

## **Overview of the Bell Creek combined CO<sub>2</sub> storage and CO<sub>2</sub> EOR project**

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The Plains CO<sub>2</sub> Reduction (PCOR) Partnership, led by the Energy & Environmental Research Center, is working with Denbury Onshore, LLC (Denbury), on a combined carbon dioxide (CO<sub>2</sub>) enhanced oil recovery (EOR) and CO<sub>2</sub> storage demonstration project in the Bell Creek oil field in Montana, USA. This project will evaluate the potential for combined CO<sub>2</sub> EOR and CO<sub>2</sub> storage, which will reduce net CO<sub>2</sub> emissions while simultaneously recovering an anticipated 35 million barrels of incremental oil. Denbury will source approximately 1.4 million cubic meters of CO<sub>2</sub> a day (>1 million tons a year) from the Lost Cabin gas-processing plant in Wyoming, transport it to the Bell Creek oil field via pipeline, and inject it into the Cretaceous Muddy Formation. The injection activities at Bell Creek are scheduled to begin in the first quarter of 2013.

The Bell Creek demonstration project will provide an opportunity to develop cost-effective monitoring, verification, and accounting (MVA) protocols for a combined CO<sub>2</sub> EOR and storage project in a clastic formation. To aid in this effort, a monitoring and characterization well was completed in January 2012. The primary objective of this program is to obtain critical data to verify site security and assess variances within the predicted injection program. The PCOR Partnership's philosophy is to combine site characterization, modeling, risk assessment, and MVA strategies into an iterative process to produce descriptive integrated results.