FUTUREGEN – MATTOON SITE GEOPHYSICAL STUDY

The FutureGen Alliance has been provided data obtained from the acquisition of 29.6 miles of seismic data along seven profiles that traversed the Mattoon FutureGen site. Although earlier, limited 2-dimensional seismic (2-D) testing was done on portions of the site, the new seismic study approximates a 3-dimensional (3-D) perspective of the subsurface at the Mattoon site allowing a more detailed view.

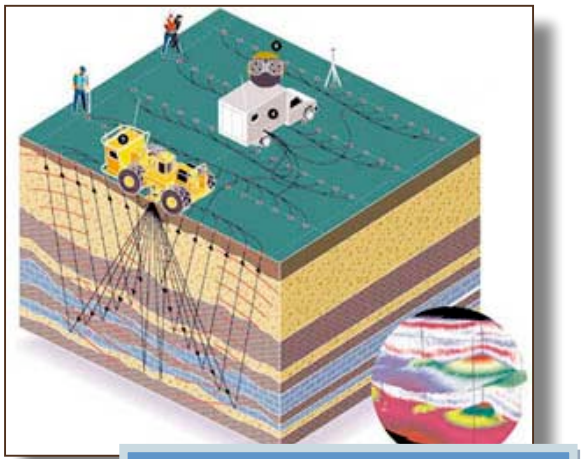
- The new study provides highly detailed information about the contact between the Mt. Simon sandstone, a highly porous rock formation generally containing saline, or salty water, and the Eau Claire shale, a type of "cap rock" directly above the Mt. Simon.
- The study confirmed that these underground rock units, or strata, are both continuous and uninterrupted at the site -- important features for safe storage of carbon dioxide.
- The study shows no faults, or cracks in the Mt. Simon sandstone, the sequestration target unit.
- The study shows the Eau Claire shale, the cap rock unit, has no faults and is continuous at the site.
- The study confirms that the Mattoon FutureGen site is an excellent location for this project.

Project oversight: Dr. Bob Hardage, geophysicist, University of Texas-Austin; Hannes Leetaru Illinois State Geological Survey; Steve Schlahta and Charlotte Sullivan of Battelle Institute on behalf of the FutureGen Alliance

Geophysical data collection: Appalachian Geophysical, June 19-28, 2008

In-field oversight: John Kosloski, Patrick Engineering

Project funding: Coles Together, using $677,000 in grant funds from the Illinois Dept. of Commerce and Economic Opportunity



Geophysical studies create 2-D images of subsurface formations.

GEOPHYSICAL STUDIES

A geophysical study creates a 2- or 3-dimensional image to help determine if a site is suitable for drilling a deep well and then injecting carbon dioxide.

Subsurface formations are mapped by measuring the time required for energy (in the form of a wave or pulse) to return to the surface after reflection from interfaces between formations having different physical properties. The reflections are recorded by detecting instruments responsive to very tiny ground motion.

(Society of Exploration Geophysicists Virtual Museum).

December, 2008