

WELL RECORD

Well No. 0-20 Lease Houston Sec. 9 Township 27 Range 18-E
 Location _____ County Neosho State Kansas
 Date Completed February 9, 1955 Drilling Contractor Carl Bernd
 Casing 8" at 28' Casing 6 $\frac{1}{4}$ " at 565' Casing _____ at _____
 Original T.D. 746.6 Cored 700.0 to 746.6' T.O.S. _____
 B.O.S. _____ Net Feet of Pay _____ Plug Back _____
 Cement On Packer 15 sacks Seating Nipple _____
 Packer 710' Kind Belt Size 4 7/8
 Tubing _____ Liner _____ Anchor Below Packer _____
 1" Tubing _____ Rods _____ Pony Packer _____
 Barrel _____ Kind _____ Size _____
 Type Unit _____ Motor _____ Well Power _____
 Initial Production: BOPD _____ EWPD _____ Bbls. Total Fluid _____

Method of Completion:

Well cored from 700.0' to 746.6' T.D. Well plugged back with rock and tin in sections to 721.0' heavy cap of tin. Well shot from 711 to 716, 19.5 qts. Nitro, well cleaned out all towers. Well plugged back with 100 lbs. lead wool from 725 to 724, 724 to 722 with crushed rock and tin. Lead wool 100 lbs. 722 to 721 crushed rock put in but no fill up. Lead wool all ran in cages and capped with lots of tin.

Well shot a second time because of mistake in shooter measurements. Second shot from 711 to 716, 13 ~~sack~~ wts. Nitro. Ran 4 7/8 Belt Packer with 9 gunny sacks above packer, seating nipple in 4 way tee 10" down from center of packer. 15 sacks 1 day cement ran thru 1" pipe. Packer set at 710.0 Heavy 10 round thread 2" tubing used.

2-12-55 - Ran 30 sks. 1 day cement thru 1".

Work Over Operations and Remarks:

February 14, 1955 - Ran in reshopped 1" pipe and a McGregor bbl.
 February 22, 1955 - Pull out McGregor bbl and ran in Insert bbl.
 March 3, 1955 - Pull out rebuilt insert bbl. and ran in another rebuilt insert bbl.
 March 29, 1955 - Pulled out Insert barrel and ran in rebuilt Insert barrel.
 April 12, 1955 - Pulled out 1" pipe and ran in new extra heavy 1" with rebuilt Insert barrel.
 June 2, 1955 - Pulled 1" and insert barrel, repaired ~~ix~~ insert barrel and ran back in well.
 June 13, 1955 - Pulled out 1" and insert barrel, reran 1" with rebuilt insert barrel.
 Nov. 18, 1955 - Pulled out 1" and replaced 34 1" collars, ran 1" back in with rebuilt insert barrel. *ran in 2" Mech. hold down.*
 April 23, 1956 - Pulled 1" and insert barrel and mech holddown - reran 1" with Oilmaster pump and 2" mech holddown.

June 6, 1956 - Pulled 1" - barrel had mech holddown - well muddy - decided to wash and acidized - ran 1" with spray on bottom - washed and acidized with Consolidated Truck.

June 7, 1956 - Pulled 1" ran barrel with mech holddown - had trouble getting pipe to go - holddown wanted to set. ~~Tightened~~ Tightened all collars.

June 28, 1956 - Pulled 1" pipe - replaced top crown on insert bbl- examined balls and seats and cups - good shape so replaced and ran pipe back in.

August 9, 1956. Pulled 1" pipe with insert barrel and mechanical holddown. Run in rebuilt insert barrel with same mechanical hold-down.

Sept. 17, 1956 - Pulled 1" pipe with insert barrel and mechanical hold-down Rerun rebuilt insert barrel with 1" pipe. Cups were off.

Sept. 27, 56.- Pulled 1" pipe with insert barrel - Found hole in collar Run back rebuilt McGregor Barrel with the 1" pipe. Hole in collar.

Sept. 28, 56 - Pulled 1 joint of 1" to set mechanical holddown and pulled 386' of 2" pipe. Replaced 206' with used 2" pipe. Hole in the threads on the 2" pipe. Run 1" back and put well to pumping.

Oct. 9 & 10, 1956 - Pulled 1" pipe and took off barrel and run 1" back as a guide. Pulled 420' of 2" - run R & L 5 times to get all the 2" out. Replaced 1 joint (22' 1" of used 2" pipe) Bad thread. Pulled the 1" back out and put on McGregor barrel and run the 1" back in.

Oct. 16, 1956 - Pulled 1" pipe - exchanged insert barrels and rerun 1" pipe.

Nov. 17, 1956 - Pulled the 1" pipe with insert barrel and mechanical hold-down. Run back a rebuilt insert barrel with the same mechanical holddown.

Jan. 15, 1957 - Pulled the 1" pipe with insert barrel and Mech H.D.. Changed 10 collars and run back with a rebuilt insert barrel. Set the mech. Holddown and put to pumping.

Jan. 29, 1957 - Pulled out barrel and 1" pipe. Ran 1" pipe back with perforation on bottom. Washed with fresh water until clean. Mixed 5 gallons of WF 1 with 6 bbls. of fresh water and circulated for 20 minutes. Washed again with fresh water until ~~clean~~ returns were clean. Washed out a lot of mud and scale. Ran 1" back in with insert barrel and started pumping.

Jan. 28, 1957 - Pulled 1" pipe and insert barrel, removed barrel and ran 1" back to wash through.

Jan. 29, 1957 - Washed well - Pulled 1" pipe, Run 1" pipe back with insert barrel and mechanical hold down. Set mech. holddown and put well to pumping.

Feb. 11, 1957 - Pulled the 1" pipe with insert barrel. Run a rebuilt McGregor barrel and mechanical hold-down back with the 1" pipe, set the hold-down and put the well to pump.

Feb. 21, 1957 - Pulled the 1" pipe with McGregor barrel and mech. holddown. Loosened 2" tubing and replaced the top joint (16 ft. used 2") and screwed the two inch together. Run back a new string of extra heavy 1" pipe with a rebuilt insert barrel and a mechanical holddown. 703.0 New 1" pipe.

Set the holddown and put the well to pump.

July 3, 1957 - Pulled the 1" pipe with insert barrel and BMW holddown. Run back a rebuilt insert barrel, and holddown and 1" pipe. Set the hold-down and put the well to pump.

August 12, 1957 - Pulled the 1" pipe and insert barrel, along with a BMW hold down. Holddown was broken. Run back a used BMW holddown and a rubber packer on it. Run back a rebuilt McGregor ~~XXXXXX~~ barrel and the 1" pipe and set the holddown and put the well to pump.

August 20, 1957 - Pulled 6 joints of 1" pipe and found a hole, replaced 1 joint 21.3' with new 1" pipe and run back, set the holddown and put to pump.

Dec. 3, 1957 - Pulled the 1" pipe, barrel and BMW holddown. Removed barrel and holddown and run back the 1" pipe with an eccentric packer and hooked the well up to flow through the 1" pipe.

Sept 1989 - Acidized to input well.