

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 OWN: 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' feet
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 cmt
Cement Company Name
Invoice #

API NO. 15-175-20899-0000

County Seward

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

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

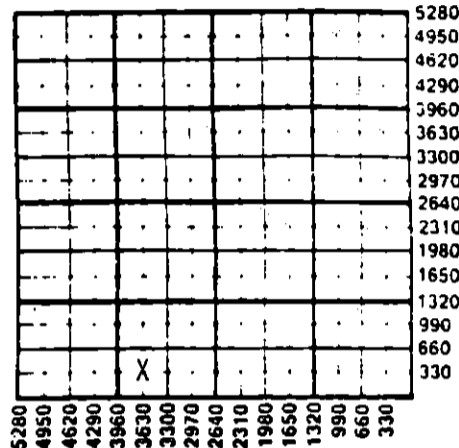
Lease Name Jerman A Well # 2
(Formerly Robinson I #1)

Field Name Hitch Panoma

Producing Formation Council Grove

Elevation: Ground 2957' KB 2969'

Section Plat



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

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

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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 drillers 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 herein are complete and correct to the best of my knowledge.

Signature Del G. Oliver
Special Projects Manager Date 11/18/87

Subscribed and sworn to before me this 18 day of November 1987
Notary Public Jeesa Jo Howell

Date Commission Expires 11-24-89

NOV 25 1987
11-25-1987
CONSERVATION DIVISION
Wichita, Kansas

K.C.C. OFFICE USE ONLY

F Letter of Confidentiality Attached
C Wireline Log Received
C Drillers Timelog Received

Distribution

KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

Operator Name **Cities Service Oil & Gas Corp** Lease Name **Jermain A**

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 PBD of 3188'-1700'. TOC at 2110'.

Name	Top	Bottom
Sand	0	339
Red BEd	339	1695
Anhy	1695	1724
Shale	1724	2660
Lm & Sh	2660	4983
Lm	4983	6400
Lm & Sh	6400	6450
TD		6450
PBD		3188

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
Surface	12 1/4"	8 5/8"	24#	1723'	65/35 Poz	800	6% gel; 2% Ca. Cl, 1/2 #/sx Flo.
Production	7 7/8"	5 1/2"	14#	3242'	65/35 Poz 50/50 Poz	175	6% gel; 2% Ca. Cl 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'			acidized w/4625 gal 15% HCl acid			2981-3030'
	2998-3001'; 3004'-3017'			Frac w/83050 gal 30# crosslinked KO gel			2981-3030'
TUBING RECORD		Size 2 3/8"	Set At 3062'	Packer at	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Date of First Production	Producing Method						
waiting for pipeline connection	<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		
	bbls	CAOF 360 MCF	91 bbls	CFPB			

METHOD OF COMPLETION			Production Interval
Disposition of gas: <input type="checkbox"/> Vented <input checked="" type="checkbox"/> Sold <input type="checkbox"/> Used on Lease	<input type="checkbox"/> Open Hole <input type="checkbox"/> Other (Specify)	<input checked="" type="checkbox"/> Perforation	2981-2996'
		<input type="checkbox"/> Dually Completed <input type="checkbox"/> Commingled	2998-3001'
			3004-3017'
			3024-3030'