



00239270

VAUGHNEY & VAUGHNEY, et al#1 John Nelson - South Liberty Field

LOCATION: SE/4 SW/4 SW/4, Sec. 8-8N-54W, Logan County, Colorado
 ELEVATION: 4449 KB, 4441 Cr. TOTAL DEPTH: 5440
 SPUD DATE: 7-20-53 COMPLETION DATE: 8-11-53
 CASING: 10-3/4" @ 162' w/150 sacks, 5 1/2" @ 5440 w/275 sacks.
 CONTRACTOR: The New Drilling Co. - Rotary Rotocone - Cable Tools.
 INITIAL PRODUCTION: Pumping 13 x 5/4" SPM 2" insert pump,
 Seated @ 5396' in 2 1/2" Tubing.
 96 Bbl. per day.

RECEIVED
 JUN 15 1954
 OIL & GAS
 CONSERVATION COMMISSION

CORE #1:CORE DESCRIPTION (7-3/4" Bit No. RZ9623H)

5378 to 5425 1/2: Out and recovered 47 1/2'
 Time: 4-2-19-12-6-8-18-24-19-21-22-14-6-9-9-15-16-14-9-
 7-(conx) 12-14-14-16-18-19-24-21-18-12-19-17-18-
 16-18-21-20-16-14-15-19-15-26-16-54-47-67-92
 Top "J" by Core 5380 (-831)
 5378 to 5379 1/2: Shale, black, streaks Bentonite.
 5379 1/2 to 5383: Sandstone, dark gray, shaly; No Show;
 No Permeability
 5383 to 5385: Shale, black, streaks silty shale.
 5385 to 5386 1/2: Sandstone, very fine, light gray, shaly;
 No Show; No Permeability.
 5386 1/2 to 5388 1/2: Shale, dark gray, silty.
 5388 1/2 to 5391: Sandstone, medium fine, gray, dense, shaly;
 No Show.
 5391 to 5395: Sandstone, fine, light gray, dense, quart-
 zitic, with 6" show oil @ 5392'.
 5395 to 5398 1/2: Siltstone, gray, streaks shale; No Show.
 5398 1/2 to 5416 1/2: Shale, dark gray to black, few streaks
 gray sandstone. No Show.
 5416 1/2 to 5421 1/2: Sandstone, medium fine, very dense, quart-
 zitic, few streaks shale. No Show. No
 Permeability.
 5421 1/2 to 5422: Sandstone, medium fine, clean, low or no
 permeability. Show oil.
 5422 to 5424: Sandstone, medium fine, clean, good perme-
 ability, good show.
 5424 to 5425 1/2: Sandstone, fine, clean to slightly clay
 filled, fair to very low permeability,
 good light brown oil show.

CORE #2:

5425 1/2 to 5437 1/2: Cut 12', recovered 10'.
 Time: 16-20-22-22-26-24-14-18-19-20-22-41
 5425 1/2 to 5435 1/2: Shale, dark gray to black, streaks silty
 shale. No Show.
 5435 1/2 to 5437 1/2: Lost.

DST #1:

5393 to 5437 1/2: (Johnston) 5/8" Bottom, no top
 Chokes, Open 2 hours, shut in 20 min., immediate weak
 blow with good increase after 3 min., gas to surface 14
 min., recovered 5000' oil and gas, 140' oil and gas cut
 mud (kicked as third stand broke off), BHFP 350# Initial
 720# final, 20 min. SI BHP 970#, Hydrostatic 2965#.

Ran Schlumberger:

Total Depth 5440', reached 5427' (13' Cavings)
 Tops: Niabrara 4450, Ft. Hayes 4783, Greenhorn 5024,
 Brown Lime 5189, "D" Sand 5275, "J" Sand 5382,
 Oil Sand 5422, Total Depth 5427.

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Set 5 $\frac{1}{2}$ " Production Casing @ 5440', cemented with 275 sacks regular cement.
Total 144 joints 5 $\frac{1}{2}$ " - 15 $\frac{1}{2}$ " J-55 LT & C, Range 3, Thds. off tally 5446.58. Used Howco scratchers from 5430 to 5370. Pipe rotated until plug down @ 2:30 P.M. 7-31-53.

Move in Cable Tools for Completion - 8-1-53.

Swab and bail 5 $\frac{1}{2}$ " Dry, test, drill out plug, float collar and cement to 5435. Ran Lane-Wells Gamma Ray and located collars.

Note: Lane-Wells 5' deep, 5387 = 5382 Schlumberger.

Perforate: 5427 to 5432 with 36 - 15/32" Bullets (5422 to 5427 by Schlumberger) Bail clean and swab test @ rate of 4 $\frac{1}{2}$ to 5 barrels clean oil per hour with fluid level rising to only 400' off bottom every 2 hours.

Ran 2 $\frac{1}{2}$ " EUE Tubing for Completion as follows:

174 joints 2 $\frac{1}{2}$ " Tubing and 1 - 2"x6' EUE sub. bottom bull plug @ 5431 (4 $\frac{1}{2}$ ' off bottom), 3' perforated nipple @ 5398, 1 - F.P.P. Co. 25 - 30 seating nipple @ 5396.

Ran 2"x12' F.P.P. Co. Volume Producer Pump with 1 $\frac{1}{4}$ "x10' gas anchor, on 136 - 3/4" and 78 - 7/8" and 1 - 7/8"x10', 1 - 7/8"x8' and 1 - 7/8"x2' Pony Rods and 1 - 1 $\frac{1}{4}$ "x22' Polish Rod. Also 1 - 3/4"x2' Pony Rod on pump seated @ 5396'.

Install Pump and started pumping 8-10-53 4:30 P.M. 12 x 54" SPM. Finished filling treater.

Initial Production - 8-11-53 Pumping 13 x 54" SPM 2" Inert Pump seated in 2 $\frac{1}{2}$ " Tubing at 5396'. Seven hour test ending 5:30 P.M. pump @ 2 $\frac{1}{2}$ -hour rate of 96 barrels oil. No Water. Corr. gravity 38.6° API @ 60° F.

VAUGHY AND VAUGHY

BY:

M. E. Norman