

Computer inventoried

9-228-11W

ORIGINAL

WHITE & ELLIS DRILLING, INC.

COMPLETION REPORT

15-185-23025

Sleeper #3
SE NE NE Section 9-22S-11W
Stafford County, Kansas

4-2-96:

Rig up Pratt Well Service. Had trouble backing in on soft location. White & Ellis cat spotted rig. RIH w/ used, tested 2 3/8" tubing, bit and scraper. Tagged PBDT at 3575'. Decided not to drill out. Rigged to pull tubing. Shut down for night.

4-3-96:

POH with tubing. Swabbed casing down to 3200'. RU Halliburton Logging and perforated the lower Arbuckle at 3553'-3557' (4') with 4 SPF with 4" expendable gun. All shots fired OK. PBDT at 3775'. Show of drilling mud on gun. Ran casing swab. Swabbed dry. Wait 15 minutes. No entry. RIH with 5 1/2" packer and tubing. Set packer at 3528'. Ran tubing swab. No entry. RU Halliburton. Lowered packer to 3564' to spot. Dumped 1 bbl. 15% MCA w/ DSFE and pen-88. Let equalize. Reset packer at 3528' to treat. Loaded tubing with remainder of 250 gals. of above acid followed by lease water. Let soak 10 minutes. Pressured to 250 psi. Bled to vacuum in 30 seconds. Worked 3 bbls. acid in by working pressure between vacuum and 250 psi. No improvement. Worked remainder of acid in between 250 psi and 500 psi. Slight improvement in bleed off by end of displacement, but did not establish a rate. Overdisplaced acid with one barrel. Bled to 0 psi in 10 minutes. Total load - 21 bbls. RD Halliburton. Rigged to swab. Swabbed 15.88 bbls. first hour - no show. Swabbed 7 bbls. second hour - no show. Swabbing at approximate rate of 3 BPH at end of second hour. Shut well in. Shut down for night.

4-4-96:

Checked fillup. 2650' of fluid - all water. Released packer and POH. RU Halliburton Logging and perforated upper Arbuckle at 3512'-15' (3') at 4 SPF with 4" expendable gun. All shots fired OK. RIH with RBP and packer. Set RBP at 3541' and packer at 3501'. Rigged to swab. Tagged fluid at 1900'. Would not swab dry swabbing all water at 400' per pull. Moved packer to 3535' and swabbed. Still swabbing 400' per pull. Halliburton pressured tubing to 1000 psi. Held. RBP is leaking with pressure underneath but not leaking with pressure above. Moved RBP to 3536'. Swab tested the same. Moved RBP to 3530'. Swab tested the same. Released RBP and packer and POH. Bottom cup on the RBP appeared excessively worn. Shut well in. Shut down for night.

4-5-96:

RIH with different, redressed RBP and packer. Set RBP at 3541' and packer at 3501'. Rigged to swab. Fluid level - 900' from surface. Once tubing was swabbed down, had some indications of RBP leakage as the previous day. Moved and reset packer at 3530' to test on blank pipe. Same indications of leakage. POH with RBP, packer and tubing. RBP bottom rubber was worn excessively as before. RU Halliburton Logging. Set CIBP at 3545'. Mixed and dumped one sack cement on CIBP. RD Halliburton Logging. Decided to let cement set up over weekend before disturbing since the exact cause of the leakage up to now has not been identified. Shut well in. Shut down for night.

4-8-96:

Tagged fluid at 1600'. Approximately where it was left Friday. Rigged to swab. Swabbed casing dry. Checked after 20 minutes. Still no entry. RIH with packer and tubing. Set packer at 3501' w/ tailpipe at 3515'. Ran swab. No entry. Wait on Halliburton. Trucks were not available as promised. Located Oilman's Acid, Inc. truck close by. Halliburton delivered 250 gals. 15% MCA with FE and Pen-88 to Oilman's truck. RU Oilman's. Spotted 3/4 bbl. acid and let equalize. Set packer at 3501'. Loaded tubing with remainder of 250 gals. acid and lease water. Worked pressure to 400 psi over first hour; 1/2 bbl. entry. Worked pressure to 750 psi over second hour;

KCC

AUG 16 1996

OPERATION DIVISION
MONTGOMERY, VA

APR 16 1996

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KANSAS GEOLOGICAL SURVEY

ORIGINAL

3/4 bbl. total entry. Worked pressure to 950 psi over third hour; 1
1/4 bbl. total entry. RD Oilman's, leaving 900 psi on tubing. Shut
down for night. Will tie on with pump truck in the morning.

