

WICHITA BRANCH

KANSAS DRILLERS LOG

API No. 15 — 075 — 20239
County Number

Operator

Cities Service Company

Address

3545 N.W. 58th Street, Oklahoma City, OK 73112

Well No.

1

Lease Name

Eagle "A"

Footage Location

1320

feet from ~~XXX~~ (S) line

1320

feet from ~~XXX~~ (W) line of SW/4

Principal Contractor

E.F. Wakefield, Inc.

Geologist

Spud Date

4-7-1978

Total Depth

2720'

P.B.T.D.

2696'

Date Completed

9-1-1978

Oil Purchaser

S. 4 T. 23S R. 40W

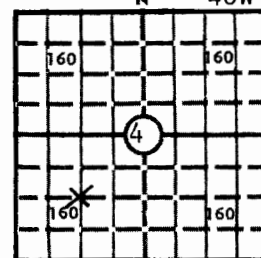
Loc. 1320' FSL, 1320' FWL of SW/4

County Hamilton

640 Acres

N

40W



Locate well correctly

Elev.: Gr. 3438'

DF 3443' KB 3446'

CASING RECORD

Report of all strings set—surface, intermediate, production, etc.

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs/ft.	Setting depth	Type cement	Sacks	Type and percent additives
Surface	12 $\frac{1}{4}$ "	8-5/8"	24#	459'	Class H	300	Cemented w/300 sx Class H cement, 2%
	CaCl, $\frac{1}{4}$ # D-29. Cement circulated to surface						
Production	7-7/8"	4 $\frac{1}{2}$ "	9.5#	2719'	Class H	225	Cemented w/125 sx Light Pozmix $\frac{1}{4}$ #
	D-29, 8/10 of 1% D-26, followed by 100 sx 50/50 Pozmix, 10% salt, $\frac{1}{4}$ # D-29, & 8/10 of 1% D-26. Flowed plug w/500 gals Acetic acid & 1% KCLW						

LINER RECORD

Top, ft.	Bottom, ft.	Sacks cement
—	—	—

PERFORATION RECORD

Shots per ft.	Size & type	Depth interval
4	0.57 S.D.J.	Winfield

TUBING RECORD

Size	Setting depth	Packer set at	Depth interval
2-3/8"	2650'	—	2590-2597'
			2599-2606'

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
Acidized Winfield 2590-2597' down 4 $\frac{1}{2}$ " csg. w/1000 gals 15% acid w/3 gals Howco Suds; flushed w/42 bbls 1% KCLW. Reacidized Winfield 2590-2597' down 4 $\frac{1}{2}$ " csg w/2500 gals MOD 202 acid containing 5 gals HL-2, flushed w/48 bbls 1% KCLW. (Continued on the reverse side)	2590-2606'

INITIAL PRODUCTION

Date of first production		Producing method (flowing, pumping, gas lift, etc.)			
9-1-1978		Flowing			
RATE OF PRODUCTION PER 24 HOURS	Oil	Gas	CAOF	Water	Gas-oil ratio
	bbls.	71	MCF	bbls.	CFPB
Disposition of gas (vented, used on lease or sold)				Producing interval (s)	
To be sold to KN				2590-2606'	

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

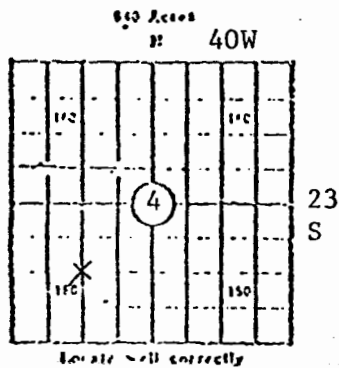
Operator		Cities Service Company		Well No. 1		Lease Name Eagle "A"		Gas		S 4 T 23S R 40 W	
SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION: DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:			WELL LOG Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.								
FORMATION DESCRIPTION, CONTENTS, ETC.		TOP	BOTTOM	NAME		DEPTH					
Sand & Clay Blue Shale Red Bed Red Bed & Clay Shale & Red Bed & Gypsum Shale & Gypsum Salt Shale Shale & Lime Streaks Shale & Lime Lime & Shale PRTD TD		0 260 409 460 710 1380 1508 1783 2095 2400 2518 2720 2696 2720	260 409 460 710 1380 1508 1783 2095 2400 2518 2720 2696 2720	Kan Schlumberger Dual Later Borehole Compensated Sonic w/Caliper. Ran GR & CB Log 2696' PRTD to 1700' & found top of cement at 1891'							
Acidized Winfield 2599-2606' down 4 1/2" csg w/750 gals 7 1/2" HCL containing 30 ball sealer 1 gal HC-2 & 1 gal Super Flow; followed by 1000 gals 15% acid containing 35 ball sealer 1 gal HC-2 & 1 gal Super Flow. Displaced w/48 bbls 1% KCLW. Reactidized Winfield 2599-2606' down 4 1/2" csg w/5000 gals 15% HCL containing 5 gals HC-2, 5 gals Super Flow & pumped as follows: 2000 gals acid, 2100 gals w/50 ball sealers, 90 gals w/No ball sealers, flushed w/42 bbls 1% KCLW containing 2 gals Super Flow. Howco Fracture Winfield dn 4 1/2" csg as follows: 3000 gals 1% KCLW containing 3 gals HC-2, followed by 2000 gals gelled 1% KCLW pad containing 60# WG-11, 2 gals HC-2 & 40# Adomite Aqua & 500# TLC-80, followed by 5000 gals 1% KCL gelled water & 5000# 10/20 sand containing 150# WG-11, 5 gals HC-2 & 100# Adomite Aqua; flushed w/3000 gals 1% KCLW containing 3 gals HC-2.		USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.									
Date Received		Signature <i>Bill Given</i> Title Engineering Manager Date September 12, 1978									

