

Water Well Testing Prior to Drilling

Catherine Main, Alberta Innovates – Technology Futures
GL 914051

In April 2006 Alberta Environment instituted standard for baseline water well testing for coalbed methane/natural gas in coal operations. This was followed by gas sampling requirements for baseline water well testing for coalbed methane/natural gas in coal operations in June 2006. This standard (and its ERCB D35 counterpart) directs companies to yield test and sample water and gas from domestic water wells within 600 m of new CBM wells.

Jurisdictions in the USA do not have any legislated requirement for companies to perform pre-drilling water well testing (with the exception of Colorado). Many companies elect to do testing of water wells prior to CBM drilling. The proposed research by the Alberta Research Council (ARC) will examine the pre-drilling water well testing (both legislated and voluntary) in other jurisdictions, predominantly within the basins in the USA. The proposed research will also examine the appropriateness of using domestic water wells as sampling points given the unknown and variability associated with these wells. The variability of domestic water well data for the

San Juan, Piceance and Raton Basins in the USA will be examined. Some temporal data from the Alberta D35 water well testing also exists and may be available for analysis. Variability of data from domestic water wells will also be compared to the variability measured in dedicated monitoring wells from Alberta and the western USA basins.

Final Report

2011 Presentation: Project Review