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MILLER "B" #1 "OWWO"-"INJECTION WELL"
C NE NW, Sec 13-6s-36w
Thomas County, Kansas
KCC DOCKET NO: E-23,778

COMPLETION REPORT:

Originally Commenced: 4/23/79 by Thunderbird Drilling
Originally Completed: 5/12/79 as D&A
OWWO Commenced: 4/18/84 by Brougher Oil, Inc.
OWWO Completed: 4/21/84
RTD: 4845'
Surface Casing: 8 5/8" set at 400' with 300 sacks cement
Production Casing: 5 1/2" set at 4840' with 250 sacks 50/50 Pozmix, 450 sacks Halco Lite.
KCC INJECTION WELL DOCKET: E-23,778 approved 7/8/85

DRILLING INFORMATION:

- 4/23/79 Moved in Thunderbird Drilling, Inc. and drilled the original well.
Ran DST #1 (4508-4535) PAWNEE, REC: 300' FGY Mdy Oil, 180' FGY Mdy Oil w/tr Wtr, 120' Wtr, SIP: 1116-1055, FP: 69-268.
Ran DST #2 (4540-4590) LOWER PAWNEE, REC: 10' Mud, SIP: 52-43, FP: 43-43
- 4/18/84 Moved in Murfin Drilling, Inc and started Washing Down.
4/19/84 Washed down to 2635', washing ahead.
4/20/84 Washed down to 4845', preparing to set 5 1/2" casing.

COMPLETION INFORMATION:

- 5/25/84 Moved in Mohawk Rig #2 and drilled out DV tool at 3020'.
5/26/84 Pused D.V. Tool to bottom. Rigged up Welex adn logged the hole. Swabbed hole down to 3500'. Perforated PAWNEE from 4521-4525'.
5/29/84 Broke down 5 1/2" swabbing tools, unloaded tubing and rods. Rigged up and ran 143 jts of 2" tubing with Howco's RTTS. Set packer at 4500'. Rigged up, swabbed down and tested Zone made approximately .5 bbls fluid per hour at 85% Oil.
5/30/84 1200' fill up overnight. Swabbed hole down. Treated by Howco with 500 gls of 15% NE. Swabbed hole down and tested. Zone made 1.25 bbls fluid per hour at 40% Oil.
5/31/84 1500' fill up overnight. Swabbed hole down. Treated by Howco with 1000 gls 15% H.F. Swabbed hole down and tested. Zone made 1.67 bbls fluid per hour at 34% Oil.

BROUGHER OIL, INC.

P. O. BOX 1367

GREAT BEND, KS 67530

#1 "B" MILLER "OWWO"

13-6-36W

C NE NW

CONTR MURFIN DRILLING CO.

CTY THOMAS

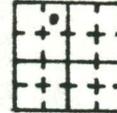
GEOLOGICAL

FIELD W W M EXT (1/8 W)

ELV 3351 KBSPD 4/18/84
3346 GL

CARD ISSUED 7/5/84

P 30 BO & 20 BWP
MARM 4521-4525



LOG	Top	Depth/Datum
ANH		2978 + 373
B ANH		3016 + 335
TARK		3869- 518
HEEB		4165- 814
TOR		4201- 850
LANS		4217- 866
BKC		4483-1132
MARM		4494-1143
PAW		4579-1228
CHER		4635-1284
MISS		4806-1455
RTD		4845-1494
LTD		4848-1497

API 15-193-20,184-A

OLD INFO: OPERATOR WAS THUNDERBIRD DRILLING, INC., #3
 "V" MILLER, SPD 4/23/79, SET 8 5/8 " 400 / 300 SX, COMP. AS
 D & A / MISS, (CARD ISSUED 5/12/79), CONTR. COMPANY TOOLS
 DST (1) 4508-4535 (MARM) / 45-45-45-45, REC 300' FROGGY
 MDY OIL, 180' FROGGY MDY OIL, W/TR WTR, 120' WTR, SIP
 1116-1055#, FP 69-268#
 DST (2) 4540-4590 (MARM) / 30-30-30-30, REC 10' M, SIP 52-
 43#, FP 43-43#
 NEW INFO: FR 1/30/84, RE-ENTERED 4/18/84, WSH DWN TO
 OTD, SET 5 1/2 " 4840 / 250SX, MICT -CO PF (MARM) 4521-
 25, AC 500G (15% NE) & 1000G (15% HF), SWB DWN, SO, POP,
 P 30 BO & 20 BWP, 6/6/84

