

LOG OF OIL OR GAS WELL (Continued.)

Humble Oil & Refining Company

Abo Chalk Bluff Draw Unit, Well No. 1, Empire Abo Field, Eddy County, New Mexico

History Of Oil Or Gas Well-

Spudded 11" hole at 7:00 AM, 6/8/60. Set 1500' of 8 5/8 csg at 1513'. Drld to total depth of 5694 and set 5683' of 4 1/2" csg set at 5694'. Perf 4 1/2" csg from 5535 to 5557' w/2 shots per ft. Acidized perfs 5535-5557 w/6000 gals acid. Well swbd dry. Spotted Dowell Jel X-820 over perfs from 5535-5557. Perf 4 1/2" csg from 5470-5483, 5486-5500, 5506-5522 w/2 shots per ft. Acidized perfs 5470-5522 w/6000 gals acid. Well failed to produce.

Set packer at 5528', pressured up between tbg & csg, circulated fluid @ 500#. Indicated channel behind 4 1/2" csg. Set cmt retainer at 5528, circulated behind 4 1/2" csg through perfs. Squeeze cmt perf from 5470-5557 w/ 150 sx cmt. Drld cmt from 5430-5525, tested csg w/1000# - held. Perf 4 1/2" csg from 5486-5500 & 5506-5522 w/2 shots per ft. Swabbed dry. Acidized perf from 5486-5522 w/12,000 gal reg 15% acid, swabbed dry. Squeezed perf 5486-5500 & 5506-5522 w/55 sx Dowell D-23 Flac cmt. Drld cmt from 5438-5528. Pressure tested squeezed perfs - broke down. Set retainer at 5408 & squeeze cmt w/75 sx Dowell Flac cmt, squeezed out 45 sx into formation. Found retainer at 5481, drilled out to 5528, tested w/4000#, failed to hold. Drilled bridge plug & cmt to 5600, perfs from 5535-5557 broke down, squeeze cmt with 75 sx Dowell Flac cmt. Drld cmt & retainer to 5600'. Set retainer at 5528, cmt w/75 sx Dowell Flac cmt first stage, squeezed another 75 sx, squeeze obtained with 55 sx in formation at 4000 psi. Drld cmt & retainer to 5600'. Set packer at 5440', pmpd in 1500 gals 15% reg acid followed by 150 sx slo-set neat cmt. 142 sx into formation thru perf 5535-5557 w/5500#, reversed out 8 sx. Drld retainer & cmt to 5600. Pressured up csg to 2000# - held. Perf 4 1/2" csg at 5569 w/4 holes. Spotted 250 gals 15% acid on perf at 5569, pressured to 2600# on tbg & 2000# on csg, pumped into formation @ 1 BPM. Pressure broke to 5000#, pmpd into formation at 5800# at rate of 4 1/2 BPM. Communications between perforations. Set cmt retainer at 5430, pmpd into formation w/water at 2 BPM, pmpd 5 bbls acid and 80 sx cmt into tbg, cmt retainer failed. Reversed out cmt and 1 bbl acid. Set retainer at 5400', pmpd in 200 sx reg neat cmt, did not squeeze. WOC 6 hrs, pmpd 200 sx neat cmt at 2800#. Did not squeeze. WOC 7 hrs. Pmpd 200 sx neat cmt at 3000#. Did not squeeze, WOC 8 hrs. Pmpd 200 sx neat cmt at 3100#. Did not squeeze. Set retainer at 5400'. Squeezed perf in 4 1/2" csg at 5569 w/50 sx reg neat cmt & 100 sx reg w/5# gilsonite per sk & 50 sx reg neat cmt. After pmpd in 180 sx at 5600 to 5800, tbg pressure & 2400# csg pressure, cmt retainer failed. Circ out cmt. No free movement. Cut tbg at 5375 w/chemical cutter. Jarred packer loose. Ran Klustrite shoe #1, milled 3 hrs, made 1' of hole, rec steel cuttings & cmt. Ran Klustrite shoe #2 w/inside cutting edge built up 3" ID, milled 2 hrs unable to make hole. Pulled tbg out of hole. Well temporarily abandoned.

Set cmt plug in 4 1/2" csg 1643-1543 w/15 sx cmt. Cut off wellhead. Set cmt plug from 29' to surface w/10 sx. Welded cap on top & installed dry hole marker. Well plugged & abandoned 9/11/60.