

**U.S. Department of Energy
FEDERAL ASSISTANCE REPORTING CHECKLIST
AND INSTRUCTIONS FOR RD&D PROJECTS**

1. Identification Number: DE-FE0006821	2. Program/Project Title: Small Scale Field Test Demonstration CO2 Sequestration																
3. Recipient: University of Kansas Center for Research, Inc.																	
4. Reporting Requirements:	Frequency	Addressees															
A. MANAGEMENT REPORTING <input checked="" type="checkbox"/> Research Performance Progress Report (RPPR) <input checked="" type="checkbox"/> Special Status Report																	
B. SCIENTIFIC/TECHNICAL REPORTING (Reports/Products must be submitted with appropriate DOE F 241. The 241 forms are available at www.osti.gov/elink)																	
<table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Report/Product</td> <td style="text-align:left;">Form</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Final Scientific/Technical Report</td> <td>DOE F 241.3</td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> Conference papers/proceedings*</td> <td>DOE F 241.3</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Software/Manual</td> <td>DOE F 241.4</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Other (see special instructions)</td> <td>DOE F 241.3</td> <td></td> </tr> </table>	Report/Product	Form		<input checked="" type="checkbox"/> Final Scientific/Technical Report	DOE F 241.3		<input checked="" type="checkbox"/> Conference papers/proceedings*	DOE F 241.3		<input type="checkbox"/> Software/Manual	DOE F 241.4		<input type="checkbox"/> Other (see special instructions)	DOE F 241.3		FG A	FITS@NETL.DOE.GOV FITS@NETL.DOE.GOV http://www.osti.gov/elink-2413 http://www.osti.gov/elink-2413
Report/Product	Form																
<input checked="" type="checkbox"/> Final Scientific/Technical Report	DOE F 241.3																
<input checked="" type="checkbox"/> Conference papers/proceedings*	DOE F 241.3																
<input type="checkbox"/> Software/Manual	DOE F 241.4																
<input type="checkbox"/> Other (see special instructions)	DOE F 241.3																
C. FINANCIAL REPORTING <input checked="" type="checkbox"/> SF-425 Federal Financial Report																	
D. CLOSEOUT REPORTING <input checked="" type="checkbox"/> Patent Certification <input checked="" type="checkbox"/> SF-428 & 428B Final Property Report <input type="checkbox"/> Other																	
E. OTHER REPORTING <input checked="" type="checkbox"/> Annual Indirect Cost Proposal <input type="checkbox"/> Audit of For-Profit Recipients <input checked="" type="checkbox"/> SF-428 Tangible Personal Property Report Forms Family <input checked="" type="checkbox"/> Other – see block 5 below																	
* <i>Scientific and technical conferences only</i>																	
Q A																	
Q, FG																	
FC FC																	
O																	
A A																	
See block 5 below for instructions.																	
FREQUENCY CODES AND DUE DATES: A - Within 5 calendar days after events or as specified. FG- Final; 90 calendar days after the project period ends. FC- Final; End of Effort. Y - Yearly; 90 calendar days after the end of the reporting period. S - Semiannually; within 30 calendar days after end of project year and project half-year. Q - Quarterly; within 30 days after end of the reporting period. Y180 - Yearly; 180 days after the end of the recipient's fiscal year O - Other; See instructions for further details.																	
5. Special Instructions:																	
Annual Indirect Cost Proposal – If DOE is the Cognizant Federal Agency, then the proposal should be sent to FITS@NETL.DOE.GOV . Otherwise, it should be sent to the Cognizant Federal Agency.																	
Other – The Recipient shall provide all deliverables as contained in Section D of Attachment 2 Statement of Project Objectives.																	

