

**WESTERN KENTUCKY SEQUESTRATION SUB-PROJECT
MEETING
FEBRUARY 21, 2008
KGS Well Sample and Core Library**

These people were present for the third meeting of this sub-project group:

KGS Staff

Dave Williams
Jim Drahovzal
Rick Bowersox
Dave Harris
Jim Cobb
Mike Lynch
Carrie Pulliam
Brandon Nuttall
John Kiefer

Sandia Technologies

Phil Papadeas

UK CAER

Jim Hower

ConocoPhillips

Michelle Pittenger
Scott Rennie

Smith Management Group

Karen Thompson

E.ON US

Roger Medina
Douglas Schetzel
Glenn Sundheimer

GOEP

Talina Mathews

Geoconsultants

Todd Calhoun

Geo Oil & Gas

Ross Miller

After introductions of all the participants, Jim Cobb made a presentation on House Bill 1 and the budget issues related to the projects funded by it. He noted that the bill language refers to doing a “test” of sequestration potential only. Cobb added that the project cannot match the funding and business plan of a similar and much larger project in Illinois, and that, as a test project, it will involve only a smaller amount of CO₂ and characterization of the geology at the well site.

He showed budget figures indicating that the total amount of money currently committed to the western Kentucky project is \$3.35 million, including state funds, private match and a donation of \$250,000 from the state of Illinois. This is one of four projects funded by HB-1. There was discussion of other potential funding sources, including TVA, which is expected to decide in March whether to join the project.

Cobb also said the draft memorandum of agreement between the private partners, acting as a 501(c)3 entity, and the University of Kentucky is being reviewed by UK. Talina Mathews suggested that her office may also need to be a signatory, since the state funding came through her office. Scott Rennie noted that funding figures are not in the draft MOA, and the industry partners do not have to be limited to those currently named in it (ConocoPhillips, Peabody and E.ON). He commented that the industry partners committed to getting the project completed.

There was discussion of the possibility of injecting a liquid into the well rather than CO₂ if it is scientifically appropriate, though it might help to attract additional partners and funding if CO₂ is used.

Scott Rennie said he believes the cost of the project will most likely not be under \$5 million.

Rick Bowersox gave an update on the geology of the target region, including some additional information received from the Indiana Survey about the region just across the Ohio River.

He said some candidate wells for re-entry, as opposed to a new well altogether, remain in Hancock, Breckenridge and Muhlenberg Counties and discussed specifics about several candidates.

There was a discussion about how a re-entry would work to get samples and other data not contaminated by the earlier drilling activity and how much money might be saved by a re-entry, as opposed to a new well.

There was an in-depth discussion of drilling a new well at the “Skillman Site” in Hancock County near the Ohio River, including sensitive areas and faulting near to it.

Ross Miller of Geo Oil & Gas made a presentation about a 12,000 acre site in Hancock County which he believes would be a good candidate site for a new well. He said there are 8 years remaining on a ten-year lease he has on the property, and he has

virtually all rights to use the site as he wishes. There are several wells on the site already, going to about 2000 to 2500 feet in depth. He asked that his company receive consideration for some of the subcontracting work in the project if the site is used. The company also wants rights to any oil or gas encountered and control of the well after the project is completed.

It was noted that having the existing wells at the site would also provide an chance to monitor the new one, if this site were chosen.

Jim Drahovzal made a presentation on his work to refine the geologic data for Hancock County, using some seismic lines in Indiana and Hancock County. Using that data, he was able to estimate the depth to the Knox and Mt. Simon formations. This prompted a discussion about how the Mt. Simon appears to “pinch off” in Kentucky just south of the Ohio River, while the Knox formation remains more uniformly thick in the target area.

There was a discussion of the value of drilling a new well vs. a re-entry for the purposes of this project.

Talina Mathews told the participants about the March 5 – 6 Illinois Basin Energy Conference in Henderson and suggested that the next meeting of the partnership be held in conjunction with that meeting. It was agreed the next meeting should be at the Henderson KGS office at 9:00 a.m. Central Time on March 5.

Dave Williams of KGS made a presentation on the surface conditions in Hancock County, concluding that there will be little problem finding a good drilling site there.

Phil Papadeas made a presentation providing his evaluation of the re-entry vs. new well approaches for the project. He suggested an approach involving two geographically separated re-entries. This approach, he said, would have a greater chance of success and lower risk and while costing an estimated \$3.6 million, as opposed to \$5.745 million for a new well.

As the meeting ended it was agreed that KGS would continue to refine the understanding of the geology of the region, and ConocoPhillips will refine its budget estimates.

The project alternatives remaining to be considered include:

- A well re-entry in Hancock County
- A new well in Hancock County
- A re-entry project in Muhlenberg County

The goal of the next meeting on March 5 is to make a site selection.