

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

Operator: License # 5056  
Name: F. G. Holl Company  
Address 6427 E. Kellogg  
P.O. Box 780167  
City/State/Zip Wichita Ks. 67278-0167  
Purchaser: K-N, Permian

Operator Contact Person: Elwyn H. Nagel  
Phone (314) 684-8481

Contractor: Name: Sterling Drilling Company  
License: 5142

Wellsite Geologist: Bryce Bidleman

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 \_\_\_\_\_

Drilling Method:  
 Mud Rotary  Air Rotary  Cable  
8-25-89 8-31-89 10-3-89  
Spud Date Date Reached TD Completion Date

API NO. 15- 047-21346-0600  
County Edwards

SE SW SE Sec. 16 Twp. 24S Rge. 17W XX East West  
330 Ft. North from Southeast Corner of Section  
1650 Ft. West from Southeast Corner of Section  
(NOTE: Locate well in section plat below.)

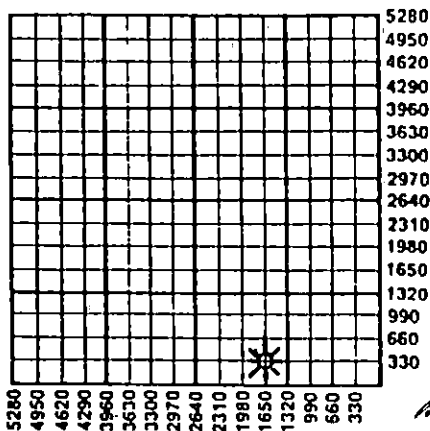
Lease Name Cross Well # 2-16

Field Name Wayne

Producing Formation Conglomerate/Mississippi

Elevation: Ground 2110 KB 2119

Total Depth 4525 PBDT \_\_\_\_\_



DEC 12 1989

CONSERVATION DIVISION  
Wichita, Kansas

Amount of Surface Pipe Set and Cemented at 310' KB Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from \_\_\_\_\_  
feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

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. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

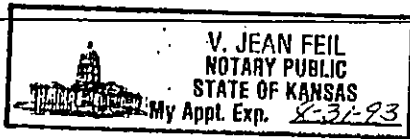
All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Elwyn H. Nagel  
Title Elwyn H. Nagel, Manager Date 12/11/89

Subscribed and sworn to before me this 11<sup>th</sup> day of December, 1989.

Notary Public V. Jean Feil

Date Commission Expires \_\_\_\_\_



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

**SIDE TWO**

Operator Name F. G. Holl Company Lease Name Cross Well # 2-16  
 Sec. 16 Twp. 24S Rge. 17  East County Edwards  
 West

**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 (Attach Additional Sheets.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  Electric Log Run (Submit Copy.) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name Heebner Brown Lime Lansing K.C. Base K.C. Marmaton Cherokee Shale Conglomerate Chert Mississippi Base Chert Viola	Formation Description <input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample  <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:60%;"></th> <th style="width:20%;">Top</th> <th style="width:20%;">Bottom</th> </tr> </thead> <tbody> <tr><td>Heebner</td><td>3740</td><td>(-1621)</td></tr> <tr><td>Brown Lime</td><td>3868</td><td>(-1749)</td></tr> <tr><td>Lansing K.C.</td><td>3880</td><td>(-1761)</td></tr> <tr><td>Base K.C.</td><td>4172</td><td>(-2053)</td></tr> <tr><td>Marmaton</td><td>4230</td><td>(-2111)</td></tr> <tr><td>Cherokee Shale</td><td>4319</td><td>(-2200)</td></tr> <tr><td>Conglomerate Chert</td><td>4357</td><td>(-2238)</td></tr> <tr><td>Mississippi</td><td>4382</td><td>(-2263)</td></tr> <tr><td>Base Chert</td><td>4427</td><td>(-2308)</td></tr> <tr><td>Viola</td><td>4501</td><td>(-2382)</td></tr> </tbody> </table>		Top	Bottom	Heebner	3740	(-1621)	Brown Lime	3868	(-1749)	Lansing K.C.	3880	(-1761)	Base K.C.	4172	(-2053)	Marmaton	4230	(-2111)	Cherokee Shale	4319	(-2200)	Conglomerate Chert	4357	(-2238)	Mississippi	4382	(-2263)	Base Chert	4427	(-2308)	Viola	4501	(-2382)
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**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 (New)		8 5/8"	23#	310 KB	60/40 Poz	225	2%gel, 3%cc
Production (Used)		4 1/2"	10.5#	4520 KB	Lite	100	
					50/50 Poz	125	

Shots Per Foot	Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth
4 SPF	4357-4364 Conglomerate	Miss.-Acidized w/500gal. 15% DSFE & 50 ball sealers. Frac w/26,000gal. x-link gel 190 sacks 20/40 & 90 sacks 12/20 sd.
4 SPF	4383-4393 Mississippi	Cong.-Acidized w/500gal. 15% DSFE & 40 ball sealers. Frac w/27,000gal. x-link gel 190 sacks 20/40 & 90 sacks 12/20 sd.

**TUBING RECORD** Size 2.375" Set At 4339' Pecker At  Yes  No  
 Liner Run  Yes  No

Date of First Production <b>SHUT-IN WOPL</b>	Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)
Estimated Production Per 24 Hours	Oil Bbls. Gas Mcf 1250 Water Bbls. Gas-Oil Ratio Gravity

Disposition of Gas: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease (If vented, submit ACO-18.)	METHOD OF COMPLETION <input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perforation <input type="checkbox"/> Dually Completed <input type="checkbox"/> Commingled <input type="checkbox"/> Other (Specify) _____	Production Interval <u>4357-4364</u> <u>4383-4393</u>
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15.047-21346-0000

# F. G. HOLL COMPANY

6427 EAST KELLOGG - P.O. BOX 780167  
WICHITA, KS 67278-0167

## CROSS 2-16

DST #1: 4316 to 4416 Mississippi

30-60-45-90

IFP 256/642:30 ISIP 1323:60 FFP 722/488:45 FSIP 1321:90

IHP 2254 FHP 2178 BHT 123°

Recovered 80' of oil and gas cut mud, 520' of frothy oil.

GTS in 7 minutes

1st FLOW

10 min. 89.8 MCF

15 " 96.3 "

25 " 51.4 "

2nd FLOW

10 min. 31.6 MCF

20 " 106.0 "

30 " 66.6 "

40 " 53.3 "

RECEIVED  
STATE OF KANSAS COMMISSION  
DEC 12 1989  
Wichita, Kansas