QUARTERLY PROGRESS REPORT

To

DOE-NETL

Brian Dressel, Program Manager

Award Number: DE-FE0006821

**SMALL SCALE FIELD TEST DEMONSTRATING CO₂ SEQUESTRATION IN
ARBUCKLE SALINE AQUIFER AND BY CO₂-EOR AT WELLINGTON FIELD,
SUMNER COUNTY, KANSAS**

Project Director/Principal Investigator:

W. Lynn Watney

Senior Scientific Fellow

Kansas Geological Survey

Ph: 785-864-2184, Fax: 785-864-5317

lwatney@kgs.ku.edu

Joint Principal Investigator:

Jason Rush

Date of Report: May 5, 2013

DUNS Number: 076248616

Recipient: University of Kansas Center for Research &

Kansas Geological Survey

1930 Constant Avenue

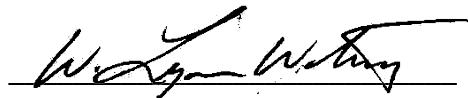
Lawrence, KS 66047

Project/Grant Period: 10/1/2011 through 9/30/2015

Sixth Quarterly Report

Period Covered by the Report: January 1, 2013 through March 31, 2013

Signature of Submitting Official:

A handwritten signature in black ink, appearing to read "W. Lynn Watney", is written over a horizontal line.

EXECUTIVE SUMMARY

Project Objectives

The objectives of this project are: (1) inject under supercritical conditions approximately 40,000 metric tons of CO₂ into the Arbuckle saline aquifer; (2) demonstrate the application of state-of-the-art MVA (monitoring, verification, and accounting) tools and techniques to monitor and visualize the injected CO₂ plume; (3) develop a robust Arbuckle geomodel by integrating data collected from the proposed study area, and a multi-component 3D seismic survey; (4) conduct reservoir simulation studies to map CO₂ plume dispersal and estimate tonnage of CO₂ sequestered in solution, as residual gas and by mineralization; (5) integrate MVA data and analysis with reservoir modeling studies to detect CO₂ leakage and to validate the simulation model; (6) develop a rapid-response mitigation plan to minimize CO₂ leakage and a comprehensive risk management strategy; and (7) establish best practice methodologies for MVA and closure. Additionally, approximately 30,000 metric tons of CO₂ shall be injected into the overlying Mississippian to evaluate miscible CO₂-EOR potential in a 5-spot pilot pattern. The CO₂ shall be supplied from the Abengoa Bioenergy ethanol plant at Colwich, Kansas who has operated the facility since 1982 demonstrating reliability and capability to provide an adequate stream and quality of CO₂. The project shall install compression, chilling, and transport facilities at the ethanol plant for truck transport to the injection site.

Project Goals

The proposed small scale injection will advance the science and practice of carbon sequestration in the Midcontinent by refining characterization and modeling, evaluating best practices for MVA tailored to the geologic setting, optimize methods for remediation and risk management, and provide technical information and training to enable additional projects and facilitate discussions on issues of liability and risk management for operators, regulators, and policy makers.

The data gathered as part of this research effort and pilot study will be shared with the Southwest Sequestration Partnership (SWP) and integrated into the National Carbon Sequestration Database and Geographic Information System (NATCARB) and the 6th Edition of the Carbon Sequestration Atlas of the United States and Canada.

Project Deliverables by Task

- 1.5 Well Drilling and Installation Plan (Can be Appendix to PMP or Quarterly Report)
- 1.6 MVA Plan (Can be Appendix to PMP or Quarterly Report)
- 1.7 Public Outreach Plan (Can be Appendix to PMP)
- 1.8 Arbuckle Injection Permit Application Review go/no go Memo
- 1.9 Mississippian Injection Permit Application Review go/no go Memo
- 1.10 Site Development, Operations, and Closure Plan (Can be Appendix to PMP)

- 2.0 Suitable geology for Injection Arbuckle go/no go Memo
- 3.0 Suitable geology for Injection Mississippian go/no go Memo
- 11.2 Capture and Compression Design and Cost Evaluation go/no go Memo
- 19 Updated Site Characterization/Conceptual Models (Can be Appendix to Quarterly Report)
- 21 Commercialization Plan (Can be Appendix to Quarterly Report).
- 30 Best Practices Plan (Can be Appendix to Quarterly or Final Report)

