

Characteristics of Natural Water Quality in Alberta

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Abstract

Resource development in Alberta has in many cases led to concerns over potential impacts on shallow potable aquifers. However, after development has initiated, it can be difficult to distinguish industrial impacts from naturally occurring poor water quality in the absence of baseline studies. Analyses of water quality data from over 26,000 groundwater samples reported in the Groundwater Information Centre of Alberta Environment allows characterisation of regional characteristics of water quality in the province. An overview of results will be presented that provides a preliminary overview of variability in groundwater geochemistry and associated natural controls on water quality within Alberta.