



Well 697-17-64B API 05-045-17051-00 9-5/8" Surface Casing Cement Job

On 29 January 2010 Oxy ran and cemented 9-5/8" surface casing set at 2720' MD shoe depth. Prior to the cement job 350 barrels of mud were circulated with partial returns to surface. Two cement slurries consisting of 1300 sacks, 540 barrels of 12.3 ppg lead cement and 125 sacks, 46 barrels of 12.8 ppg tail cement were pumped and displaced with 207 barrels of fresh water, with no cement returns to surface. Final recorded lift pressure of 545 psi indicates a estimated calculated lift height of 2350'. The primary cement job was followed by a top-out job pumped through a 60' long, 1" diameter line run down the casing annulus. A three stage total of 109 barrels, 326 sacks of 14 ppg cement was pumped down the backside during the top-out job, until cement returned to surface with no fall-back.

Well 697-17-64B

API 05-045-17051-00

Hole size 14.75"

Casing Size 9.625

Shoe Depth 2720'

Lift Psi 545

Lead Cement 1300 sxs 2.33 yield 12.3 ppg

Tail Cement 125 sxs 2.07 yield 12.8 ppg

Top Out Cement 326 sxs 1.78 yield 14.0 ppg

4 bbl Cement to surface