ACCOMPLISHMENTS

1. **Continued progress of Milestone 2 (Task 3) --** Site characterization of Mississippian Reservoir for CO2 EOR - Wellington Field
2. **Subtask 1.8 Arbuckle Injection Permit Application** – The permit application consists of 15 chapters (sections). The completion status for each section, along with the remaining tasks is described in Table 1 below. The revised and near final draft of each section is nearly completed. The process involved aggregating information from many investigators/specialists into a coherent document which summarizes the suitability of the Wellington site for conducting not only the small-scale pilot test, but potentially for long-term commercial scale carbon capture and sequestration (CCS).

Milestone Status Report

Task	Budget Period	Number	Milestone Description
Task 2.		1	1 Site Characterization of Arbuckle Saline Aquifer System - Wellington Field
Task 3.		1	2 Site characterization of Mississippian Reservoir for CO2 EOR - Wellington Field
Task 10.		2	3 Pre-injection MVA - establish background (baseline) readings
Task 13.		2	4 Retrofit Arbuckle Injection Well (#1-28) for MVA Tool Installation
Task 18.	3-yr1		5 Compare Simulation Results with MVA Data and Analysis and Submit Update of Site Characterization, Modeling, and Monitoring Plan
Task 22.	3-yr1		6 Recondition Mississippian Boreholes Around Mississippian CO2-EOR injector
Task 27.	3-yr2		7 Evaluate CO2 Sequestration Potential of CO2-EOR Pilot
Task 28.	3-yr2		8 Evaluate Potential of Incremental Oil Recovery and CO2 Sequestration by CO2-EOR - Wellington field

Project Schedule

Abengoa Biofuels informed us in mid August 2012 that the Colwich Ethanol Facility would be shut down for one year because of the severe drought in the Midwest. This shut down has status has not changed in spite of snowfall and rainfall late winter and spring 2013. The dry weather severely impacted their dryland feedstock base (mainly milo and sorghum) and the resulting high grain prices. The facility will remain closed until the next harvest. Abengoa, DOE, and partners agreed that the plant reopening will be revisited on October 1, 2013 after the next harvest cycle to determine if they will reopen. During DOE site visit in September 2012, Abengoa official gave us a tour of the ethanol plant and relayed that every effort is being taken to keep the plant in a condition so that it can be reopened next year.

A request was made and DOE extended Budget Period 1 for an additional year at no cost until October 1, 2013. The project will make every effort to evaluate alternative sources, but as yet the economics are not close to meeting the arrangements made with Abengoa and the Colwich

ethanol facility. Both Abengoa and Berexco, the oil field industry partner, are committed to working with each other to link the ethanol-based CO₂ with oil field operations in the area.

Geologic CO₂ will not be part with the Kansas market due to demand along existing pipelines in Texas, New Mexico, Colorado, and Wyoming. Anthropogenic is the only viable source to provide the CO₂ needed for CO₂-EOR. Both Abengoa and Berexco are keenly interested in the saline aquifer storage in order to obtain enhanced prices for ethanol, obtain deposal fees, and with the case at Wellington, the income generated by carbon trading through Biorecro in Sweden.

The KGS is committed to starting injection at the Wellington site in the first quarter of FY2014. Therefore, contacts were made with alternative anthropogenic CO₂ producers to supply the source in the event that the Abengoa plant remains shut indefinitely. The suppliers include Airgas and FloCO₂, and each have indicated an ability to provide CO₂ in the event of continued shutdown of the Abengoa facility. We have also had discussions with Pioneer Energy who is interested in generating the CO₂ onsite from conversion of pipeline natural gas to hydrogen and CO₂. Excess energy will be used to create electricity. Discussions will begin next quarter with a company in Oklahoma who recently completed a CO₂ pipeline ~70 miles south of Wellington.

The Class VI UIC geosequestration permit application will be submitted to EPA during May 2013. Construction of monitoring wells and installation of monitoring equipment will commence on approval of the permit, if permission is granted from DOE.