- 6/1/84 1300' fill up overnight with 200' of oil on top. Rigged up and pulled tubing and packer. Ran in 153 jts of 2" tubing, 1' seating nipple, 15' mud anchor, and 1-6' and 1-8' sub on top. Ran in pump, 190 3/4" rods, 1-2' sub on pump and 1-6' sub on top. Closed in the well head.
- 6/2/84 Rigged down and moved off of location.
- 7/5/84 Moved in Poe Well Service. Pulled the rods and pump. Shut down for day.
- 7/6/84 Got ready for tubing adn pulled it out. Hooked up our casing swab and swabbed the well down. Fluid was 4200' from surface. We tested 3 hrs:
 1st hr 24.8 bbls 26% Oil
 2nd hr 27.0 bbls 30% Oil
 3rd hr 24.0 bbls 29% Oil
 Waited on orders. Tested 3 more hrs.
 4th hr 23.6 bbls 29% Oil
 5th hr 9.7 bbls 43% Oil
 6th hr 12.2 bbls 29% Oil
 Shut down for day.
- 7/7/84 Ran swab, had 450' of fluid in the hole. Tested all day:
 1st hr 22.9 bbls 35% Oil
 2nd hr 9.4 bbls 30% Oil
 3rd hr 8.3 bbls 30% Oil
 4th hr 6.0 bbls 40% Oil
 5th hr 5.6 bbls 36% Oil
 6th hr 5.3 bbls 34% Oil
 Called in for orders. Shut dwn for day.
- 7/9/84 Ran the swab. Had 450' of fluid in the hole. Swabbed 1 hr and got 19.88 bbls, 67% Oil
 Waited 2 hrs for a water truck and Halliburton acidized with 1250 gls MCA in Pawnee Formation. Swabbed back. Made 140 bbls in 4½ hrs, 35% Oil at the end. Shut down for day.
- 7/10/84 Ran swab, 450' of fluid in the hole. Made 9 bbls on the swab down, 10% oil. Tested the rest of the day.
 1st hr 18.75 bbls, 23% Oil
 2nd hr 13.88 bbls, 37% Oil
 3rd hr 5.6 bbls, 30% Oil
 4th hr 4.5 bbls, 32% Oil
 5th hr 1.13 bbls, 24% Oil
 6th hr 1.88 bbls, 28% Oil
 7th hr 1.13 bbls, 33% Oil
 Shut down for day.
- 7/11/84 Ran swab, 180' of fluid in hole. Made 3.75 bbls on the swab down, 2% Oil. Tested 4 hrs:
 1st hr 4.87 bbls, 10% Oil
 2nd hr 4.13 bbls, 10% Oil
 3rd hr 4.13 bbls, 30% Oil
 4th hr 2.62 bbls, 40% Oil
 Halliburton acidized the PAWNEE with 4000 gls of SGA. Shut in for 1 hr and then swabbed it back. Made 133.45 bbls, all water in 3½ hrs. Shut down.
- 7/12/84 Ran swab, fluid 4300' from surface. No oil. Tested all day:
 1st hr 42 bbls 4th hr 3 bbls 7th hr 1.88 bbls
 2nd hr 12.75 bbls 5th hr 1.88 bbls 8th hr 1.88 bbls
 3rd hr 6.38 bbls 6th hr 3 bbls 9th hr 1.88 bbls
 No oil all day. Shut down.

- 7/13/84 Ran the swab. Fluid 4550' from surface. Had some oil on it. Ran the tubing in. Packed the head off and got ready for rods. Ran them in with a new pump. Hung the well on and rigged down.
- 11/30/84 Moved in Mohawk Rig #4 and pulled polish rod. Couldn't get the pump to unseat. It was sanded in. Unscrewed the rods and pulled the polish rod, subs and 156x3/4" rods. Pulled 20 jts of 2" tubing and hit fluid. Swabbed the fluid out of the tubing. Pulled out 30 more jts of tubing.
- 12/1/84 Pulled 70 more jts of tubing. Stripped out the rest of the rods and tubing. Had to hacksaw 2 rods.
- 12/3/84 Rigged up Welex and perforated LKC "L" ZONE from 4452-4456'. Ran in Howco's retrievable bridge plug and packer. Set the plug at 4480' and the packer at 4410' (isolated the LKC "L" ZONE). Ran the swab, dry. Rigged up Howco and acidized with 500 gls of 15% MCA acid. Load back 31 bbls. Swabbed the hole down. Swabbed 15.50 bbls fluid, no show of oil. 1st 30" test recovered 150' of water.
- 12/4/84 Ran the swab and checked fluid level. Fluid at 3200'. Ran swab and recovered 5 bbls fluid, no show of oil. Tested:
1st 30" 30' of water
1st 60" 30' of water
Pulled the packer and plug. Laid down the tubing. Rigged down and moved off of location.
- 1/15/85 Moved in Mohawk Rig #4. Tallied tubing going in the hole. Ran in plastic lined packer and 137 jts of 2" dura-lined tubing.
- 1/16/85 Put in new shaft. Ran in 7 jts of tubing and set the packer. Rigged down and moved off location.
- 4/24/85 Moved in Poe Well Service. Released packer and pulled 3 jts of tubing. Reset packer with 7000# in slips. Rigged down.
- 4/25/85 Drove to location and rigged up unit. Released packer. Painted and pulled tubing for leak. Found holes in last 2 jts and 1 jt was almost parted. Shut down for day.
- 4/26/85 Waited on packer. Ran packer and tubing into hole. LaRue Tank Service pumped 100 bbl treated water down annulus. Set packer and pressured on casing to 300# and it held. Rigged down and cleaned up location. R-4 set in compression at 4380'.