

# **STOCKDALE (AUSTIN CHALK) FIELD, Wilson County, Texas**

## **Case history of an Austin Chalk economic success.**

**By:**

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### **ABSTRACT**

Following the discovery of Fashing (Edwards Lime) Field in Atascosa County, Texas, the writer was involved in a regional hunt for similar undrilled faultline structures. One of these at Stockdale, Wilson County, Texas was similar. It, like Fashing, had shallow Carrizo Sand oil production from a closure against a down-to-the-north fault both of which continued downward to the Austin Chalk seismic reflector. Leases were taken on this approximate 600-acre prospect and the LONE STAR PRODUCING CO. #A-1 Hardin test well was positioned to cut the fault just above the Chalk.

The #A-1 Hardin well did cut the fault as expected. The well was geologized closely but had no shows of oil or gas while it was being drilled (eventually down to the Edwards Lime). Several pits of mud were pumped into the Chalk due to complete loss of circulation. The Carrizo Sand sloughed into the well resulting in three washovers of practically the entire string of drill pipe.

Casing was set on these obviously open fractures in the Chalk and perforations made at the depth of lost returns. The well flowed oil (with no mud or water) on the first swab pull. LONE STAR eventually sold the well after it had produced more than 300,000 barrels of oil. Combined lower carbonate (Austin through Georgetown) production from the field complex exceeded 707,000 barrels.

The poster session will include discussions on (1) parameters critical to faultline oil traps, (2) test well placement, (3) analogs in other basins (eg., the Hardeman Basin Mississippian) where per well recoverable reserves of over one million barrels are fairly common, and (4) the future for horizontal drilling in this type Austin Chalk trap.

LONE STAR  
No. A-1 HARDIN  
CUM: >300 MBO

NW

SE



FAULT DIPS 60° NW

WELL DEPTHS

4880'

OIL IN FRACTURES

AUSTIN CHALK

AUSTIN CHALK

5170'

EDWARDS LIME

SCHEMATIC OF STOCKDALE (AUSTIN CHALK) FIELD  
NOT TO SCALE