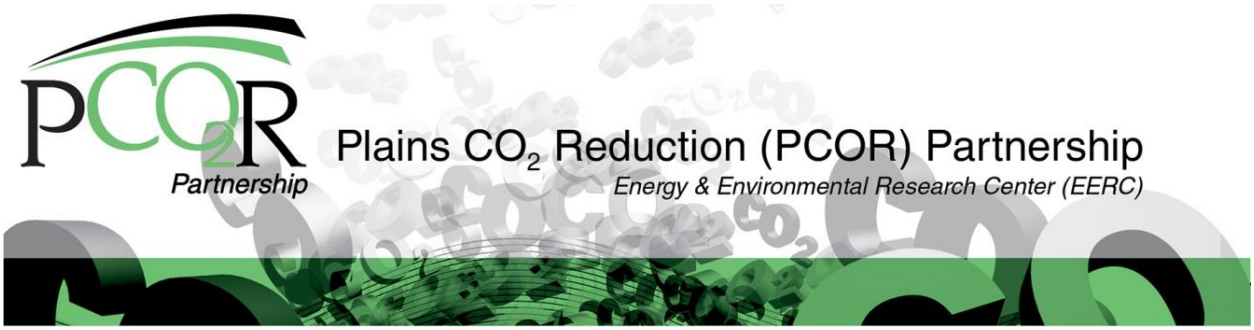

BELL CREEK TEST SITE – COMPLETION OF 2.75M METRIC TONS OF CO_2 STORED

Plains CO_2 Reduction (PCOR) Partnership Phase III
Task 9 – Milestone M58

Prepared for:

Andrea M. Dunn

National Energy Technology Laboratory
U.S. Department of Energy
626 Cochrans Mill Road
PO Box 10940
Pittsburgh, PA 15236-0940

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Prepared by:

Charles D. Gorecki
Nicholas S. Kalenze
John A. Hamling

Energy & Environmental Research Center
University of North Dakota
15 North 23rd Street, Stop 9018
Grand Forks, ND 58202-9018

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

BELL CREEK TEST SITE – COMPLETION OF 2.75M METRIC TONS OF CO_2 STORED

BACKGROUND

The Plains CO_2 Reduction (PCOR) Partnership is one of seven Regional Carbon Sequestration Partnerships competitively awarded by the U.S. Department of Energy (DOE) National Energy Technology Laboratory in 2003 as part of a national plan to mitigate greenhouse gas emissions. The PCOR Partnership is led by the Energy & Environmental Research Center (EERC) at the University of North Dakota and includes stakeholders from the public and private sectors. The PCOR Partnership region includes all or part of nine U.S. states and four Canadian provinces.

Phase III, the development phase, is a 10-year effort (2007–2017) that extends the characterization (Phase I) and validation (Phase II) phases. Currently, the Phase III efforts of the PCOR Partnership include a large-volume demonstration test in the United States (the Bell Creek project). The demonstration test focuses on injecting commercial-scale volumes of carbon dioxide (CO_2) into deep geologic formations for CO_2 storage.

Many different aspects of carbon capture and storage will be evaluated during the demonstrations, ranging from CO_2 capture, compression, and pipeline transport to injection, recycle; and monitoring, verification, and accounting.

2.75M METRIC TONS OF CO_2 STORED AS OF DECEMBER 2015

The PCOR Partnership, led by the EERC, is working with Denbury Onshore LLC (Denbury) to study CO_2 storage associated with a commercial enhanced oil recovery (EOR) project at the Denbury-operated Bell Creek oil field located in southeastern Montana. Denbury is managing all injection, production, and recycle activities as part of its commercial CO_2 EOR operation. The EERC, through the PCOR Partnership, is studying the behavior of reservoir fluids and injected CO_2 to demonstrate safe and effective CO_2 storage associated with a commercial EOR project. The PCOR Partnership is developing practices and technologies that will allow future commercial-scale CO_2 storage projects to make informed decisions regarding site selection, injection programs, operations, and monitoring strategies that maximize storage efficiency and effective storage capacity in clastic geologic formations.

This milestone marks that 2,750,000 metric tons of associated CO_2 has been stored at the Bell Creek oil field, which occurred in December 2015. The CO_2 is sourced from the Lost Cabin gas-processing facility, which processes gas from the Madden Field in the Wind River Basin of Wyoming, and the Shute Creek gas-processing facility, which processes gas from the LaBarge Field in the Green River Basin of Wyoming. Associated CO_2 storage volumes have been calculated on a monthly basis since the start of injection in May 2013 using custody transfer meter data supplied by Denbury and corrected using gas compositional data.