A condensed version of the Gantt Chart tracks tasks based on the one year no cost extension of Budget Period 1 (Figure 1). The PMP and Gantt Chart will be updated during the next quarter.

Activities of Lawrence Berkeley National Lab

No work has been completed or funds expended during this quarter by LBNL.

ONGOING ACTIVITIES –

TASK 1. PROJECT MANAGEMENT AND REPORTING

Permit Status and Activities

As of March 2013, drafts of all permit sections have been completed and major sections have been reviewed. KGS graphics and GIS personnel are completing figures for the application report. The status of each section are listed in Table 1. The goal is to finalize the sections for internal and external review in early May 2013; after which the application will be submitted to EPA. Additional exchange of technical information along with the review process have

extended the preparation time, but reviews indicate agreement with the approach, but for minor modifications. No further delays are expected.

Once submitted KGS will seek a permit kickoff meeting with EPA soon after the submittal of the application in order to expedite the review process. The contents of each section will be summarized and presented in Power Point format, which will provide the reviewer's an opportunity to better understand the application contents and seek technical clarification.

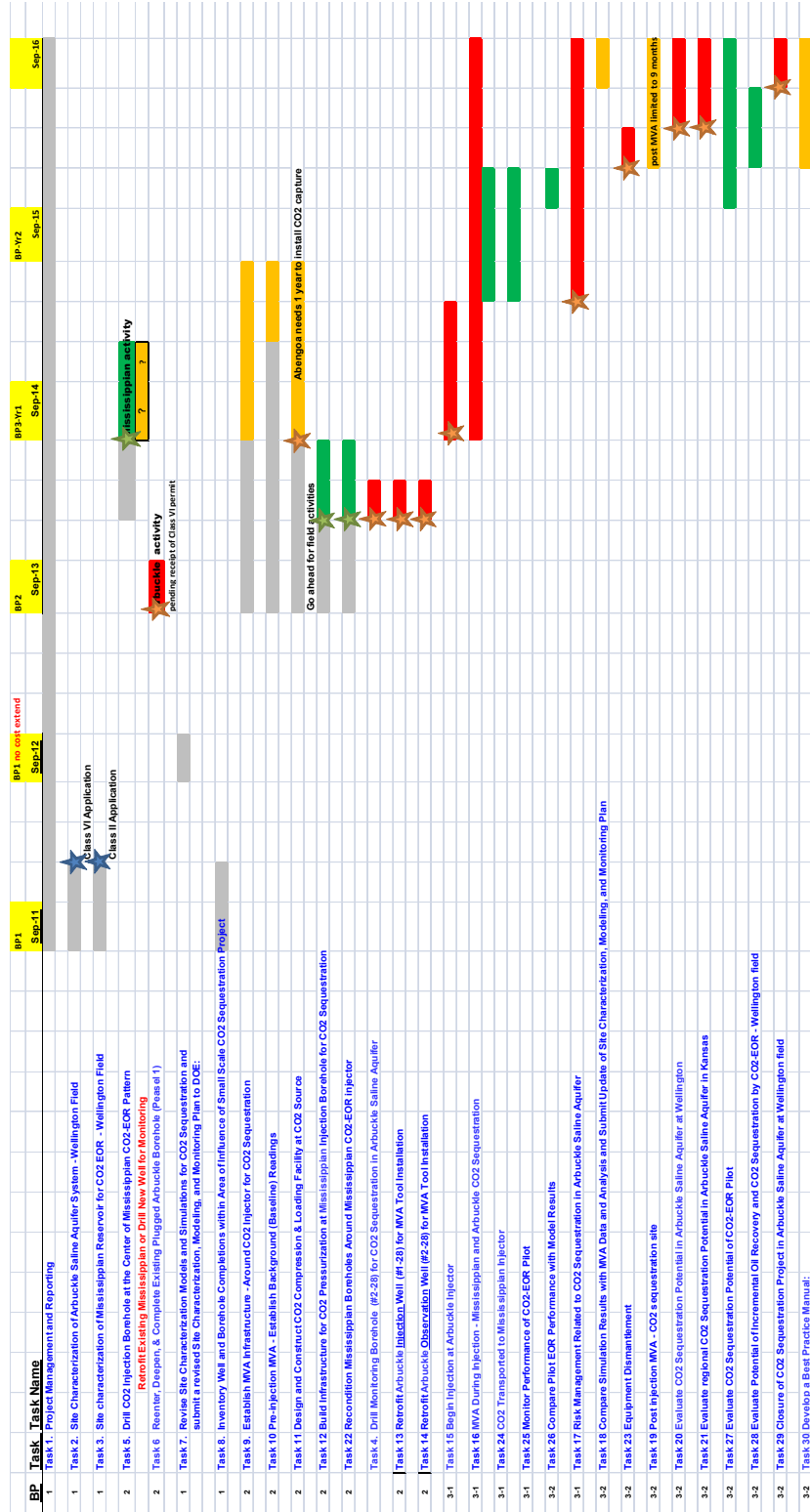


Figure 1. Condensed version of the project Gantt Chart.

Table 1. Status of Class VI permit application

Section	Percent Complete	Remaining Tasks
Project Overview	98%	GIS and graphics personnel working on finalizing figures.
Local Scale Geologic and Hydrogeologic Background	98%	Completed except for addressing editing from reviewers.
Regional Scale Geologic and Hydrogeologic Background	95%	GIS and graphics personnel working on finalizing figures.
Geologic Sequestration of Carbon Dioxide	95%	GIS and graphics personnel working on finalizing figures.
Flow and Transport Model Simulations and AOR Delineation	95%	GIS and graphics personnel working to work on finalizing figures.
Potential Capture in Depleted Mississippian Formation	98%	GIS and graphics personnel working on finalizing figures.
Geomechanical Stability Investigations	98%	GIS and graphics personnel working on finalizing figures.
Injection Well Design	90%	GIS and graphics personnel working on finalizing figures. Tiraz Birdie to add discussion on type of cement information forwarded by Dana.
