TIGHT HOLE - PLEASE DO NOT RELEASE ANY INFORMATION ON THIS WELL

OSAGE_BOYD_#1

5/4/85: TP: 2850#. CP: 0#. RU Halliburton, blow tbg. down to 200#. Recovered est. 1-1/2 bbl. LW. Install isolation tool. Sand frac down 2-3/8" tbg. while maintaining differential pressure on csg. as follows:

> Pumped 3000 gals. ENWAR PAD to condition formation and improve load recovery; followed with 6000 gals. gel water pad; followed with 3000 gals. acid gel II containing 1/2# 2040 sand/gal; followed with 3000 gals. acid gell II containing 3/4# 2040 sand/gal; followed with 6000 gals. acid gel II containing 1# 2040 sand/gal; followed with 7000 gals. acid gel II containing 2040 1-1/2# sand/gal; followed with 5000 gals. acid gel II containing 2# 2040 sand/gal; followed with 5000 gals. acid gel II containing 2# 2040 sand/gal; followed with 1480 gals. gel water flush. Total of 28,480 gals. CO2 and gel fluid and 40 tons of CO2. Max. treating pressure 7870#, avg. treating pressure 7050#. Had avg. of 10 bbls/min on fluid and 2 bbls/min on CO2. Total of 30,300# of sand. ISIP 1950#, 15 min. SIP 1830#.

> Removed isolation tool, RD Halliburton, left well closed in 4 hrs. flow well to pit for 6-1/2 hrs. Appears to have recovered most all of the LW and acid residue. Closed in well over night.

- 5/5/85: SITP: 1390#, CP: 0#. Flowed well down, recovered est. 10 bbls. LW with fine spray, SDFN.
- 5/6/85: TP: 1750#, CP: 1100#. Blowed down CP to 0#. Flowed tbg. down, recovered est. 7 bbls. load water. Closed in for BU.
- 5/14/85: Ran 4 pt. test. CAOF 652 mcf on a 24/64" choke.

NEARBURG	i la la como como
Cace No. <u>8847</u>	

TIGHT HOLE - PLEASE DO NOT RELEASE ANY INFORMATION ON THIS WELL

OSAGE - BOYD #1

TP: 2750# CP: 2775# Opened well on a 24/64" choke. TP 3/10/85: dropped as follows: 2750# - 1500# 15 mins. 1500# - 1000# 5 mins. 1000# - 950# 2 mins. Unloaded water at 950#. 950# - 500# 6 mins. Unloading a fine mist. 500# - 150# 10 mins. Unloading a fine mist. CP blew down to 900#. TP: 2725# CP: 2725# Opened well on a 24/64" choke. TP 3/11/85: dropped as follows: 2725# - 1500#15 mins. 1500# - 1000#5 mins. 1000# - 900# 5 mins. Unloaded water at 900# 900# - 500# 10 mins. Unloading fine mist. 500# - 150# 10 mins. Unloading fine mist. CP blew down to 950#. TP: 2775# CP: 2800#. Opened well on a 24/64" choke. TP 3/12/85: dropped as follows: 2775# - 1500# 22 mins. 1500# - 1000#10 mins. 1000# - 900# 4 mins. Started to unload water. 900# - 500# 3 mins. Unloading a mist. 500# - 150# % 5 mins. Unloading a fine mist. CP blew down to 900#. 3/13/85: TP: 2775# CP: 2775#. Opened well on a 24/64" choke. TP dropped as follows: 2775# - 1500# 25 mins. 1500# - 1000#12 mins. 3 mins. Started unloading water. 1000# - 900# 900# - 500# 2 mins. Unloading a mist. 500# - 150# 5 mins. Unloading a fine mist. CP blew down to 900#. 3/14/85: TP: 2800# CP: 2800#. Opened well on a 24/64" choke. TP Dropped as follows:: 2800# - 1500# 20 mins. 1500# - 1000# 12 mins. 1000# - 950# 950# - 500# 1 min. Unloading water. 2 mins. Unloading a mist. 500# - 150# 6 mins. Unloading a fine mist. CP blew down to 750#.

