

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 # 8925
Name Liberty Operations & Completions, Inc.
Address 308 West Mill
City/State/Zip Plainville, Ks 67663

Purchaser Farmland Industries, Inc.

Operator Contact Person Charles G. Comeau
Phone 913-434-4686

Contractor: License # 5665
Name Pioneer Drilling Company, Inc.

Wellsite Geologist Kevin Adams
Phone 913-628-6698

Designate Type of Completion

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

If OWNO: old well info as follows:

Operator
Well Name
Comp. Date
Old Total Depth

WELL HISTORY

Drilling Method:

- Mud Rotary Air Rotary Cable

7-18-85 7-25-85 8-15-85
Spud Date Date Reached TD Completion Date

3700' 3684'
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 8 5/8" @ 262' feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set 1701' feet
If alternate 2 completion, cement circulated from...feet depth to...w/...SX cmt

API NO. 15-163-22,709 -0000
County Rooks
C.W/2 NW NE Sec. 21 Twp. 6S Rge. 20 East West

4620 Ft North from Southeast Corner of Section
2310 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

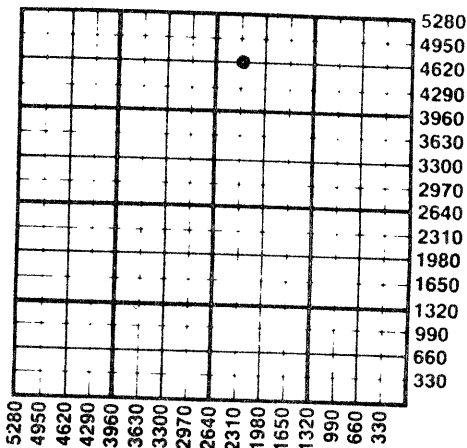
Lease Name Harmon Well # 2

Field Name Todd NE

Producing Formation Arbuckle

Elevation: Ground 2175' 2180' KB

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:
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...990 Ft North from Southeast Corner (Stream, pond etc)...330 Ft West from Southeast Corner Sec 3 Twp 7 Rge 20 East West

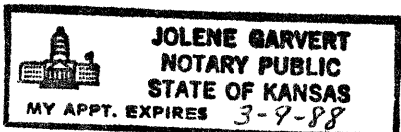
Other (explain) (purchased from city, R.W.D. #)

INSTRUCTIONS: This form shall be completed in duplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of any well. Rule 82-3-130 and 82-3-107 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 Charles G. Comeau
Title Petroleum Geologist Date 8-16-85

Subscribed and sworn to before me this 16th day of August 1985.
Notary Public Jolene Garvert
Date Commission Expires 3-9-88



K.C.C. OFFICE USE ONLY
 Letter of Confidentiality Attached
 Wireline Log Received
 Drillers Timelog Received
Distribution
 KCC SWD NGPA
 KGS P...
STATE CORPORATION COMMISSION
(Specify)
AUG 19 1985

Form 600 (Rev. 1/78) OIL & GAS CONSERVATION DIVISION
Wichita, Kansas

8-19-85

Sec 21 Twp 6S Rge 20W

SIDE TWO

Operator Name Liberty Operations & Completions Inc. Lease Name Harmon Well # 2

Sec. 21 Twp. 6S Rge. 20 East West County Rooks

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

DST #1: 3645-3674/30-60-30-60. Recovered 180' clean oil, 150' MCO, 90' gas above fluid. IF 84-101, FF 151-168, Shut-in 932-891.

| Name | Top | Bottom |
|----------------|-------|--------|
| sand and shale | 0' | 165' |
| sand and shale | 165' | 262' |
| shale and sand | 262' | 330' |
| shale and sand | 330' | 1225' |
| shale and sand | 1225' | 1789' |
| anhydrite | 1789' | 1818' |
| shale | 1818' | 1827' |
| shale | 1827' | 2300' |
| shale | 2300' | 2400' |
| shales | 2400' | 2480' |
| shale and lime | 2480' | 2710' |
| shale and lime | 2710' | 2885' |
| lime and shale | 2885' | 3070' |
| lime and shale | 3070' | 3195' |
| lime and shale | 3195' | 3283' |
| lime and shale | 3283' | 3390' |
| lime and shale | 3390' | 3485' |
| lime and shale | 3485' | 3583' |
| lime and shale | 3583' | 3597' |
| lime and shale | 3597' | 3625' |
| lime and shale | 3625' | 3669' |
| lime and shale | 3669' | 3674' |
| lime and shale | 3674' | 3700' |
| arbuckle | 3700' | R.T.D. |

LOG TOPS

| | | |
|------------|------|---------|
| Anhydrite | 1786 | (+394) |
| Topeka | 3190 | (-1010) |
| Heebner | 3389 | (-1209) |
| Toronto | 3410 | (-1230) |
| Lansing/KC | 3424 | (-1244) |
| Base/KC | 3620 | (-1440) |
| Marmaton | 3642 | (-1462) |
| Arbuckle | 3655 | (-1475) |

CONFIDENTIAL

| 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 Casing | 12 1/4" | 8 5/8" | 20# | 262' | 60-40pos | 160 | 2%gel 3%cc |
| Production (1st) | 7 7/8" | 4 1/2" | 9.5# | 3692' | 60-40pos | 173 | 8%salt |
| " (2nd) | " | " | " | " | 50-50pos | 350 | 2%gel 5%gilsonite |
| 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/foot | 3670-3673' | | | 500 gal. 15% R.F.E. hot acid | | 3670-73' | |
| 2/foot | 3658-3668' | | | 750 gal. 15% R.F.E. hot acid | | 3658-68' | |
| | | | | Retreated w/2000 gal. 15% NON-E | | | |
| TUBING RECORD | | | | Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | |
| Size | | Set At | | Packer at | | | |
| 2 3/8" | | 3860' | | | | | |
| Date of First Production | | Producing Method | | | | | |
| 8-15-85 | | <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 | |
| 30 Bbls | | | MCF | 15 Bbls | | | |

RELEASED
 DEC 11 1986
 12-11-86
FROM CONFIDENTIAL

METHOD OF COMPLETION Production Interval

Disposition of gas: Vented Open Hole Perforation
 Sold Other (Specify) 3658-3673'
 Used on Lease Dually Completed