Monitoring Well Design	80%	GIS and graphics personnel working on finalizing figures. Tiraz Birdie to add some discussion on type of cement information forwarded by Dana, and the proposed well 2-28.
Site Operations	90%	GIS and graphics personnel working on finalizing figures. Information will be forward by Dana.

Monitoring Verification and Accounting Activities	95%	GIS and graphics personnel to work on finalizing figures.
Post Injection Site Care	95%	First draft complete.
Site Closure	95%	Final writeup is being completing with access to final modeling results.
Risk Management and Mitigation Plan	90%	Need to describe automatic shutdown system after finalizing surface facilities plans. Need to ensure that onsite Programmable Logic Controller or computer can implement a shutdown plan.
Financial Assurances	70%	Draft complete. Berexco to provide P&L, balance sheet, and cash flow metrics. Berexco to also complete cost estimates for closure and monitoring activities. Berexco will provide information after they they are in receipt of the entire applicaiton.

The bulk of the efforts in second quarter of FY 2013 were expended towards finalizing the draft of the of the permit application. This involved:

- Finalized compiling background information on the regional hydrogeology,
- Finalized synthesizing the numerous physical, chemical, and biological data sets acquired during drilling of wells 1-32 and 1-28, and utilizing the same to develop a conceptual model of the stratification within the Arbuckle aquifer and characterizing the overlying formations,
- Established the EPA Area of Review,
- Completed conducting flow and transport simulations in order to determine the eventual fate of the CO₂,
- Completed the compilation of historical information on oil and gas development in Kansas and documentation the resulting under pressurization in the Mississippian reservoir, which will serve as a trap for any CO₂ that may potentially escape from the caprock or faults,
- Developed geomechanical approaches to quantatively demonstrate that the caprock and formation integrity will not be compromised due to injection,

- Completed write up on Nuclear Magnetic Resonance to communicate the strength of the technique for characterizing geologic formations,
- Completed and documented procedure for integrating seismic data and geophysical data in Petrel and developed a new upscaled CMG reservoir model.
- Demonstrating to EPA that the construction practices, materials utilized, and design of wells KGS 1-28 and 1-32 are in accordance with the Class VI specifications.