4-9-96:

RU Pratt Well Service pump truck. Tubing had 0 psi, shut in.
Pressured to 1000 psi in stages. No difference from previous day.
Worked pressure to 1500 psi over next hour. Surged off pressure
several times. No help. Opened unloader on packer and let 3/4 bbl.
fresh acid u-tube across perforations. Worked pressure back to 1500
psi but no change in bleed off. Worked an additional bbl. acid into
perforations over the first two hours of the day. Opened unloader on
packer and u-tubed an additional 1/2 bbl. fresh acid across
perforations. Worked pressure to 1800 psi over next 15 minutes and
got break. Started feeding at 1/4 bpm, 800 psi. No change throughout
displacement. Over-flushed acid with 2 bbls. lease water. ISIP - 750
psi; 5 minutes - 450 psi; 10 minutes - 250 psi; 15 minutes - 175 psi.
Rigged down Pratt Well. Total load - 21 bbls. Swabbed 20.8 bbls.
first hour - no show. Swabbed 12.5 bbls. second hour - no show. Swab
rate continued to fall off into the third hour. RD swab. Released
packer and POH. Shut well in. Shut down for night. Will perforate
Conglomerate zone in AM with tubing conveyed gun.

4-10-96:

RU Halliburton Logging. Set CIBP at 3500'. Found 2100' fluid in
hole. Dumped 1 sack cement on CIBP. RU casing swab. Swabbed casing
dry to 3400'. RIH with Halliburton tubing conveyed perforating system
and tubing as follows:

1 - gun bull plug	.70
1 - 4" perforating gun; 6', 4 spf	6.00
1 - blank perforating gun section	1.50
1 - 3 3/8" mechanical firing head	.80
1 - new 4' 2 3/8" tubing sub	4.38
1 - jt. 2 3/8" tubing	31.10
1 - 2 3/8" fill disc assy	.70
1 - 2 3/8" standard seating nipple	1.10
1 - jt. 2 3/8" tubing	28.35
1 - new 6' 2 3/8" tubing sub	5.95
108 - jts. 2 3/8" tubing	3334.46
1 - new 4' 2 3/8" tubing sub	4.36
1 - jt. 2 3/8" tubing	30.30
Rotary Space	2.00
Gun bull plug at	3451.70
Seating nipple at	3406.12

6' perforating gun at 3445'-3451' (6')

Halliburton Logging spotted gun assy with GR-Collar log. Hung tubing
and assy as above. Hooked up valves, choke and flow line to pit.
Dropped ignition bar at 2:45 p.m. Gun fired. Gas to surface in
1 minute. Unloaded a mist of load water and muddy water. Flow rate
continued to improve over first hour on 1/2" choke. At end of first
hour, approximate flow rate was 1000 mcfd with 300 psi on the casing.
Flow rate continued to improve early in the second hour. Reduced
choke to 3/8" and flowed for rest of hour. At end of second hour,
flow rate was approximately 1400 mcfd with 500 psi on casing. Still
observing a light mist of fluid occasionally, but no measurable fluid.
No evidence of fluid in the casing-tubing pressure differential. Shut
well in. Shut down for night.

4-11-96:

SITP - 964 psi; SICP - 964 psi. RD Pratt Well Service.

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Bottom Hole Pressure Calculation:

Calculate BHP and Z-factor from surface shut in pressure.

Gas Gravity	0.88
Reservoir Temp	105° F
Surface Temp	60° F
Depth of Zone	3,451'
Surface Pressure	964 PSI
Bottom Hole Pressure	1,132 psi
BHP/2 (0.6927)	1,635 psi

Northern Natural Gas Company is interested in running a line to the Sleeper #3 so we will try to negotiate a Gas Contract with them.

CONSERVATION DIVISION
MICHIGAN, KS

APR 16 1966

RECEIVED
MICHIGAN STATE UNIVERSITY
APR 16 1966