

**Fasken Oil and Ranch, Fee 'BI' #307,  
Wolfcamp, 'Cline' and Strawn Core,  
Ector County, Texas**

**Stonnie L. Pollock**  
*Fasken Oil and Ranch, Ltd.*

The Fee 'BI' #307 well cored 271 ft. of Wolfcamp, 'Cline' and upper Strawn from 9,650 to 10,407 ft. This core is a core contribution in the Tight Oil Reservoirs of the Midland Basin Consortium conducted by Core Laboratories.

The Wolfcamp consists of interbedded detrital limestone, silty shale, and argillaceous siltstone deposited in a proximal to distal basin floor environment. Some Wolfcamp intervals contain mass transport carbonates deposited on an upper to lower submarine slope. The 'Cline' consists of skeletal packstones and burrowed silty shales deposited along a lower submarine slope to medial basin plain. The uppermost Strawn comprises stacked fining upward cycles of recrystallized, naturally fractured limestone with erosional surfaces deposited in a distal ramp setting.

Mineralogy of the studied intervals is composed of quartz (6 to 42%, avg. 40%), calcite (0 to 89%, avg. 15%) and clay (1 to 39%, avg. 23%). Gas-filled porosity ranges from 0.2% to 10%, with an average of 2.4%, and total porosity from 0.8% to 13.3% with an average of 6.5%. Effective matrix permeability averages 2.52 nd. Wolfcamp oil saturations average 7.5% pv and 'Cline' averages 13% pv. Wolfcamp TOC averages 2.7 wt.% and the 'Cline' averages 4.0 wt.%. TMax and Ro values place the Wolfcamp and 'Cline' shales in the oil window of low to moderate thermal maturity.

The well was completed with 8 frac stages from the Atoka Lime to the 1st Spraberry . The well tested 209 BOPD & 220 MCFD (max. 30-day ave.) and has produced 51 MBO and 81 MMCFG in 17 months.