
The Chilcotin Group overlies and buries 55,500 km² of the Intermontane Belt, including potential mineral and hydrocarbon reserves in the Quesnel Trough and Nechako Basin respectively. Exploration within the area covered by the Chilcotin Group has been hindered by a lack of geological data concerning the thickness and distribution of the basalt and on the nature and degree of weathering of the basement rocks. Few mineral deposits are recorded in MINFILE and a corresponding lack of staked land.

As part of our ongoing efforts to constrain the thickness and lateral distribution of the Chilcotin Group we present the results of our analysis of water well records to map:
1. the thickness of Quaternary drift, and
2. the thickness of the Chilcotin Group basalts.

We have analyzed over 10,000 water well records to collect data on drift thickness, and the thickness of basement encountered. Subsequently, we examined the lithological logs provided and assessed the quality of these records. Finally, we attempted to distinguish Quaternary from Cretaceous. We have used a digitizing program to digitize the thickness of the well is analyzed, and contoured to represent the thicknesses of the Quaternary drift and the Chilcotin basalt. These maps will be useful to both mineral and industrial mineral explorists by outlining areas of thick and thin Quaternary and Chilcotin Group cover.

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The Chilcotin Group is typically less than 30 m thick across most of its distribution (for more on distribution see poster by J Dohaney). "Hot-spots" (~ 2,000 km²) are identified in the Williams Lake rarely exceed 30 m.

Quaternary drift is typically 10 - 30 m thick across most of the Interior Plateau region. Two areas of thicker drift are identified: (1) a "hot-spot" under Prince George (~ 8,000 km²; < 90 m thick); and (2) the area along the Fraser River Valley between Quesnel and Williams Lake (< 50 m).