

APPENDIX 1-F

Underground Geological Cross Section

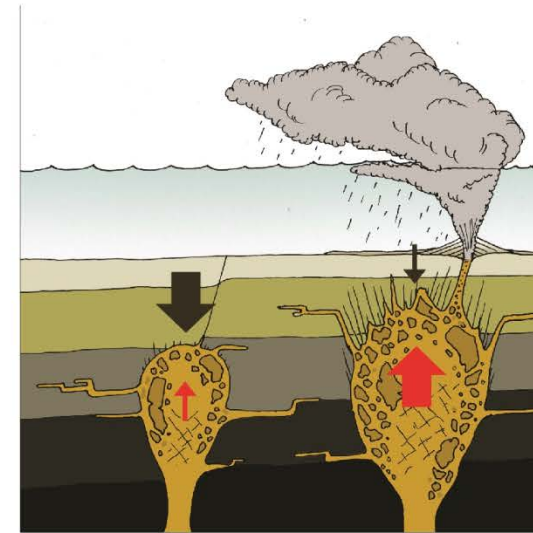
Red Mountain

1. Mineralisation in the Marc Zone appears to be found where the Hillside Porphyry passes through interbedded mudstone units, suggesting some chemical affiliation between gold and carbonaceous sediments.
2. Goldside Porphyry units were later and often cross-cut the earlier Hillside units. The occurrence of Goldside units is equivalent to Hillside intrusives.
3. It is apparent that both porphyry units shared the same source, but are likely developing different textures due to fractionation and segregation of minerals in the magma chamber.
4. Hillside units found in higher younger, volcanic-dominated sediments do not mineralise as well, bolstering the idea that gold is related to available carbon in the host rocks.
5. Dykes of material, especially Hillside, are common and often follow bedding of older units. These were emplaced when the sediments were still wet and relatively young.
6. Pebble Dykes have been observed in both core and in the field. These illustrate phreatic processes were in play, and that the rising magmas were heating water in the sediment pile resulting in massive steam explosions.
7. Rafts of mineralised sedimentary wall rock is common, and can present a significant volume.

Lost Valley

8. Early Tertiary granodiorites were emplaced long after the Red Mountain mineralisation had ceased. This new phase consists of nested granitic plutons, and although much younger in age, they have been emplaced in older sediments than the Marc Zone. This type of pluton forms the core of Lost Valley and Lost Mountain.
9. Mineralisation in the Lost Valley Zone seems to be more structurally controlled, with mineral-rich fluids exploiting conduits such as regional faults that likely formed in the Late Cretaceous.

Formation and Mineralisation of The Red Mountain Project Area, including Lost Valley



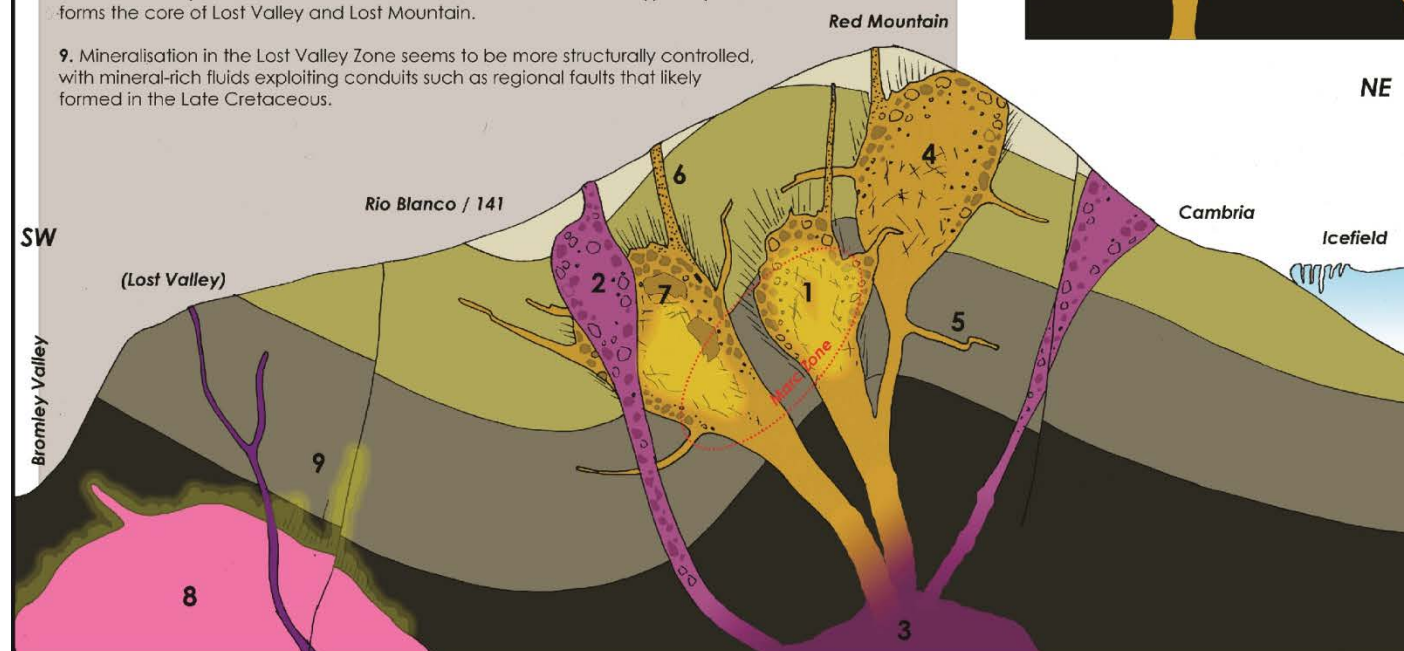
Explosive Beginnings

The Hillside Porphyry units would have intruded into seafloor sediments during the Jurassic, which would have been waterlogged and malleable.

The weight of the overlying sediment pile and water column will, for a time, constrain the intrusion, but eventually the build up of magma and the production of steam leads to a phreatic explosion and rapid depressurisation of the magma chamber.

Rock fragments, magma and steam rush to the sea bed through relatively narrow pipes, forming pebble dykes. The sudden drop in pressure fractures the host rock where brittle enough, forming sheeted veins and stockworks.

The original orientation of the intrusions is later altered by tectonic forces, and they become filled with bedding.



Legend

General Stratigraphy

- Volcanic Sediments
- Siltstone with Volcanics
- Interbedded Mudstones
- Argillite
- Granodiorite (Eocene)
- Goldside Porphyry (Jurassic)
- Hillside Porphyry (Jurassic)
- Andesite Dykes

Textural Features

- Breccia, Chamber Walls
- Breccia, 'Crackle' Texture
- Massive Porphyry
- Sheeted / Stockwork Veins
- Pebble Dyke
- Mineralised Porphyry
- Mineralised Halo

A. Randell, 2017

Red Mountain Underground Gold Project

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