

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 Koch Oil Co.

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

Contractor: License # 5883  
Name Warrior Drilling Co.

Wellsite Geologist Ron Dulos  
Phone 316-262-3791

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

3-27-86 4-07-86 4-24-86  
Spud Date Date Reached TD Completion Date  
1600 RTD 4508'  
Total Depth PBDT

Amount of Surface Pipe Set and Cemented at 300' 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. 15-15-101-21,305-0000

County LANE

SE SE NW Sec 1 Twp 18S Rge 30  East  West

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

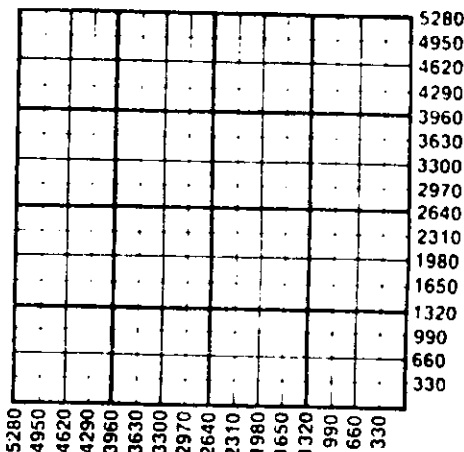
Lease Name CRAMER Well # 1

Field Name Wichita

Producing Formation Pawnee

Elevation: Ground 2838 KB 2843

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 # 22111

Groundwater Ft North from Southeast Corner  
(Well) Ft West from Southeast Corner of  
NW/4 Sec 1 Twp 18S Rge 30  East  West  
SE/4 23 17 30 XX

Surface Water Ft North from Southeast Corner  
(Stream, pond etc) Ft West from Southeast Corner  
Sec Twp Rge  East  West

Pumped to rig by Robert Cramer  
 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

Subscribed and sworn to before me this 29th day of April 1986  
Notary Public Martha E. Gustin

Date Commission Expires

MARTHA E. GUSTIN  
NOTARY PUBLIC  
STATE OF KANSAS  
MY APPT. EXPIRES 4-15-89

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)

Sec. 1, Twp. 18, Rge. 30

MAY 03 1986  
5-2-86  
OIL & GAS CONSERVATION DIVISION  
WICHITA, KANSAS

15-101-21305-0000

SIDE TWO

Operator Name Chief Drilling Co., Inc. Lease Name CRAMER Well # 1

Sec. 1 Twp. 18S Rge. 30 East West County Lane Co., Ks.

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 [X] Yes [ ] No
Samples Sent to Geological Survey [X] Yes [ ] No
Cores Taken [ ] Yes [X] No

Formation Description [X] Log [X] Sample

4-02-86 DST #1 4214-4325 (Lane 200 - Pleasanton) wk bl died in 30", Rec. 90' MW, IBHP: 1028# FBHP: 964# IFF: 71-71 FFP: 71-71
4-03-86 DST #2 4319-4376 (Upper Marm & Marm "A") very strong blow, GTS end of 2nd flow, Rec. 2560' CGO 41 gr, no water IBHP: 1228# FBHP: 1228# IFF: 223-580 FFP: 661-983
4-04-86 DST #3 4384-4415 (Marm "C") 30-45-75-60 st bl off bottom in 4", Rec. 500' GIP, 380' CGO, 40 gr, 60 temp, IBHP: 1146# FBHP: 983# IFF: 80-98 FFP: 107-169 DST #4 4405-4485 30-45-45-45 (Pawnee, Ft Scott) SBOB immediately, GTS 75", Rec. 1575' CGO, Gravity 41 @ 60 F, IBHP: 1074# FBHP: 983# IFF: 151 312 FFP: 401-535 HP: 2261-2215
4-05-86 DST #5 4454-4485 (Ft Scott) wk bl throughout 30-45-45-45 (Pulled tool after IBHP) Rec. 5' M, IBHP: 44# FBHP: 44# IFF: 44-44 FFP: 44-44 HP: 2261-2215 DST #6 4430-4485 (L. Pawnee & Ft Scott) 30-45-45-45 wk bl bldg. fair bl, Rec. 220' GIP, 25' OCM (27% D, 73% M) IBHP: 133# FBHP: 133# IFF: 80-801 FFP: 89-89 HP: 2261-2215
4-06-86 DST #7 4476-4518 (U. Cher.) wk bl died 30" 30-30-30-30 Rec. 12' M, IBHP: 625# FBHP: 535# IFF: 44-44 FFP: 44-44 HP: 2261-2215 DST #8 4500-4545 (Johnson, L. Cherokee) wk bl died 30" 30-30-30-30 Rec. 8' M, IBHP: 312# FBHP: 133# IFF: 35-35 FFP: 35-35 HP: 2071-1985
4-07-86 T.D. 4600' Ran E-log ran 111 jts. new 4 1/2" 10 1/2" casing 4522', set @ 4527' 73' off bottom, guide shoe on 14" shoe jt., insert float and centralizers on shoe jt. @ 4512', centralizers @ 4449-4380-4310, basket @ 2229', centralizer @ 2219', 18 bbl salt flush 12 bbls super K, cemented w/175 sx EA 2 10 sx RH, 60-40 posmix, 6% gel, plug down @ 7:45 pm

