

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION

WELL COMPLETION OR RECOMPLETION FORM  
ACO-1 WELL HISTORY

DESCRIPTION OF WELL AND LEASE

Operator: License # 5447  
Name Cities Service Oil & Gas Corp.  
Address 3545 N.W. 58th Street  
Okla. City, Okla. 73112

Purchaser Northern Natural Gas

Operator Contact Person Raymond Hui  
Phone (405) 949-4400

Contractor: License # 3098  
Name Exeter Drilling Company

Wellsite Geologist Andrew Howell  
Phone (405) 949-4268

Designate Type of Completion

- New Well     Re-Entry     Workover
- Oil             SWD             Temp Abd
- Gas             Inj             Delayed Comp.
- Dry             Other (Core, Water Supply etc.)

If OWMO: old well info as follows:  
Operator .....  
Well Name .....  
Comp. Date ..... Old Total Depth.....

WELL HISTORY

Drilling Method:  
 Mud Rotary     Air Rotary     Cable

5-10-87	5-14-87	2-14-88
Spud Date	Date Reached TD	Completion Date
2817'	2641'	
Total Depth	PBTD	

Amount of Surface Pipe Set and Cemented at 717 feet  
Multiple Stage Cementing Coilar Used?  Yes  No  
If yes, show depth set.....feet  
if alternate 2 completion, cement circulated  
from.....feet depth to.....w/.....SX cm

INSTRUCTIONS: This form shall be completed in duplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of any well. Rule 82-3-130 and 82-3-107 apply.  
Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months.  
One copy of all wireline logs and driller's time log shall be attached with this form. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

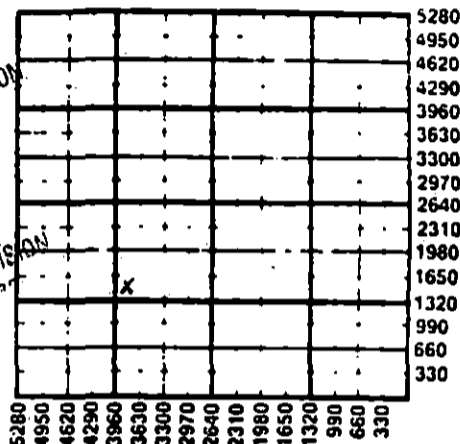
All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements hereon are complete and correct to the best of my knowledge.

Signature Bryan Humphries  
Title Engineering Manager Date 3-30-88

Subscribed and sworn to before me this 30th day of March  
1988  
Notary Public James S. Porter  
Date Commission Expires 6-12-88

API NO. 15-.....129-20858-00-00.....  
County.....Morton.....  
SW/4 NE/4 SW/4 Sec. 21 Twp. 34S Rge. 40  East  West  
1386..... Ft North from Southeast Corner of Section  
3757..... Ft West from Southeast Corner of Section  
(Note: Locate well in section plat below)  
Lease Name.....Wiker A..... Well # 2.....  
Field Name.....Kansas Hugoton Gas.....  
Producing Formation.....Chase.....  
Elevation: Ground.....3387'..... KB.....3398'

RECEIVED  
NOV 15 1988  
KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION  
Wichita, Kansas



WATER SUPPLY INFORMATION  
Disposition of Produced Water:  Disposal  Repressuring  
Docket # .....

Questions on this portion of the ACO-1 call:  
Water Resources Board (913) 296-3717  
Source of Water:  
Division of Water Resources Permit #.....  
 Groundwater.....Ft North from Southeast Corner  
(Well) .....Ft West from Southeast Corner of  
Sec Twp Rge  East  West  
 Surface Water.....Ft North from Southeast Corner  
(Stream, pond etc).....Ft West from Southeast Corner  
Sec Twp Rge  East  West  
 Other (explain).....Purchased.....  
(purchased from city, R.W.D. #)

K.C.C. OFFICE USE ONLY  
 Letter of Confidentiality Attached  
 Wireline Log Received  
 Driller's Timelog Received  
Distribution  
 KCS     SWD/Rep     NGPA  
 KGS     Plug             Other  
(Specify)  
11-15-88  
Form ACO-1 (7-84)

Sec 21 Imp 34 Rge 40 W

Operator Name **Cities Service Oil & Gas Corporation** Lease Name **Wiker A** Well # **2**

Sec. **21** Twp. **34S** Rge. **40**  East  West County **Morton**

WELL LOG

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken  Yes  No  
 Samples Sent to Geological Survey  Yes  No  
 Cores Taken  Yes  No

Formation Description  
 Log  Sample

Ran DIL - SFL w/SP & GR from 817-2812'; Long Spaced Sonic w/GR & Caliper from 1800-2812'; Microlog w/NGT & Caliper from 1800-2812'; LTD-CNL w/NGT and Caliper from 1800-2812'. Ran Cement Bond Log. CBL from 2722' KB to 600' KB. Ran CET & NGT from 2722' KB to 600' KB.

Name	Top	Bottom
Red Beds	0	718
Anhy.	718	1300
Shale	1300	2570
Sand & Shale	2570	2817

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs/Ft.	Setting Depth	Type of Cement	#Sacks used	Type and Percent Additives
Conductor	30"	20"		20'	Redi-Mix	2 yds	
Surface	12-1/4"	8-5/8"	24#	717' KB	CL C	325	6%gel; 2%CaCl
Production	7-7/8"	5-1/2"	15.5#	2816'	CL C	500	6%gel; 1#/sx LCM
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of each interval Perforated			(Amount and Kind of Material Used)		Depth	
1	Chase 2518-60'; 2572-80'; 2587-2630'			200 gals 10% acetic acid 5000 gals 2% KCLW		2518-2630'	
TUBING RECORD							
Size	Set At	Packer at	Liner Run		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
2-3/8"	2605						
Date of First Production		Producing Method					
2-25-88		<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (explain).....					
Estimated Production Per 24 hours		Oil	Gas	Water	Gas-Oil Ratio	Gravity	
CAOF							
501		Bbls	MCF	Bbls	CFPB		

METHOD OF COMPLETION

Disposition of gas:  Vented  Sold  Used on Lease  
 Open Hole  Perforation  Other (Specify) .....  
 Dually Completed  Commingled

Production Interval  
 ..... 2518-2630' .....  
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