

Indications of gold deeper on margins of Waihi gold system

4 September 2009 - Prospective gold targets in the near-mine areas of the Waihi district may be located deeper on the edges of the fossil geothermal system, Newmont Waihi Gold's project geologist for near mine exploration, Jackie Hobbins says.

In a paper presented to the Queenstown conference of the New Zealand branch of AusIMM she says that consistencies in the geometry of known veins and controlling faults allow predictive inferences to be made about the likely location of new vein positions in untested areas.

Geochemical and paleotemperature zonation within the Waihi vein-hosted deposits appears to be subparallel to the stratigraphy. This suggests that both stratigraphy and ore horizons are draped over a central high.

"The influence of pre-existing fault geometry and volcanic stratigraphy on the location of known veins suggest that there is untested potential in the Waihi district for vein occurrences," she says.

"This is both at the margins of east-north-east trending extensional basins, analogous to Martha and for north to north-east trending veins such as Favona located in fractures that are concentric or tangential to the host volcanic edifice."

She also says that some surprising results have also been produced from low-detection geochemical analysis of soils indicating strong anomalous gold and mercury signatures directly over known veins located beneath more than 40 m of postmineral ignimbrite. More work is required to assess potential for this method.

The current Favona underground mine was discovered in 2001 under more than 50 m of postmineral cover.

She says the total gold endowment of the Waihi epithermal vein system is estimated to be in excess of 12 million ounces, including 7.5 million ounces mined to December 2008.

Sources: Newmont Waihi Gold and Lindsay Clark

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