

## **ADVANCES IN HIGH RESOLUTION SEISMIC METHODS FOR CO<sub>2</sub> ENHANCED OIL RECOVERY (EOR) AND SEQUESTRATION**

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New technologies are being developed to produce CO<sub>2</sub> from industrial sources for EOR methods and sequestration in oil and natural gas reservoirs across the U.S. The technical challenge is the containment and accountability of large volumes of injected CO<sub>2</sub> within these oil and natural gas reservoirs. High resolution seismic methods can be used to delineate and assess the reservoirs for CO<sub>2</sub> injection feasibility as well as quantitative reservoir management, monitoring and leakage detection. Recent advances in seismic acquisition include low impact vibroseis energy sources and enhanced source control electronics. These advances directly result in a limited cultural footprint, including densely populated urban environments as well as agricultural regions.