



Lease Name: Unruh Well No. 3-4
 Well Located: C NE/4 SE/4
 Comanche County, Kansas SEC 4 TWP 31S RGE 18W
 Operator: Graham-Michaelis Corporation
 Address: 211 North Broadway, Wichita, Kansas 67202
 Elevation: Ground 2123 D.F. 2127 K.B. 2128
 Type Well: (Oil, gas, dry hole) Oil

Drilling Commenced: December 10, 19 71 Drilling Completed: December 22, 19 71
 Well Completed: December 31, 19 71 Total Depth 5110'
 Initial Production: Swabbing 96 bbls oil per day.

Casing Record

Size: 8 5/8" Set at 544' Size: _____ Set at _____
 Size: 5 1/2" Set at 5109' Size: _____ Set at _____

Liner Record

Size: none Set from _____ To _____

Cementing

<u>Casing Size</u>	<u>Sacks</u>	<u>Type Cement and Additives</u>
<u>8 5/8"</u>	<u>350</u>	<u>(200 sx. light wt.) 150 sx common, 2% c.c.</u>
<u>5 1/2"</u>	<u>125</u>	<u>125 sx. lt. wt. 1/2 of 1% CFR2.</u>

Perforations

<u>Formation</u>	<u>Perforated Interval and Number Shots</u>
<u>Mississippi</u>	<u>5030-5034' and 5040-5046'</u>
_____	_____
_____	_____

Electric Log Run (Show type log and depths covered)

Schlumberger Dual Induction-Laterolog and Compensated Density Log with Gamma Ray
DIL - 555' to 5100' EDC-GR - 4000' to 5105'

(Fill in formation and related information on reverse side)

Graham - Michaels - 2 -

4 - 31 - 18W

3-4 unrec

FORMATION, TESTING AND COMPLETION RECORD

Show Drill Stem Tests,
Well Stimulation and
Production Tests

Formation	Top	Bottom
Surface Clay & Sand	0	225'
Red Bed	225	540'
Shale & Shells	540	1850'
Shale & Lime	1850	2418'
Lime & Shale	2418	2515'
Lime	2515	4460'
Lime	4460	5110'
Rotary Total Depth		5110'

LOG TOPS	DEPTH
BN LM	4358
LKC	4378
MISS	5001
RTD	5110

Drill Stem Test #1
4993-5030'

Open: 60 minutes, gas to surface
in 2 min. gauged 1,600 mcf.
10 min. gg - 1,950 mcf
20 min. gg - 1,900 mcf
30 min. gg - 1,850 mcf
40 min. gg - 1,800 mcf
50 min. gg - 1,775 mcf
60 min. gg - 1,775 mcf

Recovery: 30' gas cut mud
ISIP: 1481# in 20 min. (leveled)
FP: (407-329)
FSIP: 1299# in 30 min. (building slightly)

Drill Stem Test #2
5030-5058'

Open: 60 minutes, strong blow throughout
Recovery: 180' heavy oil and gas cut mud
ISIP: 825# in 20 minutes (building)
FP: (28-46)
FSIP: 1065# in 30 minutes (building)

Acidized with 500 gals acid Dec. 28th and Dec. 30th
with 2,000 gals. 15% acid.

Well swabbing 96 bbls oil per day.