Model Domain Grid Description:

A 313 mi^2 SEM centered on the Cleco Diamond Vault Project site was used to assess potential CO_2 storage and estimate the extent of the CO_2 plume. To address cell count and simulation speed, a smaller 60 mi^2 grid with lateral dimensions of 7.5 mile by 8 mile was used which encases the entirety of the plume and pressure front for the intended injection period. The grid size is variable with an average of 10 ft layers in the injection zone and 12 ft layers in the confining unit.

The SEM is subdivided into four internal zones based on observed responses seen in gamma ray, spontaneous potential (SP), and resistivity logs. These zones include the Cane River (confining unit), Carrizo, Wilcox 1, and Wilcox 2 (injection intervals) as shown in Figure 1 and Table 1. The reservoir quality of the zones indicates the highest quality sands in Carrizo, respectively lower-net fluvial sands in the Wilcox 1, and higher net fluvial sand abundance in the Wilcox 2.

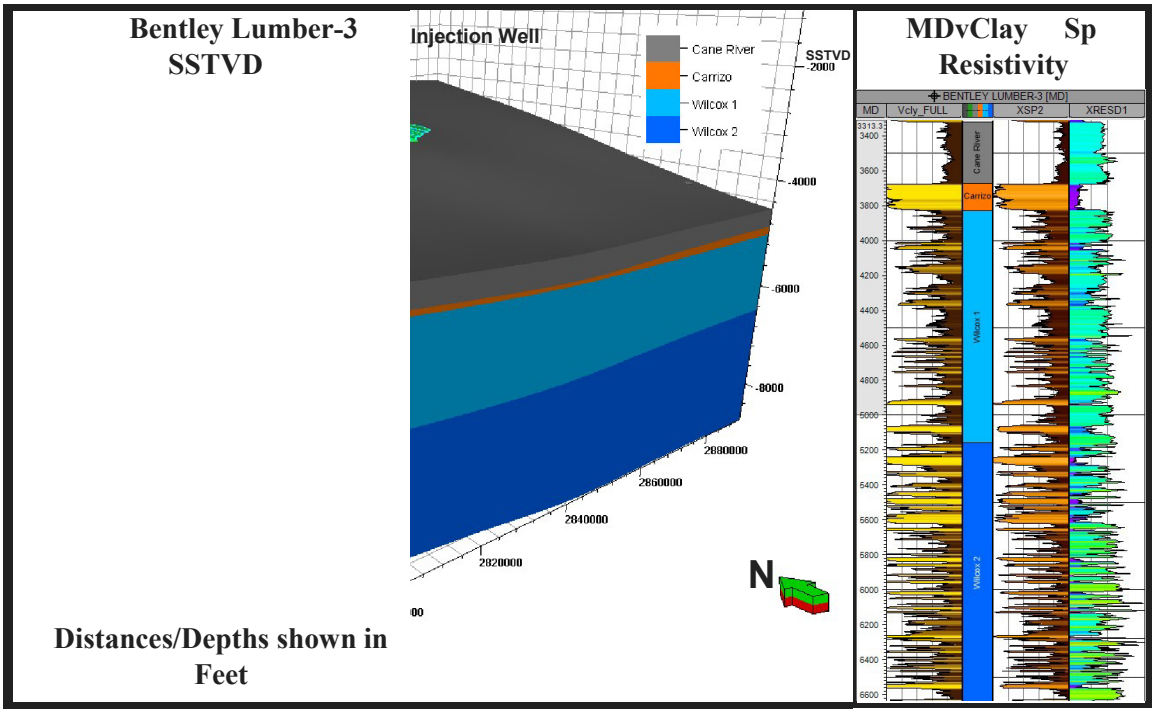
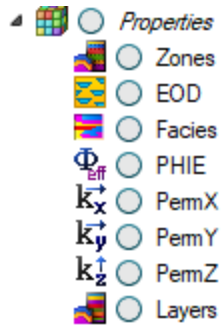


Figure 1: Model Zones and corresponding vClay, Sp, and Resistivity logs. Cane River acts as the confining unit, with Carrizo, Wilcox 1 and Wilcox 2 targeted for injection. Cleco property outline shown at center of the grid.

Zone	Classification	Average Depth (TVDss, feet)	Average Thickness (feet)
Cane River	*Confining Unit*	-3522	347
Carrizo	*Secondary Injection*	-3864	153
Wilcox 1	*Primary Injection*	-4012	1380
Wilcox 2	*Primary Injection*	-5402	2129

Table 1: Summary of modeled zone classifications, depths, and thicknesses.

For the purpose of this submission, the model is being provided as a Generic Simulation Grid (gsg) containing the properties shown below: