



## **Appalachian Storage Hub (ASH) Project**

### **Team Meeting Minutes**

**November 9, 2016 – 10 - 11 am**

**1 (877) 306-9784, Code 211 437 2313**

**Present:** Mohammad Fakhari, Kyle Metz, Michael Solis, Jessica Moore, Phil Dinterman, Gary Daft, Mary Behling, John Saucer, Michele Cooney, Doug Patchen, Kris Carter

#### **1) Data Communication and Sharing**

The group indicated that they had no concerns or outstanding questions to be resolved among research team members.

As for the Project Partners and Advisory Board, Jessica Moore indicated that John Bocan will be sending out the listserv login information on Monday, November 14. Partners and Board members will have read-only access to the project's website, and it was decided that because of potentially confidential information that the research team members may use and share for interpretive work, the Partners and Board members will not be provided access to the ASH ftp site itself.

Kris Carter noted that Battelle reacted favorably to the brief introductory slide set she shared at last week's MRCSP meeting in Columbus, OH, and Battelle offered any technical data and/or project support that might benefit us.

#### **2) Master PETRA Project**

ODGS is having some ftp access issues right now in the wake of some software/firewall updates on their end. ODGS asked each of the states for an update on the status of their data compilation, so that it can be ready to download these materials and get mapping. Pennsylvania has completed two of its six counties (Greene and Washington), and may have two more completed within the next week. Gary Daft continues to work in the southern portion of its state, and Jessica Moore mentioned that WVGES has to be careful when selecting digital log files for this project (because some logs are still confidential in status). Along these same lines, Mohammad Fakhari indicated that Ohio's storage fields/well data are confidential, and that these need to be kept out of the public's reach. Jessica Moore suggested that OH provide Michele Cooney with a list of confidential API numbers so that she can filter those out of datasets shared with the Partners and Advisory Board. For the Research Team's part, we will have access to these confidential data to inform our mapping and reservoir characterization, but the raw data will not be made available to the public.

Kyle Metz asked the group for input on how many cross sections should be prepared for the project, what wells should be used, and how the sections should be oriented. After some discussion, it was agreed that we will draft no more than four cross sections, with one running North-South through the project area and the other three running perpendicular to the first at different locations so that all geologic intervals are properly represented by these cross sections. Kris Carter will send a list of API numbers PA is using in their MRCSP tri-state area cross sections to kick start this work.

### 3) Project Schedule and Milestones

Doug revisited the official project schedule (see below). We're officially in Month 4 of 12 and are generally on schedule. Strategy 1 is ongoing, but Strategy 2 has been initiated. Data compilation (as per Strategy 1) is key to the rest of our work.

| Strategies/Activities   | Start Date | End Date          |
|---|------------|-------------------|
| Strategy 1: Data Collection   |            |                   |
| • Identify and assemble well log and core data  | Month 1    | Month 2           |
| • Identify previous studies of interest   | Month 1    | Month 2           |
| • Create a project database (format, prototype)   | Month 1    | Month 2           |
| Strategy 2: Stratigraphic correlation of key units  |            |                   |
| • Develop cross sections of the Salina Formation  | Month 3    | Month 8           |
| • Develop cross sections of the Greenbrier Formation  | Month 3    | Month 8           |
| • Develop cross sections of the Keener to Berea Interval  | Month 3    | Month 8           |
| • Develop cross sections of the Upper Devonian Sandstones   | Month 3    | Month 8           |
| • Develop cross sections of the Oriskany Sandstone  | Month 3    | Month 8           |
| • Develop cross sections of the Clinton-Medina through Tuscarora Interval                         | Month 3    | Month 8           |
| • Develop cross sections of the Rose Run and Upper Sandy Member of the Gatesburg Formation        | Month 3    | Month 8           |
| Strategy 3: Map the thickness, extent, and structure of potential storage units in the study area |            |                   |
| • Map the Salina Formation  | Month 5    | Month 7           |
| • Map the Greenbrier Limestone  | Month 5    | Month 7           |
| • Map the Keener-Berea, Upper Devonian, Oriskany, Clinton-Medina, and Gatesburg Formations        | Month 5    | Month 7           |
| Strategy 4: Conduct studies of reservoir character  |            |                   |
| • Characterize potential storage intervals in the Salina Formation                                | Month 5    | Month 8           |
| • Characterize potential storage intervals in the Greenbrier Formation                            | Month 5    | Month 8           |
| • Characterize potential storage pools in gas-depleted sandstone reservoirs                       | Month 5    | Month 8           |
| Strategy 5: Develop ranking criteria for potential storage zones                                  |            |                   |
| • Determine criteria and weighted priority of potential storage zones                             | Month 8    | Month 9           |
| Strategy 6: Recommendations   |            |                   |
| • Rank all candidates within each category  | Month 10   | Month 11          |
| • Rank the top candidates in each category  | Month 10   | Month 11          |
| Strategy 7: Suggestions for engineering follow-up study   |            |                   |
| • Make suggestions for additional field and lab studies   | Month 10   | Month 11          |
| Strategy 8: Project management and technology transfer  |            |                   |
| • Project management  | Month 1    | Month 12          |
| • Final Report  | Month 11   | Month 12          |
| • Technology transfer   |            | Month 12+ ongoing |

#### **4) Action Items and Next Steps**

Mohammad – There is still no signature on Ohio’s subcontract. Please follow up.

ALL – send quarterly reports to Doug no later than November 11, 2016; send data to Kyle as soon as possible; continue submitting invoices to Doug

Kris – prepare meeting minutes, send MRCSP cross-section well lists to Ohio and WV

Jessica/John – distribute listservs to Industry and Advisory Board members

**Next meeting date – Wednesday, December 7, 2016, at 10 am.**