be addressed by future research.

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