**Blan #1 Well Pre-Testing Meeting**

**July 21, 2009**

**KGS Well Sample and Core Library**

These people were present for the meeting:

**KGS Staff**

Dave Williams

Dave Harris

Rick Bowersox

Jim Drahovzal

Brandon Nuttall

Jim Dinger

Junfeng Zhu

Kathy Takacs

Marty Parris

Glynn Beck (via telephone)

Mike Lynch

**PraxAir**

 Michael Vollmer

**Sandia Technologies**

 Bill Armstrong

**ConocoPhillips**

 Paul Heard

 David Pena

 Henry Veltman (via telephone)

 Alicia Koval (via telephone)

 Jianbing Wu (via telephone)

**E.ON US**

Roger Medina

Doug Schetzel

Glenn Sundheimer

**TVA**

Suzanne Fisher (via telephone)

**Smith Management Group**

 Karen Thompson

 Lea Masson

 Marius Buchi

**ERS**

 Artur Kraszewski

 Becky Stansfield

**Nabors Well Service**

 Curtis Downer

 Bobby Dennis

**Schlumberger**

 Johnny Little

 Larry D. Hall

 Jim Kirksey

Dave Williams called the meeting to order with introductions

Paul Heard made a presentation about the well-testing program. He noted operations will run 24 hours a day. The rig is mobilizing for the move to the site. He did an overview of the testing operations. (See his presentation: Testing Operations Review)

Dave Pena addressed health and safety protocols, emphasizing the need to keep the site and the people working there safe during the operation.

Rick Bowersox made a presentation on the test zone selection procedure (see his presentation: Test Zone Selection Procedure).

Paul noted the project has about a $2 million budget and about a month long timeframe.

A Nabors Well Service Rig video was shown, and Curtis Downer described the features of the 104 foot tall, 250,000-pound rig.

Marty Parris and Kathy Takacs presented information on collecting formation water samples: (See presentation document) They showed the sampling instrument. Reason to do this, they explained, is that when CO2 injected, it dissolves in the formation fluid as part of the buffering process. If there are significant changes in water chemistry, it will indicate something about the vertical movement through the formations in the testing area. This is not a pressure test. Isotope measurements will be done because carbon isotopic composition is an indicator of carbon dioxide and brine interactions, AND the isotopes are sensitive indicators of vertical communication of waters in the formation.

Carbon dioxide injection:

 A Praxair presentation was made by Mike Vollmer. He described the equipment which will be brought in for carbon dioxide injection. They include low and high pressure alarms and shut offs, among other equipment and steps for safety. It hasn’t been decided yet where the carbon dioxide will come from. There are several options. Approximately six 60-ton vessels for carbon dioxide will be brought in. Injection likely will occur over one day.

There was discussion about when to schedule the final road repair, because a second project may be scheduled for the site. Damage to the road so far is not serious.

Dave Williams complemented all who worked the first phase, calling it a clean operation with no undue noise or disturbances at the site.