

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 CITGO

Operator Contact Person Raymond Hui  
Phone (405) 949-4432

Contractor: License # 6033  
Name Murfin Drilling Company

Wellsite Geologist  
Phone

Designate Type of Completion  
 New Well  Re-Entry  Workover

Oil  SWD  Temp Abd  
 Gas  Inj  Delayed Comp.  
 Dry  Other (Core, Water Supply etc.)

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

WELL HISTORY

Drilling Method:  
 Mud Rotary  Air Rotary  Cable  
7/24/87 8/3/87 9/2/87  
Spud Date Date Reached TD Completion Date  
5415' 5031'  
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 407 feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set DV Tool at 3669 feet  
If alternate 2 completion, cement circulated from feet depth to w/ SX cmt  
Cement Company Name  
Invoice #

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. Rules 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  
Title Special Projects Manager Date 9/11/87

Subscribed and sworn to before me this 11th day of September 1987  
Notary Public Jensa Jo Doweth  
Date Commission Expires 4-24-89

API NO. 15-023-20249-00-00  
County Cheyenne  
W/2 SW/4 NE/4 Sec. 26 Twp. 2 Rge. 42 East West  
3300 Ft North from Southeast Corner of Section  
2310 Ft West from Southeast Corner of Section  
(Note: Locate well in section plat below)

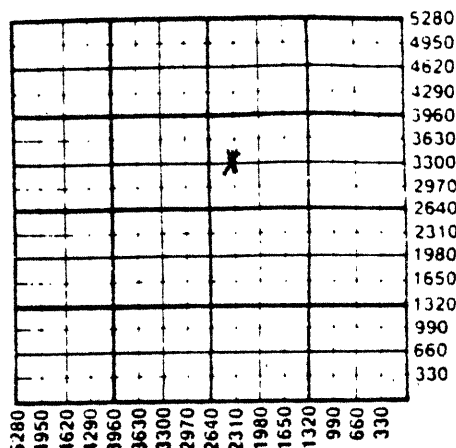
Lease Name Northrup A Well # 6

Field Name Northrup

Producing Formation LKC

Elevation: Ground 3696' KB 3701'

Section Plat



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: Not Applied  
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 from city, R.W.D. #)

K.C.C. OFFICE USE ONLY  
 Letter of Confidentiality Attached  
 Wireline Log Received  
 Drillers Timelog Received  
Distribution  
 KCC  SWD/Rep  NGPA  
 KGS  Plug  Other  
(Specify)

Operator Name Cities Service Oil & Gas Corp Lease Name Northrup A Well # 6

Sec. 26 Twp. 2 Rge. 42  East  West County Cheyenne

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

Name Top Bottom

DST #1: Tested Cherokee from 5015-5065' (50'). Ran 30-60-30-60 test. 1st opening light to weak blow; 2nd opening no blow. Recovered 60' of slightly water cut mud and 120' of heavy mud.

LKC F Zone	4780	
Base of KC	4875	
Marmaton	4914	
Fort Scott	4996	
Cherokee	5018	
TD		5415'
PBTD		5031'

DST #2: Morrow Sand (5233-5360') 30-60-30-60. 1st opening strong blow; 2nd opening weak blow. Recovered 120' mud and 180' mud and water, 2240' muddy salt water.

Ran Compensated Neutron - Density w/GR, Dual Induct. SFL w/GR and Spontaneous Potential w/Microlog & Caliper. Ran Bond log w/GR and CCL. TOC on 1st stage: 4320'; TOC on 2nd stage: 2600'.

Set CIBP at 4850'; dumped 2 sxs cmt on CIBP

\*Cementing information for production casing:

DV tool at 3669'. 175 SXS 60/40 Poz + 10% salt + 2% Bentonite + 0.75% CFR-2 + 1/4 lb Flocele/sx

RELEASED  
 10-20-88  
 OCT 20 1988

Second stage not designed to circulate. CASING RECORD  New  Used

FROM CONFIDENTIAL

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#	407'	Cl. A	265	3% Ca Cl <sub>2</sub>
Production	7 7/8"	5 1/2"	14#	5035'	(Please refer to * above)		

Shots Per Foot	Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
4	Marmaton Sand 4918-19'	100 gals 7 1/2% MCA w/2% acid	
4	LKC F 4782-84'	100 gals 7 1/2% MCA w/2% acid	
2	LKC E 4752-60'	400 gals 7 1/2% MCA w/2% acid	

TUBING RECORD Size 2 3/8" Set At 4778' Packer at  Liner Run  Yes  No

Date of First Production 9/2/87 Producing Method  Flowing  Pumping  Gas Lift  Other (explain).....

Estimated Production Per 24 Hours	Oil	Gas	Water	Gas-Oil Ratio	Gravity
86 Bbls		MCF	64 Bbls	CFPB	

METHOD OF COMPLETION

Production Interval

Disposition of gas:  Vented  Open Hole  Perforation  
 Sold  Other (Specify) ..... 4782-84'  
 Used on Lease  Dually Completed 4752-60'  
 Commingled