

KANSAS DRILLERS LOG

State Geological Survey
WICHITA, BRANCH

API No. 15 — 175 — 20290
County Number

S. 22 T. 32S R. 34 W
Loc. 2340' FNL, 2490' FWL NW/4
County Seward

Operator
Cities Service Oil Company

Address
3545 N. W. 58th Street, Oklahoma City, Okla. 73112

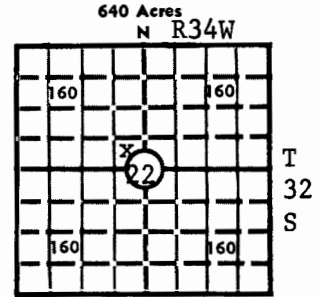
Well No. 3 Lease Name Hitch "C"

Footage Location
2340 feet from (N) line 2490 feet from (W) line of NW/4

Principal Contractor E. F. Wakefield Drilling Co. Geologist

Spud Date 7-14-76 Total Depth 3085' P.B.T.D. 3059'

Date Completed 8-20-76 Oil Purchaser



Locate well correctly
Elev.: Gr. 2914'
DF 2921' KB 2922'

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	12-1/4"	8-5/8"	24#	762	Class H	375	Cemented w/200 sx Howco Lite w/2% CaCl, 1/4# Flocele, Cement circulated.
Production	7-7/8"	4-1/2"	9.5#	3083'	Class H	225	Cemented w/125 sx Howco Lite, 1/4# Flocele, & 8/10 of 1% CFR-2, followed by 100 sx 50/50 Pozmix w/10% salt & 1/4# Flocele & 8/10 of 1% CFR-2.

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
---	---	---	2	0.57 S.D.J.	2924-2932'
TUBING RECORD					2935-2948'
Size 1 1/2"	Setting depth 2994'	Packer set at ---			2950-2955'

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
Fractured Council Grove formation w/2500 gals 15% clean up acid followed by 6000 gals 1% KCLW pad containing 18# G-16 & 2 gals of Adomall followed by 58,000 gals 1% KCLW w/116,000# 20/40 Sd containing 174# G-16, 20 gals Adomall. Flushed w/48 bbls 1% KCLW containing 6# G-16.	2924-2955'

INITIAL PRODUCTION

Date of first production 8-20-76 Producing method (flowing, pumping, gas lift, etc.) Flowing

RATE OF PRODUCTION PER 24 HOURS
Oil ----- bbls. Gas CAOF 2816 MCF Water ----- bbls. Gas-oil ratio ----- CFPB

Disposition of gas (vented, used on lease or sold) To be sold to PEPL Producing interval (s) 2924-2955'

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.

perator

Cities Service Oil Company

DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:

Well No. 3 Lease Name Hitch "C" Gas

S 22 T 32S R 34 W

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.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
Soil, Sand & Clay	0	540	Ran Schlumberger Dual Laterolog, Borehol Comp. Sonic Log.	
Red Bed	540	936		
Red Bed & Anhydrite	936	1180		
Sand	1180	1380	Ran GRN, Cement Bond & CC Log from 1800' to 3059' PBTD.	
Red Bed & Shells	1380	1525		
Red Bed & Lime	1525	1848		
Shells & Shale	1848	2084		
Lime & Shale	2084	2295	Top of the cement was at 2002'.	
Lime	2295	2480		
Shale & Lime	2480	2548		
Lime	2548	3085		
TD		3085		
PBTD		3059		

USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.

Date Received

H. E. Massey

H. E. Massey

Signature

Operations Manager

Title

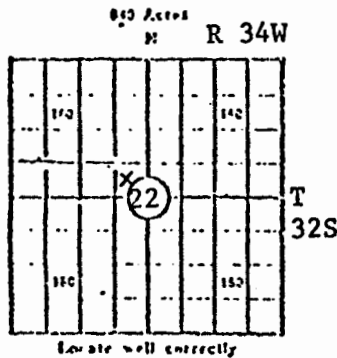
August 24, 1976

Date

WELL RECORD

22-32-34W

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



Lease Name: Hitch "C" Well No. 3
 Well Located: 2340' FNL, 2490' FWL of NW/4
SEC 22 TWP 32S RGE 34W
 Operator: Cities Service Oil Company
 Address: 3545 N.W. 58th Street, Oklahoma City, Ok. 73112
 Elevation: Ground 2914' D.F. 2921' K.H. 2922'
 Type Well: (Oil, gas, dry hole) Gas

Drilling Commenced: 7-14 19 76 Drilling Completed: 7-19 19 76
 Well Completed: 8-20 19 76 Total Depth 3085'
 Initial Production: CAOF Volume: 2816; CAOF Date 8-20-76
MCF

