

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 # 5886  
Name CHIEF DRILLING CO., INC.  
Address 151 N. Main Suite #700  
Wichita, Kansas 67202  
City/State/Zip

Purchaser NA

Operator Contact Person E.W. Shelton, Jr.  
Phone Vice President 262-3791

Contractor: License # 5883  
Name Warrior Drilling Co.

Wellsite Geologist Jim Gribi  
Phone 267-6248

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

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

WELL HISTORY

Drilling Method:  
 Mud Rotary  Air Rotary  Cable  
1-28-86 2-07-86 2-7-86  
Spud Date Date Reached TD Completion Date  
4630  
Total Depth PBDT

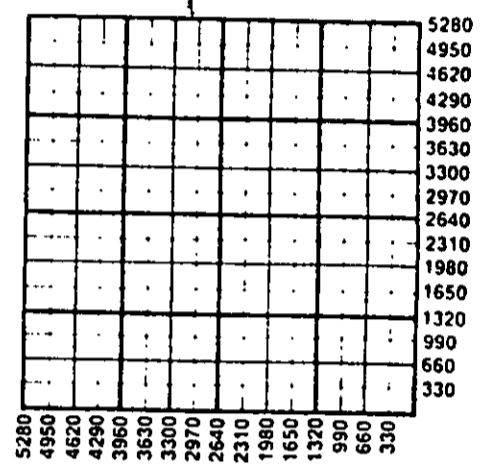
Amount of Surface Pipe Set and Cemented at 305' feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set...feet  
If alternate 2 completion, cement circulated from...feet depth to...w/...SX cmt

API NO. 15-171-20,322-00-00  
County Scott  
SW SE NW Sec 24 Twp 17S Rge 31

2970 Ft North from Southeast Corner of Section  
3630 Ft West from Southeast Corner of Section  
(Note: Locate well in section plat below)

Lease Name Gruver Well #1  
Field Name  
Producing Formation NA

Elevation: Ground 2905 KB 2912  
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 NW/4 Sec 24 Twp 17 Rge 31  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. #)

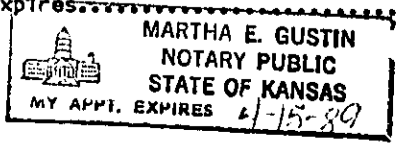
INSTRUCTIONS: This form shall be completed in duplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of any well. Rule 82-3-130 and 82-3-107 apply. Information on side two of this form will be held 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 F.W. Shelton, Jr., Vice President  
Title Date 2-11-86

Subscribed and sworn to before me this 11 day of Feb 1986.  
Notary Public Martha E. Gustin

Date Commission Expires



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)

02-19-86

Sec. 24 Twp. 17 Rge. 31 W

15-17-20322-00-00

SIDE TWO

Operator Name Chief Drilling Lease Name Grover... Well# ... SEC. 24 TWP. 17. RGE. 31.  East  West

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.

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Drill Stem Tests Taken  Yes  No
Samples Sent to Geological Survey  Yes  No
Cores Taken  Yes  No

Formation Description
 Log  Sample

2-02-86 DST #1 3964-3985 (LKC 35z) wk. blow bldg. to fair blow 30-45-60-45 Rec. 80' MW w/ cup of O (chl. 32,000 ppm) IBHP: 1047# FBHP: 983# IFP: 62-62 FFP: 89-89
2-03-86 DST #2 4152-4212 (LKC 160-180 z) weak blow bldg. to 7", Rec. 20' HOCM, 276' OCMW, IBHP: 1074# FBHP: 1028# IFP: 107-125 FFP: 133-178
2-04-86 DST #3 4344-4370 (Marmaton "A" z) 30-30-30-30 very wk. blow died, Rec. 20' OCM, IBHP: 983# FBHP: 930# IFP: 44-44 FFP: 44-44
2-05-86 DST #4 4405-4457 (U. Pawnee & L. Pawnee) 4405-4457 30-30-30-30 very wk. blow died Rec. 10' M w/O spots IBHP: 89# FBHP: 71# IFP: 77-77 FFP: 77-77 DST #5 4455-4512 (Ft. Scott & U. Cherokee) 30-30-60-30 4" blow, Rec. 90' M, IBHP: 169# FBHP: 169# IFP: 89-89 FFP: 89-89
2-06-86 DST #6 4508-4553 (Johnson z) 30-30-30-30 very wk. blow throughout, Rec. 18' OSM, IBHP: 151# FBHP: 98# IFP: 62-62 FFP: 62-62 E-log DST #7
2-07-86 4546-4630 (Cherokee Sand) 30-15-15-15 very wk. blow died, Rec. 15' M IBHP: 196# FBHP: 107# IFP: 89-89 FFP: 89-89 Plugged w/50 sx @ 2300', 80 sks @ 1500', 40 sx @ 330', 10 sx @ 40', 15 sx. RH, 15 sx MH, started @ 12:00 Comp. @ 2:45 pm Steve Durrant Dist. #1

