

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 # ...5144.....  
Name ...Mull. Drilling Company.....  
Address P.O. Box 2758.....  
City/State/Zip ..Wichita, KS..67202..

Purchaser.....KOCH OIL COMPANY.....  
.....Wichita, KS.....

Operator Contact Person ...Paul Gunzelman...  
Phone (316) 264-6366.....

Contractor: License # ..Blue Goose Drlg.....  
Name .....Great Bend, KS.....

Wellsite Geologist...George Mueller.....  
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 ONWO: old well info as follows:  
Operator .....  
Well Name .....  
Comp. Date .....Old Total Depth.....

WELL HISTORY

Drilling Method:  
 Mud Rotary \_\_\_ Air Rotary \_\_\_ Cable  
6/17/79... 7/02/79... 8/17/87... P&A  
Spud Date Date Reached TD Completion Date  
4591'  
Total Depth PBDT  
Amount of Surface Pipe Set and Cemented at 324 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. 15-101-20,388-0000.....  
County.....Lane.....  
..NW..NE..SE..Sec. 8... Twp. 17S...Rge. 28W... East  
.....XX West  
...2290... Ft North from Southeast Corner of Section  
...990... Ft West from Southeast Corner of Section  
(Note: Locate well in section plat below)

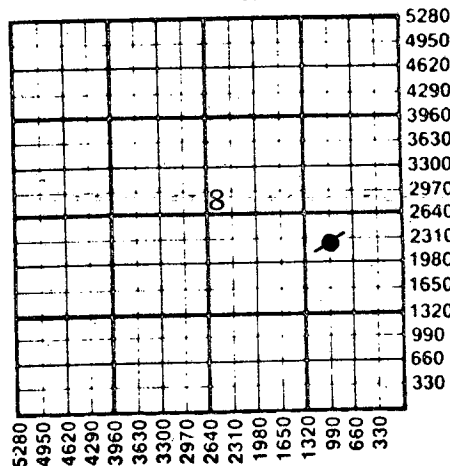
Lease Name.....TERWILLIGER.....Well #..1.....

Field Name.....Shields.....

Producing Formation...Marmaton 'C'.....

Elevation: Ground...2768'.....KB...2775'.....

Section Plat



WATER SUPPLY INFORMATION

Disposition of Produced Water:  Disposal  
Docket # .....  Repressuring  
Hauled

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.....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 *Paul M. Gunzelman*  
Paul M. Gunzelman

Title.....Geologist..... Date 10/06/87



Subscribed and sworn to before me this 10th day of October, 1987...

Notary Public.....*Patricia L. Ungleich*.....  
Patricia L. Ungleich

Date Commission Expires...March 27, 1991.....

K.C.C. OFFICE USE ONLY  
F Letter of Confidentiality Attached  
C Wireline Log Received  
C Drillers Timelog Received  
Distribution  
 KCC SWD/Rep NGPA  
 KGS RECEIVED Other  
STATE CORPORATION COMMISSION (Confidential)  
OCT 15 1987  
10-15-87

SIDE TWO

Operator Name Mull Drilling Company Lease Name TERWILLIGER Well # 1

Sec. 8 Twp. 17S Rge. 28W  East  West County Lane

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

Name Top Bottom

SEE ATTACHED C-10 and CO-1

SEE ATTACHED C-10 and CO-1

CASING RECORD <input 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
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....
PERFORATION RECORD Shots Per Foot Specify Footage of Each Interval Perforated				Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth			
.....	.....			.....		.....	
.....	.....			.....		.....	
.....	.....			.....		.....	
.....	.....			.....		.....	
TUBING RECORD Size Set At Packer at				Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date of First Production		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	Water Bbls	Gas-Oil-Ratio	Gravity	

METHOD OF COMPLETION

Disposition of gas:  Vented  Open Hole  Perforation  
 Sold  Other (Specify) ..... P & A  
 Used on Lease  Dually Completed .....  
 Commingled



**KANSAS DRILLERS LOG**

S. 8 T. 17 R. 28 <sup>EW</sup>

API No. 15 — LANE 101-20,388  
 County Number

Loc. NW/NE/SE

County LANE

Operator

MULL DRILLING COMPANY, INC.

Address

221 Main, Suite 300 Wichita, Kansas 67202

Well No.