Table with columns: Name, Top, Bottom. Includes FORMATION TOPS and E-LOG TOPS lists for various geological formations like Anhydrite, Heebner, Lansing, etc.

Well Log table with columns: Material, Top, Bottom, Notes. Includes Sand/Clay, Shale, Anhydrite, Shale, Lime.

ORD [X] New [ ] Used
Factor, 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. Includes Surface and Production rows.

PERFORATION RECORD table with columns: Shots Per Foot, Specify Footage of Each Interval Perforated, Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used), Depth. Includes 2 shots per ft. interval.

TUBING RECORD table with columns: Size, Set At, Packer at, Liner Run. Includes size 2 3/8" and set at 4508.30'.

Date of First Production 4-24-86 Producing Method [ ] Flowing [X] Pumping [ ] Gas Lift [ ] Other (explain).....

Table with columns: Oil, Gas, Water, Gas-Oil Ratio, Gravity. Includes Estimated Production Per 24 Hours: 100 Bbls, 40 CFPB.

METHOD OF COMPLETION Production Interval

Disposition of gas: [ ] Vented [ ] Solid [ ] Used on Lease [ ] Open Hole [X] Perforation [ ] Other (Specify) 4424-4431
[ ] Dually Completed [X] Single

15-101-21305-0000

PRODUCTIVITY TEST  
BARREL TEST

OPERATOR Chief Drlg. LOCATION OF WELL SE, SE, NW  
 LEASE Cramer OF SEC. 1 T 18 R 30  
 WELL NO. 1 COUNTY Lane  
 FIELD \_\_\_\_\_ PRODUCING FORMATION Pawnee  
 Date Taken 6-2-86 Date Effective \_\_\_\_\_  
 Well Depth 4527' Top Prod. Form \_\_\_\_\_ Perfs 4424'-31'  
 Casing: Size 4 1/2" Wt. \_\_\_\_\_ Depth 4527' Acid 4-17-86, 500 gals  
 Tubing: Size 2 3/8" Depth of Perfs 4508' Gravity 38  
 Pump: Type Insert Bore 2 X 1 1/2 X 12 Purchaser Koch  
 Well Status Pumping  
 Pumping, flowing, etc.

TEST DATA

Permanent \_\_\_\_\_ Field \_\_\_\_\_ Special \_\_\_\_\_  
 Flowing \_\_\_\_\_ Swabbing \_\_\_\_\_ Pumping X

STATUS BEFORE TEST:

PRODUCED 24 HOURS  
 SHUT IN 0 HOURS

DURATION OF TEST \_\_\_\_\_ HOURS \_\_\_\_\_ MINUTES \_\_\_\_\_ SECONDS

GAUGES: WATER .1 INCHES Trace PERCENTAGE  
 OIL 99.9 INCHES 99.9 PERCENTAGE

GROSS FLUID PRODUCTION RATE (BARRELS PER DAY) 68.5

WATER PRODUCTION RATE (BARRELS PER DAY) Trace

OIL PRODUCTION RATE (BARRELS PER DAY) 67.8 PRODUCTIVITY

STROKES PER MINUTE 8

LENGTH OF STROKE 54 INCHES

REGULAR PRODUCING SCHEDULE 24 HOURS PER DAY.

COMMENTS \_\_\_\_\_

RECEIVED  
STATE CORPORATION COMMISSION  
JUN 09 1986  
6-9-86  
CONSERVATION DIVISION  
Wichita, Kansas

operator  
DM Lindemuth

State  
Dan Goodrow

15-101-21305-0000

# CHIEF DRILLING CO., Inc.

Drilling Contractors - Oil Producers

151 N. MAIN BUILDING

SUITE 700

WICHITA, KANSAS 67202

V. RICHARD HOOVER  
PRESIDENT

(316) 262-3791

## DAILY DRILLING REPORT

API: 15-101-21,305

RIG #1

CRAMER #1 (#2271)  
SE SE NW 1-18S-30W  
Lane County, Ks.

