

Past, Present, and Future of Mobility and Conformance Control

A Literature Review and Survey of Lab-scale,
Pilot-Scale, and Field-scale Techniques (other
than WAG) to Improve CO₂ Flooding, and
Suggestions on Future Research Directions

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2 Reasons for this Report

1. Provide a comprehensive review of advanced mobility control and conformance control techniques (e.g. surfactant-stabilized foams, gels, foam gels, direct CO₂ thickeners, pre-formed swellable polymer particles, nanoparticle-stabilized foams)
2. To provide a “baseline” document for upcoming DOE Funding Opportunity Announcements on Advanced Mobility and Conformance Control

Why Am I Bothering You?

- 1. Past** - The DOE NETL wants to find out why some technologies that appeared to be promising in published reports were not developed
- 2. Present** - The DOE NETL wants to have an accurate idea about what technologies are currently in use
- 3. Future** - The DOE NETL is interested in funding research that will, if successful, provide a new tool that will be of interest to operators

What Am I Asking You to Do?

Please respond to a short survey that asks three questions summarizing

1. Your **past** experience with advanced mobility and conformance control techniques
2. Your **present** involvement with these technologies
3. What you think researchers should work on to improve **future** field operations
4. Please give me your business card or fill out the form at the back of the room if you are interested