Key Findings

1. Geomechanical analysis and low pressure of CO₂ injection into the Arbuckle continue to find that it will be virtually impossible to encounter stress related failure along existing fracture and fault planes due to CO₂ injection.
2. Simulation results indicate that area of review is within 1000 ft of the injection well, Wellington KGS #1-28.
3. Underpressurization of the Mississippian is throughout the area around Wellington Field and supports the hydraulic isolation of the Mississippian from units above and below and adds additional assurance that the Mississippian is a pressure trap for any CO₂ that might leak from the underlying Arbuckle. Results are consistent with the stable isotope data that indicates that the Mississippian and Arbuckle hydrostratigraphic units are isolated.
4. The primary and secondary caprock are most adequate for this small scale test injection based on a combination of geomechanical measurements and modeling, capillary entry pressure, and continuity of the combined caprocks based on seismic imaging.

Plans

1. Top priority remains to finalize and submit application for Class VI injection permit to the EPA in May 2013. A day long or half-day permit kickoff meeting is to be requested with the EPA in order to communicate the project findings and contents of the permit document to EPA reviewers, and provide them an opportunity to ask questions/seek clarification. This will

expedite the EPA review process. On obtaining the permit, field activities shall commence in conjunction with construction of new monitoring wells, and deepening of the existing Peasel well.

2. Submit updated management plan, well drilling and installation plan, MVA plan, Public Outreach Plan based on material included in Class VI application.

3. Submit Mississippian Injection Permit Application (Class II injection well under Kansas primacy, regulated by Kansas Corporation Commission) using updated geomodel and simulation of the Mississippian oil reservoir.

PRODUCTS

Publications, conference papers, and presentations

January 31st, AAPG Mississippian Forum, Oklahoma City, OK, Mississippian Carbonate and Chert Reservoirs in Kansas: Integrating Log, Core, and Seismic Information -- Lynn Watney (based primarily on Wellington Field) – discussion of caprock and Arbuckle as a disposal zone for brine and CO₂

February 18-19, Applied Geoscience Conference, Houston, TX, Mississippian Exploration: Stratigraphy, Petrology, and Reservoir Properties -- Lynn Watney (based on new data from Wellington Field, considerations for CCUS, and regional mapping) – include caprock and disposal of brine and CO₂

PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS

A project organization chart follows. The work authorized in this budget period includes office tasks related to preparation of reports and application for a Class VI permit to inject CO₂ into the Arbuckle saline aquifer. Tasks associated with reservoir characterization and modeling are funded in contract DE-FE0002056.

ORGANIZATION CHART

Kansas Geological Survey		
Name	Project Job Title	Primary Responsibility
Lynn Watnev	Project Leader, Joint Principal Investigator	Geology, information synthesis, point of contact
Yevhen Holubnyak	Petroleum Engineer	Reservoir engineer, dynamic modeling, synthesis
Jason Rush	Joint Principal Investigator	Geology, static modeling, data integration, synthesis
John Doveton	Co-Principal Investigator	Log petrophysics, geostatistics
Dave Newell	Co-Principal Investigator	Fluid geochemistry
Rick Miller	Geophysicist	2D seismic acquire & interpretation
TBN	Geology Technician	LiDAR/InSAR support, water well drilling/completion
Tiraz Birdie	President, TBirdie Consulting, Inc.	Assemble and analyze data, report writing
		Hydrogeologic modeling, permitting, MVA, integration
KU Department of Geology		
Michael Taylor	Co-Principal Investigator	Structural Geology, analysis of InSAR, LiDAR, seismometer array
TBN	Graduate Research Assistant	Structural Geology, analysis of InSAR and LiDAR, seismometer array
Kansas State University		
Saugata Datta	Principal Investigator	
TBN	Graduate Research Assistant	Aqueous geochemistry
TBN	3- Undergraduate Research Assistants	
Lawrence Berkeley National Laboratory		
Tom Daley	Co-Principal Investigator	Geophysicist, analysis of crosshole and CASSM data
		Hydrogeology, analysis of soil gas measurements
Barry Freifeld	Co-Principal Investigator	Mechanical Engineer, analysis of U-Tube sampler
Sandia Technologies, Houston		
Dan Collins	Geologist	Manage CASSM and U-Tube operation
David Freeman	Field Engineer	Manage field install of CASSM and U-Tube
Berecoco, LLC		
Dana Wreath	VP Berecoco, LLC	Engineering, Manager of Wellington Field
Randy Koudele	Reservoir engineer	Engineering
Staff of Wellington Field		Field operations
Beredco Drilling team		Mississippian and Arbuckle drilling operations
Abengoa Bioenergy Corp.		
Christopher Standlee, Danny Allison		CO2 supply Colwich Ethanol Facility