ELEVATION: 2838 GR  
2841 DF  
2843 KB

**CONFIDENTIAL**

### FORMATION TOPS:

3-25-86 Moving in on location.  
 3-26-86 Moving in on location.  
 3-27-86 Finish moving in on location, spudded in @ 2:00 pm, ran 7 jts new 20# 8 5/8" casing 297', set @ 300', cem w/175 sks 60/40 pos mix, 2% gel, 3% cc, plug down @ 9:15 pm  
 3-28-86 Drilling from under surface  
 3-29-86 Drilling @ 2348'  
 3-30-86 Drilling @ 3121'  
 3-31-86 Drilling @ 3680'  
 4-01-86 Drilling @ 4085'  
 4-02-86 DST #1 4214-4325 (Lans 200 - Pleasanton) wk bl died in 30", Rec. 90' MW, IBHP: 1028# FBHP: 964# IFF: 71-71 FFP: 71-71  
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Anhydrite	2215 + 628
B/Anhydr.	2237 + 606
Heebner	3910 - 1067
Lansing	3947 - 1104
Muncie Cr	4118 - 1275
Stark	4223 - 1380
HushPuckney	4257 - 1414
BKC	4300 - 1457
Marmaton	4334 - 1491
Pawnee	4412 - 1569
Ft. Scott	4462 - 1619
Cherokee	4484 - 1641
Mississippi	4557 - 1714
RTD	4600 - 1757

### E-LOG TOPS:

Anhydrite	2178 + 665
Base Anhyd	2236 + 607
Heebner	3909 - 1066
LKC	3948 - 1105
Muncie Cr	4121 - 1278
Stark	4223 - 1380
HushPuckney	4256 - 1413
BKC	4299 - 1456
Marmaton	4334 - 1491
Pawnee	4411 - 1568
Ft. Scott	4461 - 1618
Cherokee	4486 - 1643
Mississippi	4554 - 1711
LTD	4598 - 1755

MAY 05 1986  
GENERAL SURVEY  
BRANCH

RECEIVED  
STATE CORPORATION COMMISSION  
MAY 02 1986  
5-2-86  
CONSERVATION DIVISION  
Wichita, Kansas

# CHIEF DRILLING CO., Inc.

Drilling Contractors - Oil Producers

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**CONFIDENTIAL**

MAY 05 1986

KANSAS CORPORATION COMMISSION  
WICHITA BRANCH

RECEIVED  
STATE CORPORATION COMMISSION

MAY 02 1986  
5-2-86  
CONSERVATION DIVISION  
Wichita, Kansas

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SUITE 700

WICHITA, KANSAS 67202

V. RICHARD HOOVER  
PRESIDENT

DAILY COMPLETION REPORT

(316) 262-3791

CRAMER #1  
SE SE NW 1-185-30W  
LANE COUNTY, KANSAS

**CONFIDENTIAL**

4-16-86 Moved in Warrior double drum and rigged up, swabbed down casing to 3000'. Ran correlation, cement and collar log, Perf. 2' per ft. expendable gun 4424'-4431', swab down casing,  
 1 hr. test 8.12 bbls., 94% 0  
 2 hr. test 7.25 bbls., 95% 0  
 3 hr. test 6.09 bbls., 98% 0

4-17-86 1630' fill up, w/trace of W, acidized w/500 gallons 15% SGA 2 1/2 BPM @ 600# max pressure total load 83.5 bbls., swab down 80.44 bbls.  
 1 hr. test 12.18 bbls., 87% 0  
 2 hr. test 11.02 bbls., 95% 0  
 3 hr. test 10.44 bbls., 95% 0  
 1/2 hr. test 5.22 bbls., 95% 0

4-18-86 Mud Anchor 27.00  
 138 jts. 2 3/8" tubing 4463.30  
 3 - 6' subs 18.00  
 -----  
 TOTAL 4508.30

2 x 1 1/2 x 12 THD insert pump  
 177 3/4 sucker rods  
 3 - 6' pony rods  
 1 - 16' polish rods

MAY 05 1986  
SURVEY

RECEIVED  
STATE CORPORATION COMMISSION  
MAY 02 1986  
5-2-86  
CONSERVATION DIVISION  
Wichita, Kansas