

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 # 5398
Name ARCO OIL AND GAS COMPANY
Address Box 1610
City/State/Zip Midland, Texas 79702

Purchaser Northern Natural Gas Company

Operator Contact Person Ken W. Gosnell
Phone 915/688-5672

Contractor: License # 03098
Name Exeter

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

7-30-88 8-1-88 8-18-88
Spud Date Date Reached TD Completion Date

2800 2730
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 780 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. 15-067-20798-0000
County Grant
SE NW NW Sec. 32 Twp. 29 Rge. 38 East
X West

4026 Ft North from Southeast Corner of Section
3975 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

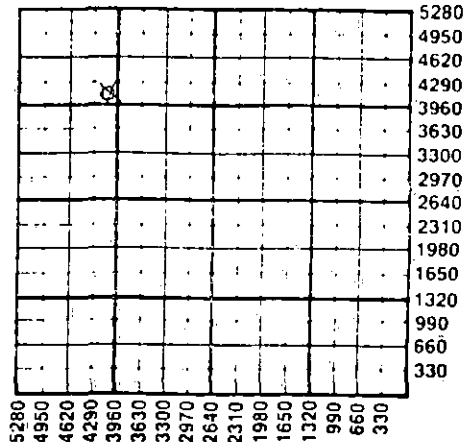
Lease Name G. R. Hickok "H" Unit Well # 3

Field Name Hugoton

Producing Formation Chase

Elevation: Ground 3091 KB 3107

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 # T&S-378

Groundwater 2832 Ft North from Southeast Corner
(Well) 1584 Ft West from Southeast Corner of
Sec 32 Twp 29 Rge 38 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. #)

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.

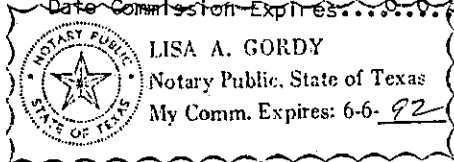
Signature Ken W. Gosnell

Title Engr. Tech. Date 11-15-88

Subscribed and sworn to before me this 15 day of November 1988

Notary Public Lisa A. Gordy

Date Commission Expires 6-6-92



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)
11-17-88
Form ACO-1 (5-86)

Sec 32 Twp 29 Rge 38 W

SIDE TWO

Operator Name ARCO OIL AND GAS COMPANY Lease Name.. G. R. Hickok "H" Well #. 3

RELEASED

Sec. 32 Twp. 29 Rge. 38 East West County... Grant

MAR 0 7 1990

WELL LOG

FROM CONFIDENTIAL

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 |
|-----------------|------|--------|
| Glorieta Sand | 1245 | |
| Stone Corral | 1600 | |
| Chase | 2309 | |
| Krider | 2340 | |
| Winfield | 2400 | |
| Towando | 2450 | |
| Lower Ft. Riley | 2500 | |
| Flourence | 2548 | |
| Wreford | 2580 | |
| Council Grove | 2596 | |

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 | 780 | C | 500 | 2% CC, 1/4# FC |
| production | 7-7/8 | 4-1/2 | 10.5 | 2797 | C | 800 | |

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 | 2448-58, 2462-84 | Frac w/222,180 gals & 561,000# sd | |
| 2 | 2312-34, 2336-55, 2373-94, 2400-12 | A w/8200 gals | |

TUBING RECORD Size Set At Packer at Liner Run Yes No

Date of First Production 9-27-88 Producing Method Flowing Pumping Gas Lift Other (explain).....

| Estimated Production Per 24 Hours | Oil | Gas | Water | Gas-Oil Ratio | Gravity |
|-----------------------------------|--------|----------|--------|---------------|----------|
| | 0 Bbls | 2312 MCF | 0 Bbls | NA CFPB | Gas .720 |

METHOD OF COMPLETION

Production Interval

Disposition of gas: Vented Sold Used on Lease Open Hole Perforation Other (Specify) 2312-2484 Dually Completed Commingled