TIGHT HOLE - PLEASE DO NOT RELEASE ANY INFORMATION ON THIS WELL

OSAGE BOYD #1

- 2/26/85: MI, RU Monument Well Service Pulling Unit. Remove WH, install BOP, POH with tbg. SDFN.
- 2/27/85: RU GO Van. Run Gamma Ray Collar log from PBTD of 9130' to 6900'. Perf. zones 9110, 9109, 9108, 9107, 9094, 9093, 9092, 9091, 9090, 9089, 9088, 9087, 9086, 9085 with 2 SPF and zones 8954, 8901, 8900, 8890, 8884, 8878, 8877, 8876, 8871, 8867, 8866 with 1 SPF. Had 1 miss run due to bad collar locator. The shot at 8884' did not go off. Run Baker lock-set, 2-3/8" x 4-1/2" pkr. with seating nipple in top, and 2-3/8" 8rd thread x 2-3/8" CS Hydril adaptor sub. Ran 100 jts. of 2-3/8" CS Hydril 4.7# N-80 tbg., test to 7000# above slips. Ran tbg. to 2984' and SDFN due to darkness. Prep. to finish running tbg. and acidize.
- 2/28/85: Run 303 jts. (9106') of 2-3/8" 4.7# N-80 CS-Hydril tbg. Test to 7000# above slips. 2-3/8" x 4-1/2" Baker lok-set pkr. with seating nipple in top. TLA 9114' and spot acid across perforated zones 9110'-8866', then pull 10 jts. of tbg. and reverse acid out of tbg. Pumped 39 gals. of KCl water. Pull BOP and install WH, displace KCl water out of tbg. with N₂. Set pkr. with 10 pts. compression at 8796' and RU Halliburton. Discovered tbg. leak, RD Halliburton and prepared to round-trip and re-test tbg. to 7000# above slips.
- 3/1/85: Unseat pkr., pull WH and install BOP. Make TOH with tbg. and pkr. RU Hydro-static pipe tester. GIH with new Baker lok-set pkr. and tbg. Test to 7000# above slips and found 4 bad pins. Ran a total of 293 jts. (8783') of 2-3/8" 4.7# N-80 CS-Hydril tbg., pkr. and seating nipple. Closed BOP, SI well due to darkness.
- 3/2/85: Ran tbg. at 8798', Pull BOP, install and bolt down WH. RU Halliburton, displace KCl from tbg. with N2. Unbolt WH, set Baker lok-set pkr. with 10 pts. compression. Bolt down WH, RU Halliburton. Pressure annulus prior to beginning acid job. Pressure annulus to 1000#, had communications into tbg., pressure tbg. to 2900# into ${\rm N}_2$ and seal bottom pkr. element. Pressure annulus to 1000# and holding OK. Acidize zones 91101 - 88661. with 4000 gals mor-flo acid containing 4 gals. HAI-75 surfactant and 1000 standard cuft. N2 per bbl. and 74 ball sealers. Maximum treatment pressure 7000#. Average treatment pressure 5450#. Instantanious SIP 3400#. 5 mins. SIP 3000#, 10 mins. SIP 3000#. MIR N2 & acid 4.9 bbls/min., AIR N2 & acid 4.9 bbls/min., MIR on acid 3 bbls/min. 120 BLW to recover. Recovery TP in 20 mins. 2700#. Flow back 90 BLW in 4 hrs. with FTP 25# to 30# fluctuating on a 45/64" ck. Closed ck. to 28/64" with TP immediately increasing from 30# to 60#. Fluctuate flow 20 BLW and average volume of 165 mcf/d with no distilate. In 22 hrs., recover 20 BLW with 10 BLW left to recover.
- 3/3/85: Closed ck. to 18/64". At 7:30 am, FTP increased to 60# from 20# in 15 mins. Calculated gas volume was 175 mcf/d. Well was making no trace of distilate and a 1/8" stream of water. Water Sample Analysis shows water to be 2% KCl with trace of acid water in it. Csg. was checked for pressure 4 times today at 15 min. intervals and each time had a medium vacuum, This in conjunction with water analysis and problems encountered with pkr. prior to acid job indicates that the pkr. is leaking annular fluid into the borehole and probably building up into the tbg. which is impeding the gas flow. Well SI for pressure BU.