Casing Record

Size: 8-5/8" Set at 762' Size: _____ Set at _____
 Size: 4-1/2" Set at 3083' Size: _____ Set at _____

Liner Record

Size: _____ Set from _____ To _____

Cementing

Casing Size	Sacks	Type Cement and Additives
<u>8-5/8"</u>	<u>375</u>	<u>Cemented w/200 sx Howco Lite w/2% CaCl, 1/4# Flocele followed by 175 sx Class H w/2% CaCl 1/4# Flocele. Cement Circulated.</u>
<u>* 4-1/2"</u>	<u>225</u>	<u>Cemented w/125 sx Howco Lite, 1/4# Flocele & 8/10 of 1% CFR-2, followed by 100 sx 50/50 Pozmix w/10% salt & 1/4# Flocele & 8/10 of 1% CFR-2.</u>

Perforations

Formation	Perforated Interval and Number Shots
<u>Council Grove</u>	<u>2924-2932' w/16 shots</u>
<u>Council Grove</u>	<u>2935-2948' w/26 shots</u>
<u>Council Grove</u>	<u>2950-2955' 2/10 shots</u>

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

Ran Schlumberger Dual Laterlog Borehole Comp Sonic Log. Ran GRN, Cement Bond & CC Log from 1800' to 3059' PBTD.

* Cement Bond Log indicated that the top of cement for the 4-1/2" csg was at 2002'.

(Fill in formation and related information on reverse side)

22-32-34u

FORMATION, TESTING AND COMPLETION RECORD

Show Drill Stem Tests,
Well Stimulation and
Production Tests

Formation Top Bottom

Soil, Sand & Clay	0	540
Red Bed	540	936
Red Bed & Anhydrite	936	1180
Sand	1180	1380
Red Bed & Shells	1380	1525
Red Bed & lime	1525	1848
Shells & Shale	1848	2084
Lime & Shale	2084	2295
Lime	2295	2480
Shale & Lime	2480	2548
Lime	2548	3085
TD		3085
PBTD		3059

Fractured Council Grove formation w/2500 gals
15% clean up acid followed by 6000 gals 1% KCLW
pad containing 18# G-16 & 2 gals of Adomall
followed by 58,000 gals 1% KCLW w/116,000#
20/40 Sd containing 174# G-16, 20 gals Adoma
Flushed w/48 bbls 1% KCLW containing 6# G-16.

22-32-34W

PEDIGO

OKLA CITY

MAP NO. _____ SEC. 22-32S-34W WELL CLASS _____
 STATE KANSAS COUNTY SEWARD LOC. E/2 SE SE NW D
 OPER. CITIES SERVICE OIL CO 150 fel, 300 fsl INIT. FIN
 WELL 3 FARM Hitch "C" of NW/4
 POOL Hugoton (Chase) ELEV. 2922K BX
 CONT. Wakefield Drlg Co GEOL. _____
 API NO. 15-175-20290 PROVINCE _____
 FR. 6-29-76 SPUD. _____ COMP. _____
 TO _____ FORM _____ PBTD _____



DISTRIBUTION RECORD	PROD. INTERVAL TREATMENT	PRODUCING FM	FROM-TO	TREATMENT		
COMPLETE RECORD	PROD FM IP					
CASING RECORD	SIZE	DEPTH	SX	SIZE	DEPTH	SX

+	+	+	+	+	+
+	+	+	+	+	+
+	+	+	+	+	+
+	+	+	+	+	+
+	+	+	+	+	+
+	+	+	+	+	+
+	+	+	+	+	+
+	+	+	+	+	+
+	+	+	+	+	+
+	+	+	+	+	+

3545 NW 58th, Okla City, OK 73112
 9 Mi NE of Pleasant Valley, Ks
 PTD 3085 C Gr Gas Test
 Start 7-7-76

7-12 Jan
 7-24 spud 7-14-76 8 7/8 @ 762 w/375
 TO 3085 Log: DIL, BHC, SONL, GEN, CBND, CCL,
 4 1/2 @ 3083 w/225

Met 3059 PBTD
 8-3 Log (Carnal Grove) 16/2924-32
 26/2935-48 10/2950-55

Fract 2500 gal 15% acid
 6000 gal 1% KCl with Pad

Fract w/58,000 gal 1% KCl with + 114,000 # sand POL X
 Fract 48 15% KCl with

OWSA,

~~Shore pick-up 8-3~~

TSTM

F 187 BLW/8 hr gas for TSTM
POP R-locks

Tag Log 2922 Kb

Wreptch 2470

Council Grove 2904

PBTD 3059

LTO 3085 X + Dir C or

B-17 see act lead

~~R 120 BSW / 48 hr~~

(9-2)(KDL)

CAOF 2816 Mefgpd
Council Grove 2924-55

8-20-76

COMPLETED