

## Cement City, Oklahoma (Depleted Sand)

### WELL HISTORY

Depleted Sandstone at 16,000'. Wellbore losses previous to Ultra Squeeze was 2,500 bbls of OBM. Three cement plugs were pumped prior to Ultra Squeeze and the well bore was on vacuum.

An 80 bbl Ultra Squeeze pill was blended and pumped from the casing shoe at 15,500'. After 8 hours the well was circulated with full returns. The Ultra Squeeze pill was drilled through and returns were noted to be approximately 70%. A second pill of 40 bbls was blended.

The second pill was squeezed as per the first pill scenario and the well was left shut in for 6 hours.

After tagging the second pill, bottoms up was circulated the drilling fluid conditioned. Washing and reaming commenced, and drilling operations continued for another 800' with no losses and the well was T.D.

*OPERATOR: CHEVRON*

*LOCATION: OKLAHOMA*

*DRILLING FLUID: OBM*



## East Texas (Fractured Limestone)

### OBJECTIVE

Cure loss circulation into the Travis Peak (Fractured Limestone) and increase mud weight to safely drill through tectonically stressed shale formations.

The well was experiencing dynamic seepage losses of 30 bbls/hour. A 20 bbl pill of Ultra Squeeze was mixed and spotted across the target formation. The drill pipe was

pulled above the slurry and the Hydril closed. Slight hesitation squeezes were applied up to 250 psi. After squeezing 2-3 bbl increments, the well was allowed to stabilize.

**"Inner Zonal Shut-Off Provided a Chemical Liner, Increasing FIT Across the Travis Peak Formation by 0.7 lb/gal"**

After squeezing a total of 8 bbls, the well stabilized with 200 psi on the casing and was left shut in for (6) hours. The plug was washed through and drilling fluid conditioned. The drill pipe was POOH to the casing shoe and a FIT performed to 10.9 EMW. The well tested. The mud weight was increased from 10.1 to 10.7 and drilling commenced without further incident.

## Fort Nelson, B.C., Canada (Fractured Sandstone)

Operator was drilling ahead with no losses when a drill break occurred and the bit fell 5'. Total loss of circulation occurred into a fractured sandstone.

The BHA was placed 5 barrels inside the 13 3/8" casing and 180 barrels of Ultra Squeeze was blended and formulated for a static BHT of 122 degrees F.

With the drill pipe on vacuum, Ultra Squeeze was pumped into the drill pipe. After +/- 140 bbls of Ultra Squeeze exited the bit, partial returns were observed on surface. Five barrels of Ultra Squeeze was left in the drill pipe to prevent contamination with OBM while pulling above the pill. The Hydril was closed and 10 bbls of Ultra Squeeze was squeezed

into the formation at 0.25 BPM. The well was left shut in for (8) hours. The pill was tagged below the casing shoe and washing and reaming commenced.

A successful FIT was obtained and drilling commenced without further incident.

*OPEN HOLE SIZE: 12 1/4"*

*MUD TYPE: 80/20 OWR OBM*