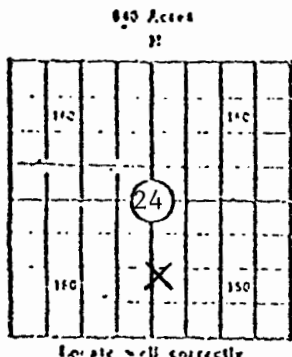


WELL RECORD

(Mail to Kansas Geological Survey, 4150 Monroe Street, Wichita, Kansas 67201)



Lease Name: Brown F Well No. 2
 Well Located: 1250'FSL 2590'FEL
S1C 24 TWP 34 R.1E 42W
 Operator: Cities Service Company
 Address: 3545 N. W. 58th Street, Oklahoma City, OK 73112
 Elevation: Ground 3479 D.F. 3486 K.B. 3487
 Type Well: (Oil, gas, dry hole) GAS

Drilling Commenced: 9-22 19 77 Drilling Completed: 9-28 19 77
 Well Completed: 11-14 19 77 Total Depth 3320
 Initial Production: CAOF 2811 MCF

Casing Record

Size: 8-5/8 Set at 747 Size: Set at
 Size: 5-1/2 Set at 3319 Size: Set at

Liner Record

Size: Set from To

Cementing

Casing Size	Sacks	Type Cement and Additives
<u>8-5/8</u>	<u> </u>	<u>250 sx Lite w/2% CaCl, 1/4# Flocele;</u> <u>200 sx Class H w/2% CaCl-2 & 1/4# Flocele</u>
<u>5-1/2</u>	<u> </u>	<u>75 sx Howco Lite, 1/4# Flocele, .8% CFR-2.</u> <u>100 sx 50/50 Pozmix, 10% salt, 1/4# Flocele, .8% CFR-2</u>

Perforations

Formation	Perforated Interval and Number Shots
<u>Topeka</u>	<u>3044-48 w/8 shots</u>
<u>Topeka</u>	<u>3118-30 w/24 shots.</u>

Electric Log Run (Show type log and depths covered)

Simultaneous Dual Laterolog, Micro SFL & Simultaneous Compensated Neutron Formation
Density w/Gamma Ray & Caliper from 748 to 3319. Welex Cement Bond & Collar
Correlation Log from 2300-3284.

(Fill in formation and related information on reverse side)

FORMATION, TESTING AND COMPLETION RECORD

Show Drill Stem Tests,
Well Stimulation and
Production Tests

Formation	Top	Bottom	
Sand & Clay	0	245	Acidized Upper Topeka 3044-3048 w/750 gals 15% HCL containing 2 gals J-4 & 8 gals J-7.
Red Bed & GYP	245	748	
Red Bed	748	1010	Acidized Lower Topeka 3118-3130 w/2000 gals 15% HCL containing 4 gals J-4 & 20 gals J-5.
Sand	1010	1240	
Red Bed & Anhydrite	1240	1595	Acidized Topeka 3044-3130 w/7500 gals Sta-Live Acid containing 26 gals G-10. Flushed w/74 bbls 1% KCLW w/1/2# gal G-10W.
Shale & Anhydrite	1595	1890	
Shale	1890	2135	Acidized Topeka 3044-3130 w/2000 gals 7 1/2% WA (Mud clean up acid) containing 6 gals J-45 (low surface tension material) & 100 gals J-40 (mutual solvent). Flushed w/59 bbls. 2% KCLW w/first 20 bbls containing 2 1/2 gals J-45 & 42 gals J-40. Next 39 bbls containing 5 gals J-45.
Shale & Lime	2135	2470	
Lime & Shale	2470	2610	
Shale & Lime	2610	2885	
Lime & Shale	2885	2995	
Lime	2995	3220	
Lime & Shale	3220	3320	
Total Depth		3320	
PBTD		3286	