CO_2 Injection and Storage Summary

As of December 31, 2015, the most recent month of record, 2.807 million tonnes of total gas (composition of approximately 98% CO_2) has been purchased for injection into the Bell Creek Field, equating to an estimated ***2.753 million tonnes of CO_2 stored***. Table 1 shows the fieldwide total gas purchased and net CO_2 stored for the month of December 2015. Cumulative CO_2 storage by month is shown in Figure 1.

Table 1. Cumulative Total Gas Purchased and Estimated Associated CO_2 Storage Volumes for the Bell Creek Field[1]

	December 2015 Gas Volume
Month Total Gas Purchased, MMscf[2]	1717
Month Total Gas Purchased, million tons[2]	0.098
Month Total Gas Purchased, million tonnes[2]	0.089
Cumulative Total Gas Purchased, MMscf[2,3]	54,034
Cumulative Total Gas Purchased, million tons[2,3]	3.091
Cumulative Total Gas Purchased, million tonnes[2,3]	2.807
Cumulative Total CO_2 Stored, MMscf[3,4]	53,003
Cumulative Total CO_2 Stored, million tons[3,4]	3.032
Cumulative Total CO_2 Stored, million tonnes[3,4]	2.753

[1] Conversion factors of 17.483 Mscf/ton and 19.253 Mscf/tonne were used to calculate volumes.
[2] Total gas injection volumes ***NOT CORRECTED*** for gas composition.
[3] Cumulative totals are for the period from May 2013 to the month listed.
[4] Total gas injection volumes ***CORRECTED*** for gas composition.

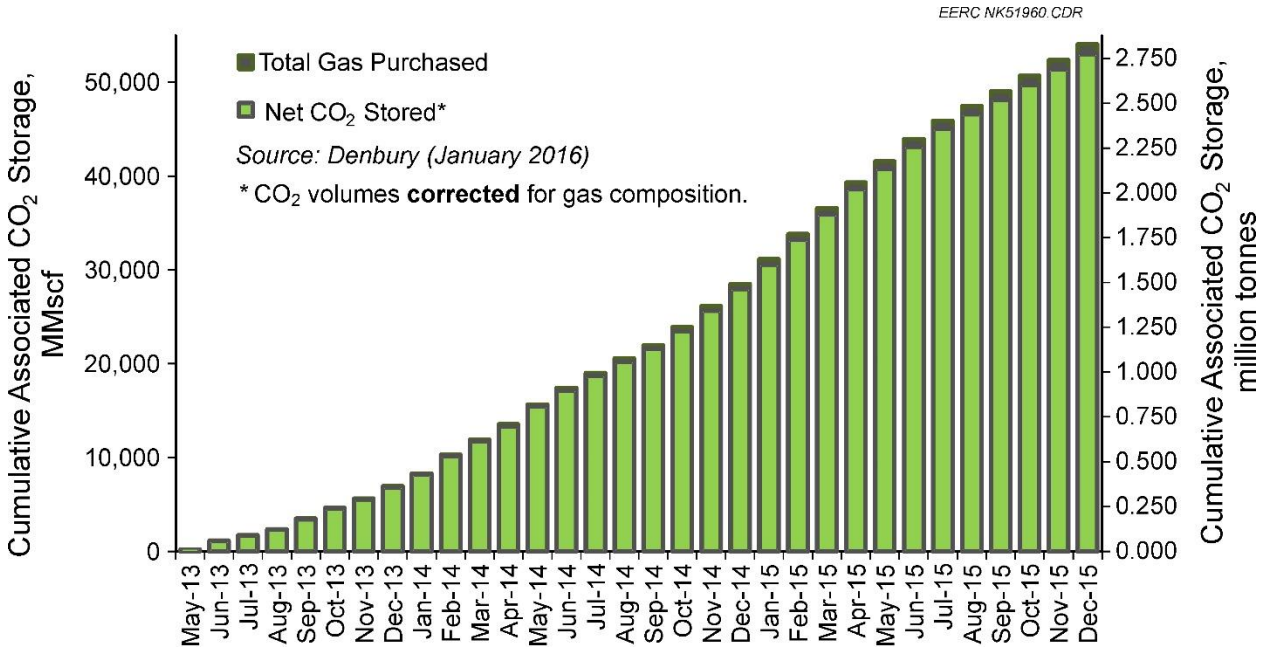

Figure 1. Cumulative total gas purchased and estimated associated CO_2 storage volumes for the Bell Creek Field.