An Overview of Hydraulic Fracturing

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Abstract

This presentation will provide an overview of hydraulic fracturing, a technique employed by industry to extract oil and gas from unconventional reservoirs like the Bakken Play. It will include an explanation of conventional and unconventional oil and gas reservoirs, why hydraulic fracturing is needed, how horizontal drilling and hydraulic fracturing are conducted, common fracturing fluid components and what the real risks are (or are not) from this practice. The presentation will be largely non-technical and geared towards the general public.

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Bethany Kurz is a Senior Research Manager within the Energy & Environmental Research Center's (EERC's) Oil and Gas Research Group. Ms. Kurz's principal areas of interest and expertise include the evaluation of water supply sources for the oil and gas industry, evaluation of conventional and unconventional materials for use in hydraulic fracturing, produced water management, and characterization of geologic media for carbon storage and/or CO2-based enhanced oil recovery. Ms. Kurz also oversees several of the EERC's analytical research laboratories. Ms. Kurz received an M.S. in Hydrogeology from the University of North Dakota in 1998 and a B.S. in Geochemistry from Bridgewater State University, Bridgewater, Massachusetts, in 1995.