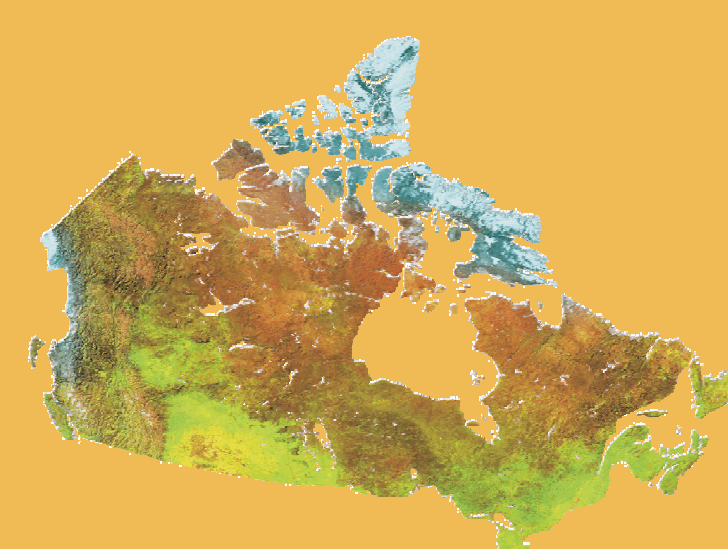




## Depth to basement beneath the Chilcotin Group basalts, BIZ and QUEST project areas south-central BC (0920, P, 093A, B, C, F, G, J, K, M, N, O).

Profondeur du socle sous les basaltes du groupe de Chilcotin dans les régions des projets de BIZ et Quest, centre-sud de la C.B. (0920, P, 093A, B, C, F, G, J, K, M, N, O).



**G.D.M. Andrews and J.K. Russell**

EOS, UBC, Vancouver; 6339 Stores Road, Vancouver, B.C. V6T 1Z4; email: gandrews@eos.ubc.ca