FORMATION TOPS: Anhydrite 2279 + 633 Top Bottom B/Anhydr. 2303 + 609 E-LOG TOPS: Wabunsee 3517 - 605 Anhydrite 2277 + 635 Heebner 3901 - 989 B/Anhydrite 2299 + 613 LKC 3942 - 1030 Heebner 3894 - 982 Muncie Cr. 4114 - 1202 LKC 3939 - 1027 Stark 4210 - 1298 Stark 4207 - 1295 Hush Puckney 4255 - 1343 BKC 4294 - 1382 BKC 4298 - 1386 Marmaton 4334 - 1422 B/Pleasanton 4324 - 1412 Pawnee 4412 - 1500 Marmaton 4337 - 1425 Ft. Scott 4458 - 1546 Pawnee 4415 - 1503 Cherokee 4484 - 1572 Ft. Scott 4463 - 1551 Mississippi 4561 - 1649 Cherokee 4488 - 1576 LTD 4627 - 1715 Mississippi 4561 - 1649 RTD 4630 - 1718

Well Log
Clay/Sand 0 453
Shale/Clay 453 1565
Shale 1565 2279
Anhydr. 2279 2303
Shale 2303 3655
Lime 3655 4630
RTD 4630

CASING RECORD  New  Used Report all strings set-conductor, surface, intermediate, production, etc.

Table with columns: 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. Row 1: surface, 12 1/4, 8 5/8, 20#, 305', 60-40, 190, 3% cc 2% gel

PERFORATION RECORD Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth

RELEASED
JUN 11 1987

TUBING RECORD Size Set At Packer at Liner Run  Yes  No FROM CONFIDENTIAL

Date of First Production Producing Method  Flowing  Pumping  Gas Lift  Other (explain).....

Table with columns: Oil, Gas, Water, Gas-Oil Ratio, Gravity. Row 1: Oil, Gas, Water, Gas-Oil Ratio, Gravity

METHOD OF COMPLETION Production Interval

Disposition of gas:  Vented  Open Hole  Perforation
 Sold  Other (Specify) .....
 Used on Lease  Dually Completed .....
 Conmingled .....

15-171-20322-00-00

# CHIEF DRILLING CO., Inc.

Drilling Contractors • Oil Producers

151 N. MAIN BUILDING

SUITE 700

WICHITA, KANSAS 67202

V. RICHARD HOOVER  
PRESIDENT

DAILY DRILLING REPORT

API: 15-171-20,322

RIG #2

(316) 262-3791

GRUVER #1 (#2308)  
SW SE NW 24-17S-31W  
SCOTT COUNTY, KS.

ELEVATION: 2905 GR  
2909 DF  
2912 KB

1-28-86 Moving in on location Spudded in @ 4:00pm  
Ran 7 jts. new 20# 8 5/8" 295', set @  
305', cem. w/190 sks 60-40 posmix, 3%  
cc 2% gel, plug down @ 9:00 pm

1-29-86 Drilling @ 745'  
1-30-86 Drilling @ 2340'  
1-31-86 Drilling @ 3140'

2-01-86 Drilling @ 3760'

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to fair blow 30-45-60-45 Rec. 80' MW w/cup  
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blow died, Rec. 15' M IBHP: 196# FBHP: 107#  
IFP: 89-89 FFP: 89-89 Plugged w/50 sx @  
2300', 80 sks @ 1500', 40 sx @ 330', 10 sx  
@ 40', 15 sx. RH, 15 sx MH, started @ 12:00  
Comp. @ 2:45 pm Steve Durrant Dist. #1

**CONFIDENTIAL**

FORMATION TOPS:

Anhydrite	2279 +	633
B/Anhydr.	2303 +	609
Wabunsee	3517 -	605
Heebner	3901 -	989
LKC	3942 -	1030
Muncie Cr.	4114 -	1202
Stark	4210 -	1298
Hush Puckney	4255 -	1343
BKC	4298 -	1386
B/Pleasanton	4324 -	1412
Marmaton	4337 -	1425
Pawnee	4415 -	1503
Ft. Scott	4463 -	1551
Cherokee	4488 -	1576
Mississippi	4561 -	1649
RTD	4630 -	1718

E-LOG TOPS:

Anhydrite	2277 +	635
B/Anhydrite	2299 +	613
Heebner	3894 -	982
LKC	3939 -	1027
Stark	4207 -	1295
BKC	4294 -	1382
Marmaton	4334 -	1422
Pawnee	4412 -	1500
Ft. Scott	4458 -	1546
Cherokee	4484 -	1572
Mississippi	4561 -	1649
LTD	4627 -	1715

FEB 24 1986

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JUN 11 1987

FROM CONFIDENTIAL