State Geological Survey
WICHITA BRANCH

WELL RECORD

4-23 40W

(Mail to Kansas Geological Survey, 4150 Monroe Street, Wichita, Kansas 67209)



Lease Name: Eagle "A" Well No. 1
Well Located: 1320' FSL, 1320' FWL of SW/4
SEC 4 TWP 23S R. 40W
Operator: Cities Service Company
Address: 3545 N.W. 58th Street, Oklahoma City, Oklahoma 73112
Elevation: Ground 3438' D.F. 3443' K.B. 3446'
Type Well: (Oil, gas, dry hole) Gas

Drilling Commenced: 4-7 1978 Drilling Completed: 4-11 1978
Well Completed: 9-1 1978 Total Depth 2720'
Initial Production: CAOF Date 9-1-78 CAOF Volume 71 MCF

Casing Record

Size: 8-5/8" Set at 459' Size: - Set at - - -
Size: 4-1/2" Set at 2719' Size: - Set at -

Liner Record

Size: - Set from - To -

Cementing

Casing Size	Sacks	Type Cement and Additives
<u>8-5/8"</u>	<u>300</u>	<u>Cemented w/300 sx Class H, 2% CaCl, 1/4# D-29.</u>
<u>*4-1/2"</u>	<u>225</u>	<u>Cemented w/125 sx Light Pozmix, 1/4# D-29, 8/10 of 1% D-26, followed by 100 sx 50/50 Pozmix, 10% salt, 1/4# D-29, 8/10 of 1% D-26, Flowed plug w/500 gals acetic acid & 1% KCLW.</u>

Perforations

Formation Perforated Interval and Number Shots

<u>Winfield</u>	<u>2590-2597' w/28 shots</u>
<u>Winfield</u>	<u>2599-2606' w/28 shots</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

Electric Log Run. (Show type log and depths covered)

Ran Schlumberger Dual Laterolog Borehole Compensated Sonic w/Caliper.
Ran GR and CB Logs 2696' PBD to 1700'.

(Fill in formation and related information on reverse side)

*Cement Bond Log indicated the top of cement was at 1891'.

FORMATION, TESTING AND COMPLETION RECORD

4-23-40w

Show Drill Stem Tests,
Well Stimulation and
Production Tests

Formation	Top	Bottom	
Sand & Clay	0	260	Acidized Winfield 2590-2597' down 4½" csg. w/1000 gals
Blue Shale	260	409	15% acid w/3 gals Howco Suds; flushed w/42 bbls 1%
Red Bed	409	460	KCLW. Reacidized Winfield 2590-2597' down 4½" csg
Red Bed & Clay	460	710	w/2500 gals MOD 202 acid containing 5 gals HL-2;
Shale & Red Bed & Gyp.	710	1380	Flushed w/48 bbls 1% KCLW.
Shale & Gypsum	1380	1508	Acidized Winfield 2599-2606' down 4½" csg. w/750 gals
Salt	1508	1783	7½" HCL containing 30 ball sealers, 1 gal HC-2 & 1
Shale	1783	2095	gal Super Flow; followed by 1000 gals 15% acid con-
Shale & Lime Streaks	2095	2400	taining 35 ball sealers, 1 gal HC-2 & 1 gal Super
Shale & Lime	2400	2518	Flow. Displaced w/48 bbls 1% KCLW.
Lime & Shale	2518	2720	Reacidized Winfield 2599-2606' down 4½" csg w/5000 gal
PBTD		2696	15% HCL containing 5 gals HC-2, 5 gals Super Flow &
TD		2720	pumped as follows: 2000 gals acid, 2100 gals w/50
			ball sealers, 900 gals w/ no ball sealers, flushed
			w/42 bbls 1% KCLW containing 2 gals Super Flow.
			Howco fracture Winfield dn 4½" csg as follows: 3000
			gals 1% KCLW containing 3 gals HC-2 followed by 2000
			gals gelled 1% KCLW pad containing 60# WG-11, 2 gals
			HC-2 & 40# Adomite Aqua & 500# TLC-80, followed by
			5000 gals 1% KCL gelled water & 5000# 10/20 sd.
			containing 150# WG-11, 5 gals HC-2 & 100# Adomite
			Aqua; flushed w/3000 gals 1% KCLW containing 3 gals
			HC-2.

RECEIVED
STATE CORPORATION COMMISSION

SEP 15 1978

CORPORATION COMMISSION