

Enhancing Alberta's Groundwater Monitoring for Unconventional Oil and Gas Developments

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Abstract

Alberta is well placed to take North America forward in the unconventional oil and gas (UCOG) sector. Given the trillions of cubic feet of shale gas and associated liquids, development of these resources will generate significant economic benefit for the province, and provide a clean energy source for end users. On the other hand, concern is mounting regarding the potential impacts of UCOG development, associated hydraulic fracturing activities on non-saline groundwater resources, and connected systems. The GoA has recognized this concern, and has responded in kind by working to enhance the provincial groundwater observation well network (GOWN). This presentation will showcase the multi-criteria analysis approach designed to assess subsurface risk and surface access opportunity to assist with optimal placement of future groundwater monitoring.