

HIGH RESOLUTION SEISMIC SURVEY

AT BIG HILL SALT DOME

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ABSTRACT

High resolution reflection seismic data was collected over the top and slope of Big Hill Salt Dome to detail its structure for siting additional oil storage caverns and brine disposal wells. The data shows normal faulting of the top of caprock, voids just below the caprock surface, and valley sinks in the caprock and overburden. Upper Pleistocene formations can be mapped from depth off-dome to near the surface over the top of the dome. The seismic data together with existing cavern information support interpretation of two shear zones and a 4-spine model of the salt dome.

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