

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 NW 58th Street
Oklahoma City, Oklahoma
City/State/Zip 73112

Purchaser Northern Natural Pipeline

Operator Contact Person Raymond Hui
Phone (405) 949-4268

Contractor: License #
Name Johnson Drilling Company

Wellsite Geologist Robert Vick
Phone (405) 949-4400

Designate Type of Completion

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

If OWO: old well info as follows:

Operator
Well Name
Comp. Date Old Total Depth

WELL HISTORY

Drilling Method:

☒ Mud Rotary ☐ Air Rotary ☐ Cable

2/19/86 3/4/86 10/7/87
Spud Date Date Reached TD Completion Date

6450' 3188'
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 1723'
Multiple Stage Cementing Collar Used? Yes ☒ No

If yes, show depth set.....feet
If alternate 2 completion, cement circulated
from.....feet depth to.....w/.....SX cmf
Cement Company Name
Invoice #

API NO. 15-175-20899

County Seward

SW SE SW Sec. 17 Twp. 32S Rge. 34 East
X West

330 Ft North from Southeast Corner of Section
3630 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

Lease Name Jerman A Well # 2
(Formerly Robinson I #1)

Field Name Hitch

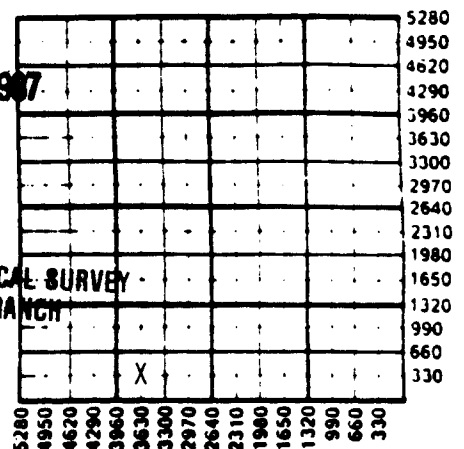
Producing Formation Council Grove

Elevation: Ground 2957' 2969' KB

Section Plat

NOV 30 1987

KANSAS GEOLOGICAL SURVEY
WICHITA BRANCH



WATER SUPPLY INFORMATION

Disposition of Produced Water: Disposal
Docket # Repressuring

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

X Other (explain) Purchased
(purchased from city, R.A.D. #)

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission,

Estimated Production Per 24 Hours	Oil	Gas	Water	Gas-Oil Ratio	Gravity
	3bls	CAOF 360 MCF	91 bls	CFPB	

Operator Name ... Cities Service Oil & Gas Corp. ... Lease Name ... Jerman A ... Well # ... 2

SW SE SW

Sec. 17 Twp. 32S Rge. 34 East West County Seward

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, CNL-LDT w/GR & Caliper,
 Microlog. Ran CBL/CCL/GR from PBTD of 3188'-1700'.
 TOC at 2110'.

Name	Top	Bottom
Sand	0	3.0
Red BEd	339	1695
Anhy	1695	1724
Shale	1724	2660
Lm & Sh	2660	498
Lm	4983	640
Lm & Sh	6400	6450

TD 6450

PBTD 3188

METHOD OF COMPLETION

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

Production Interval

2981-2996'
 2998-3001'.....
 3004-3017'
 3024-3030'.....

CASING RECORD ☒ New ☐ 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
Surface.....	12 1/4"	8 5/8"	24#	1723'	65/35 Poz	800	6% gel; 2% Ca. Cl
Production.....	7 7/8"	5 1/2"	14#	3242'	65/35 Poz	175	1/2 #/sx. 6% gel; 2% Ca. Cl
				50/50 Poz 2% gel; 12% salt			
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
4	Council Grove 2981-2996'; 2998-3001'; 3004'-3017'; 3024-3030' (37')			acidized w/4625 gal. 15% HCL acid		2981-3030'	
				Frac. w/83050 gal. 30# crosslinked KO gel		2981-3030'	
TUBING RECORD				Liner Run ☐ Yes ☒ No			
Size 2 3/8"		Set At 3062'		Packer at			
Date of First Production		Producing Method					
waiting for pipeline connection				☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (explain).			