#1

Lease Name

TERWILLIGER

Footage Location

2290

feet from (N) (S) line

990'

feet from (E) (W) line

Principal Contractor

Blue Goose Drilling Co.

Geologist

George Mueller

Spud Date

6-17-79

Total Depth

4591

P.B.T.D.

Date Completed

8-28-79

Oil Purchaser

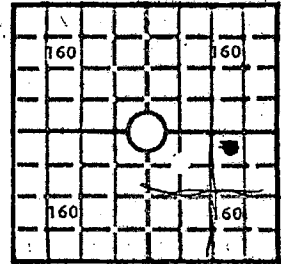
Elev.: Gr. 2768

DF 2772

KB

2775

640 Acres  
N



Locate well correctly

**CASING RECORD**

Report of all strings set—surface, intermediate, production, etc.

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs/ft.	Setting depth	Type cement	Sacks	Type and percent additives
Surface	12 1/2"	8 5/8	20#	324'	Cmmn	200sx	3% cc 2% gel
Production	7 7/8	5 1/2	14#	4585	50-50 poz Cmmn	50 25	3/4 of 1% CFR & 10% salt

**LINER RECORD**

**PERFORATION RECORD**

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			4		4490-4496
<b>TUBING RECORD</b>			4		4511-4520
Size	Setting depth	Packer set at			

**ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD**

Amount and kind of material used	Depth interval treated
250 gals 15% MCA and 1000 gals 15% NE 8/7-8	4490-4496
1500 gals acid 8/14	4511-4520

RECEIVED

**INITIAL PRODUCTION**

STATE CORPORATION COMMISSION

Date of first production <u>9-2-79</u>	Producing method (flowing, pumping, gas lift, etc.) <u>Pumping</u>	<u>OCT 15 1987</u>
RATE OF PRODUCTION PER 24 HOURS	Oil <u>98</u> bbls.	Gas <u>MCF</u>
Disposition of gas (vented, used on lease or sold)	Producing interval (s) <u>Cherokee</u>	

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

Well No. 1 Lease Name RWILLIGER Oil

S 8 - T 17 R - 28 WW E

**WELL LOG**

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
Anhydrite	2150			
Heebner	3933			
Toronto	3950			
Lansing	3970			
Stark Sh	4227			
B/KC	4303			
Ft Scott	4475			
Cherokee	4498			
B/Chero LS	4550			
Miss MS	4569			
Miss Dolomite	4584			
LTD	4591			
DST #1 4047-4064 / 30-30-30-30 Very weak blow; Rec 6' free oil & 4' oil cut mud; ISIP 950 IFP 20-20 FFP 20-30- FSIP 200				
DST #2 4135-4205 / 30-45-60-90 Fair blow; Rec 60' oil; 120' OCM ISIP 1107 IFP 81-81 FFP 81-102 FSIP 1119				
DST #3 4201-4218 / 30-45-90-60 Fair blow; Rec 5' oil; 985' wtr; ISIP 1107 IFP 61-132 FFP 204-318 FSIP 1119				
DST #4 4225-4240 / 30-45-60-60 Strong blow off bttm bkt / 7 min; Rec 10' oil; 710 SW; ISIP 1207 IFP 81-204 FFP 244-387 FSIP 1207				
DST #5 4259-4270 / 30-45-60-60 Strong blow off bttm bkt / 5 min; Rec 115' gas; 65' cln oil; 60' fmy GCM Oil 120' oil & GCMW; ISIP 1125 IFP 40-122 FFP 122-224 FSIP 1125				
DST #6 4276-4295 / 30-45-90-60 Fair blow; rec 570' SW; ISIP 1127 IFP 40- FFP 163-295 FSIP 1127				
DST #7 4304-4340 / 30-45-60-60 Strong blow/10 min; Rec 300' gas; 150' cln oil; 60' mdy oil; 120' gas & sly OCW; 660' SW; ISIP 1167 IFP 132-265 FFP 306-469 FSIP 1167				
DST #8 4371-4395 / 30-45-60-60 Imm stg blow; Rec 240' GIP, 435' cln gsy oil 240' fmy GC Mdy oil; ISIP 1094 IFP 71-102 FFP 142-204 FSIP 922				
DST #9 4396-4468 MISRUN DST #10 4393-4468 MISRUN				
DST #11 4401-4468 / 30-45-60-60 Strong blow; Rec 10' mud; 990' wtr ISIP 1266 IFP 122-285 FFP 346-589 FSIP 1266				
DST #12 4478-4523 / 30-45-60-60 Strong blow bttm bkt / 5 min; Decrsd to 3 min at end of 2nd open. Rec 660' Gas; 405' cln gsy oil; 480' sly mdy oil; ISIP 1227 IFP 142-183 FFP 244-367 FSIP 1207				

USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.

