

Advances in Characterization of Multiphase Flow and Transport in Conventional and Unconventional Reservoirs

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Outline of Presentation

1. Laboratory Injection of Carbonated Water into Residual Oil Zones
2. Insights on Time Varying Wettability Changes
3. Laboratory Capabilities in Micro- and Nano-Pore Scale Imaging

Carbonated Water Injection Experiments

- Pressurized Injection of Carbonated Water into ROZ scale oil saturations
- Depressuring to exsolve CO₂ from the Water
- Mobilizing oil with the CO₂
- Repeating Pressuring Cycles showing Additional Changes in Distribution and Mobilization of Additional Oil

CO₂ ROZ Conference Comment: Is this the first direct insight on the bonus effects of WAGs and reservoir pressure cycling that causes long term oil production in CO₂ Flooding?

For more information see:

<http://piriresearchgroup.com/research/>