**Title:**CO2 storage potential in the DJ Basin: Screening, Reservoir Characterization and Geologic Modeling of the Lyons Sandstone

**Abstract:**The DJ basin holds great potential for CO2 storage, but not all locations or reservoir targets are suitable. This study focuses on the Lyons Sandstone, viewed by many as a suitable target for CCS (CO2 Capture and Storage). Regional data were used to highlight areas with thicker (mostly eolian) sandstones at suitable temperatures and pressures to hold supercritical CO2. A focus area was identified that contained sufficient well control and core data to perform more detailed, reservoir-scale mapping and petrophysical characterization to build a 3D geocellular model. This resulting geologic model was simulated with CO2 injection to evaluate the impact of reservoir quality variations imparted by the eolian depositional setting. Initial results indicate favorable conditions for CO2 storage, but additional structural and stratigraphic characterization plus drilling and completion concepts is recommended to refine most likely outcomes.

**Bio:**Jason Eleson is the founder of the GeoIntegra Group, a group of senior geoscientists that specialize in tackling tough energy transition projects with a focus on CCS. He is also the chief geoscientist for the EnergyFuse Group, an advisory team provides industry with state-of-the-art integrated project, technical and commercial services required to plan, design, implement, operate and post-appraise energy transition projects in areas encompassing carbon management, enhanced recovery (EOR) and conventional, and unconventional hydrocarbons.  Jason has over 20 years of subsurface experience, and has worked for ExxonMobil, Enverus and Caerus Oil and Gas. He is the current 2nd VP-Elect of RMAG and former president of RMS-SEPM.

A diagram of a building

Description automatically generated with medium confidence