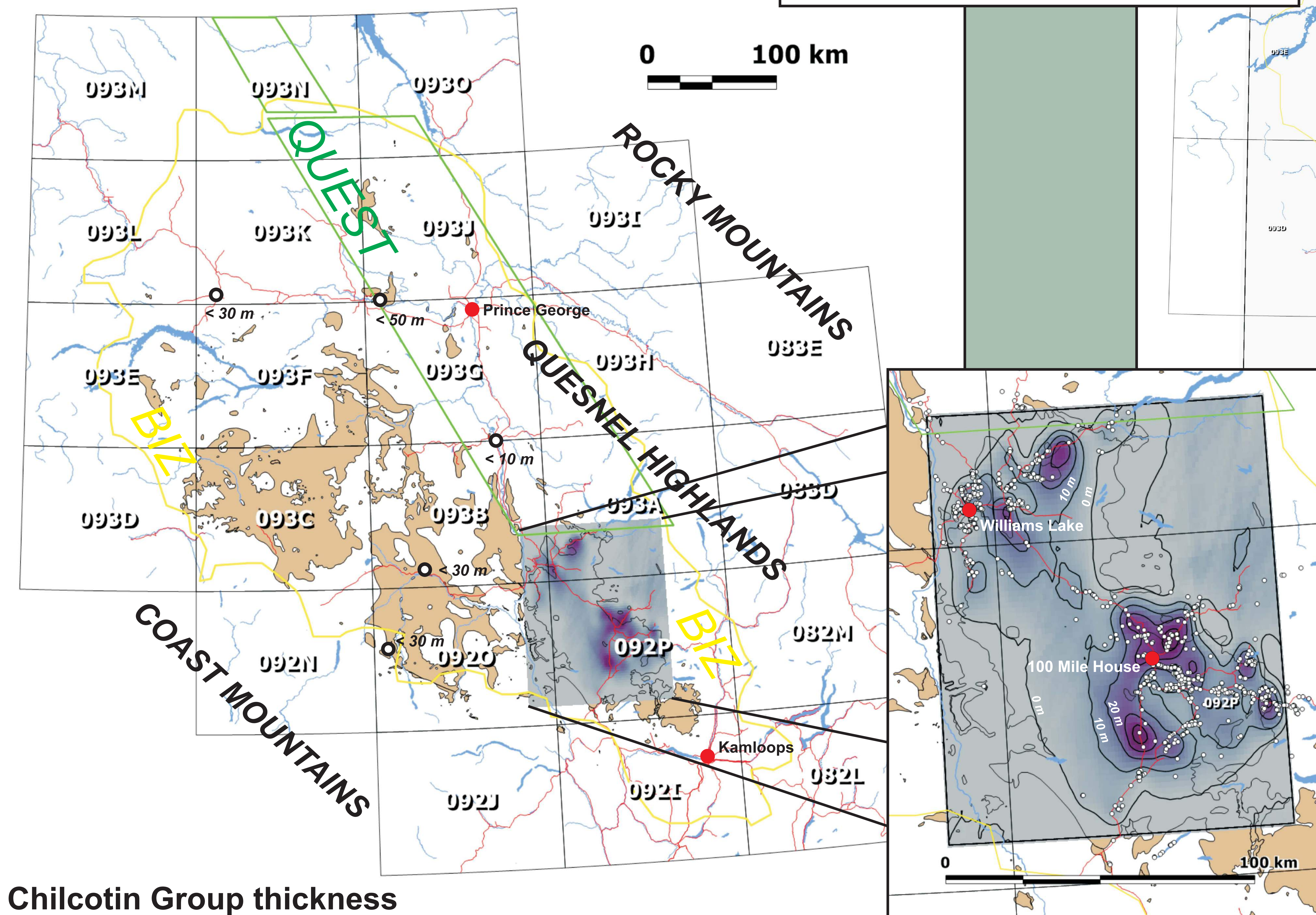
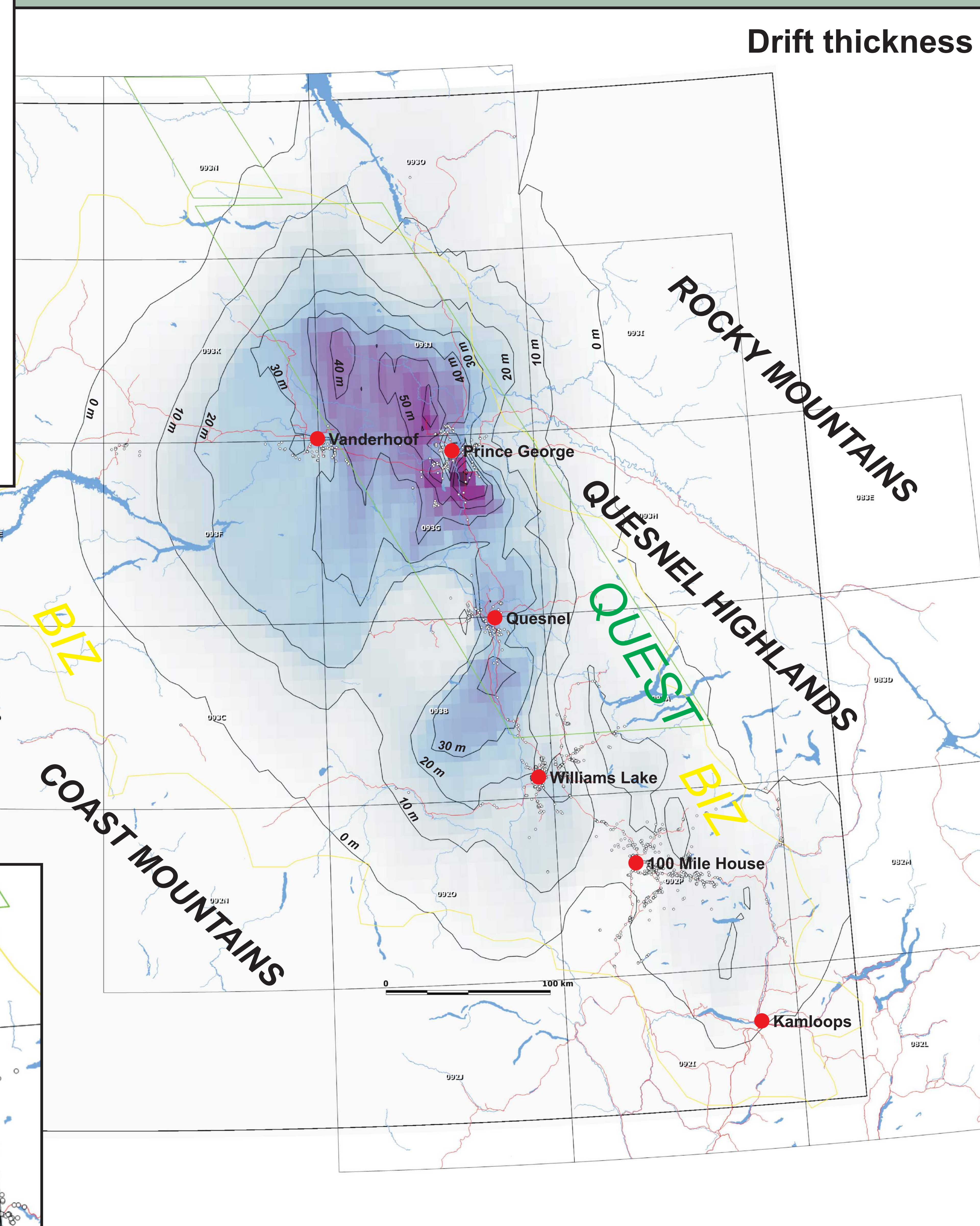
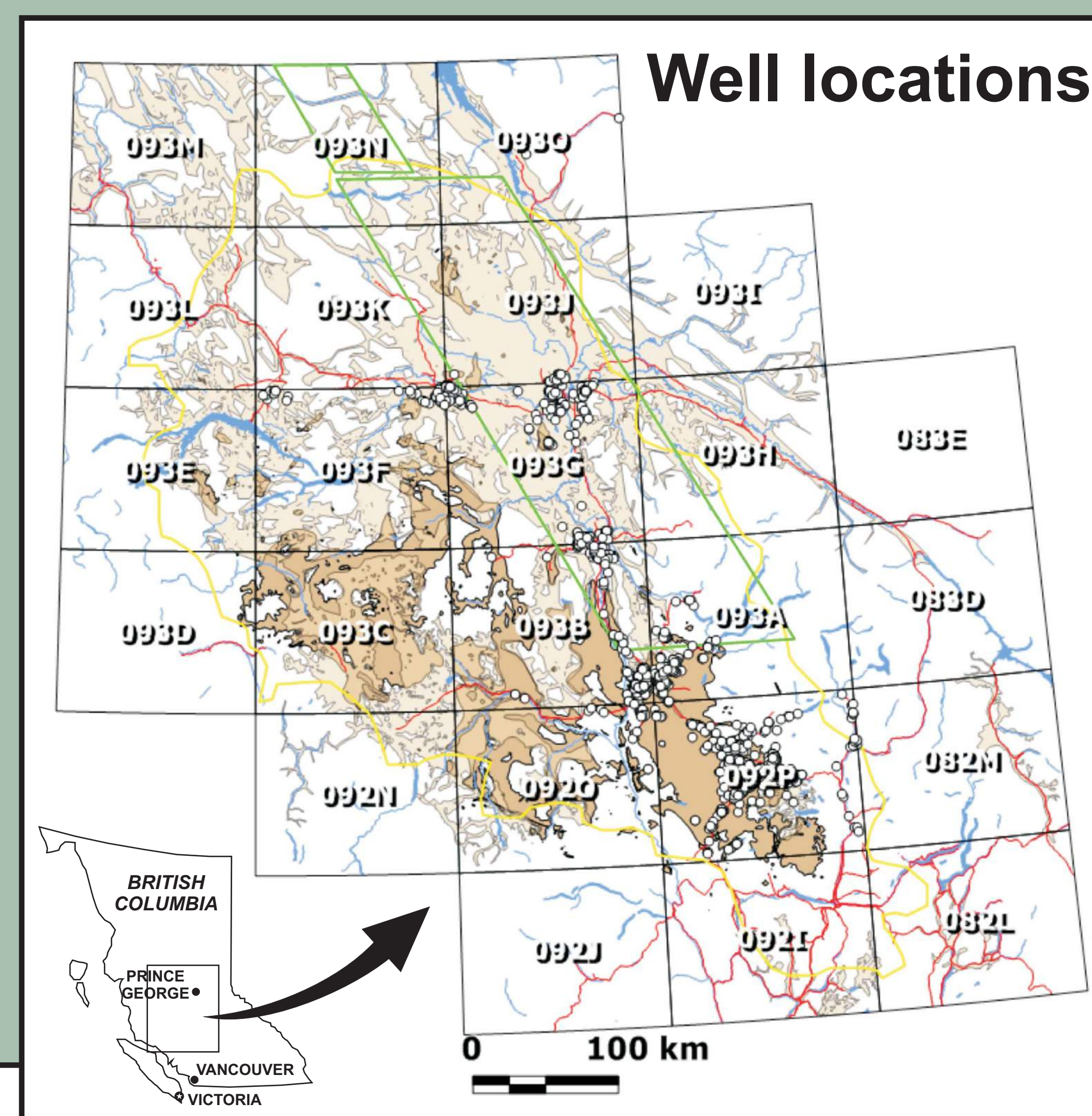
The Chilcotin Group overlies and buries 55,500 km<sup>2</sup> of the Intermontane Belt, including potential mineral and hydrocarbon reserves in the Quesnel Trough and Nechako Basin respectively. Exploration within the area covered by the Chilcotin Group has been hindered by a lack of geological data concerning the thickness and distribution of the basalts, and on the nature and depth of the basement; as a result there are very few mineral deposits recorded in MINFILE, and a corresponding lack of staked land.

As part of our on-going 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 the:

- 1 the thickness of Quaternary drift, and
- 2 the thickness of the Chilcotin Group basalts,

We have analysed over 10,000 water well records to collect data on drift thickness, and the thickness of bedrock encountered. Subsequently we examined the lithological logs provided and assessed the quality of these records. Finally we attempted to distinguish basalts from other lithologies. We present a series of maps showing the positions of the wells analyzed, and contoured to represent the thicknesses of the Quaternary drift and the Chilcotin Group. These maps will be of interest to both metal and industrial mineral explorationists by identifying areas of thick and thin Quaternary and Chilcotin Group cover.

Geoscience BC project 2006-003



### Chilcotin Group -

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 km<sup>2</sup>) are identified in the Williams Lake and 100 Mile House areas, with extensive *thin* areas between them. Elsewhere, maximum thicknesses rarely exceed 30 m.

### Quaternary Drift -

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 km<sup>2</sup>; < 90 m thick); and (2) the area along the Fraser River Valley between Quesnel and Williams Lake (< 50 m).