IMPACT

The project has been discussed in public venues – presentations at professional meetings, legislative committees, and town hall meeting, and has provided information on the project via the website to encourage a dialog on the merits and economies related to carbon management in Kansas. Kansans are realizing the potential for an important collaboration between the two of the largest economies in Kansas – agriculture and related ethanol industry and the petroleum industry to advance energy and contribute to a viable rural economy.

The small scale field test at Wellington Field as designed integrates two petroleum business activities: 1) use of CO₂ for enhanced oil recovery and revitalizing many older mature oil fields and 2) disposal/storage of CO₂ in the underlying saline aquifer for the longer term. It has been conveyed to the local petroleum industry that drilling and oil production infrastructure of an active oil field are important components that could lead to a successful carbon sequestration project including 1) knowledge about the subsurface including injection zones and caprock, 2) knowledge about abandoned wells, 3) access and suitability of land with greater likelihood for participation by landowner, and 4) access to insurance and investors to facilitate economic success.

CHANGES/PROBLEMS

KGS is committed to starting BP2 on October 1, 2013. To ensure this, discussions are ongoing with alternative suppliers to deliver the source CO2 should the Abengoa facility remain out of operation in calendar year 2013.

The PMP and schedule will be updated in the next quarter.

BUDGETARY INFORMATION

Cost Status Report

See next page for the cost status for quarters 1-6.

Balance Reporting Category	New York State	Fiscal Year 2015																				
		10/11-12/31/11	10/11-3/31/12	4/11-6/30/12	7/11-9/30/12	10/11-12/31/12	1/12-3/31/13	4/11-6/30/13	7/11-9/30/13	10/11-12/31/13	1/12-3/31/14	4/11-6/30/14	7/11-9/30/14									
Balance Reporting Category		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	
State																						
Non-Federal																						
Federal Share	\$36,84	\$17,208.02	\$17,282.02	\$31,683.01	\$31,683.01	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	
Non-Federal Share	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	
Total (Federal & Non-Federal)	\$365,427.01	\$382,635.03	\$382,709.03	\$397,110.02	\$397,110.02	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	\$397,099.07	
Commuter Benefits Cost	\$365,427.01	\$746,874.02	\$1,131,051.03	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	
Actual Amounts																						
Federal Share	\$26,84	\$17,208.02	\$17,282.02	\$31,683.01	\$31,683.01	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	\$31,672.06	
Non-Federal Share	\$0.00	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	\$6,775.86	
Total (Federal & Non-Federal)	\$26,84	\$23,983.88	\$24,057.88	\$38,458.87	\$38,458.87	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	\$38,447.92	
Commuter Benefits Cost	\$26,84	\$74,687.24	\$113,051.03	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	\$152,116.50	
Variance																						
Federal Share	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Non-Federal Share	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	
Total (Federal & Non-Federal)	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	\$365,427.01	
Commuter Benefits Cost	\$365,427.01	\$746,874.02	\$1,131,051.03	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	\$1,521,165.04	