Date Received

CONT'd DST #13 & #14 on Page Two

*Robert O. Wall*  
Robert O. Signature Wall  
PRESIDENT

4/30/80 RECEIVED  
STATE CORPORATION COMMISSION  
Date

OCT 15 1987

Two

MULL DRILLING COMPANY, INC.  
#1 TERWILLIGER  
NW/NE/SE 8-17S-28W  
LANE COUNTY, KANSAS

DST #13 4516-4550 / 30-30-30-30  
Weak blow/15 min/died; flushed, no help;  
Recovered 10 feet mud  
ISIP 988 IFP 61-61 FFP 61-61 FSIP 1007

DST #14 4570-4591 / 30-45-60-60  
Strong blow / bttm bucket/ 5 min;  
Recovered 15 feet of oil cut muddy water  
60 feet of very slightly oil cut muddy water  
60 feet of slightly muddy water with oil spots  
2190 feet of water  
ISIP 1361 IFP 288-774 FFP 864-1361 FSIP 1386

RECEIVED  
STATE CORPORATION COMMISSION

OCT 15 1987

CONSERVATION DIVISION  
Wichita, Kansas

AFFIDAVIT TO ESTABLISH TEMPORARY PRODUCTIVITY

This form must be filed in duplicate within five days after completion of the well:

Two copies to State Corporation Commission, Conservation Division  
245 North Water, Wichita, Kansas 67202

OPERATOR Mull Drilling Co., Inc. LOCATION OF WELL:

LEASE Terwilliger 2290 Ft. from South line.

WELL NUMBER 1 990 Ft. from East line.

PURCHASER Husky Oil OF THE SE OF SEC. 8 TWP. 17S RGE. 28W

COUNTY Lane

FIELD Unnamed

PRODUCING FORMATION Cherokee

Total Depth 4591

Top Prod. Form. 4498

Acid; Date 8-7-79, 8-8-79 & 8-14-79

Prod. Perfs. 4511-20

Amount 250 15% MCA, 1000 15% Gal. NE and 1500 gals

Prod. Perfs. \_\_\_\_\_

PRODUCTION TEST

Date 9-2-79 How Produced Pumping

Oil Produced 98 BOPD Bbl. Length of Test 24 Hours,

A F F I D A V I T

STATE OF KANSAS )

) SS

COUNTY OF SEDGWICK )

Robert O. Wall of lawful age, being first duly sworn upon his oath, deposes and says:

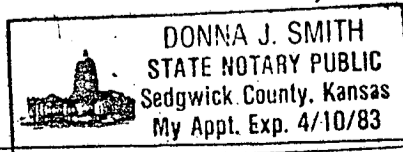
That he is President for Mull Drilling Co., Inc. Operator of the Terwilliger Lease, and is duly authorized to make this affidavit for and on behalf of said operator, that Well No. 1 on said lease has been completed and was capable of producing twenty-five barrels of oil per day as of the 25th day of September, 19 79, and that all information entered herein with respect to said well is true and correct.

Further affiant saith not.

(S) Robert O. Wall

Subscribed and sworn to before me this 25th day of September, 19 79

Donna J. Smith  
NOTARY PUBLIC



OCT 15 1987

My Commission expires \_\_\_\_\_

CONSERVATION DIVISION  
Wichita, Kansas

WELL LOG  
Terwilliger #1  
NW NE SE 8-17S-28W  
Lane County, Kansas

Name of Operator: Mull Drilling Co., Inc.  
221 N. Main Suite 300  
Wichita, Kansas 67202

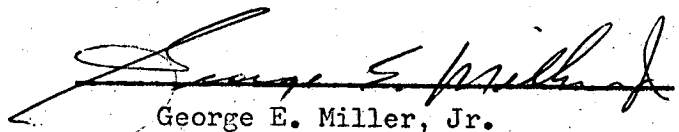
Date Completed: July 3, 1979

<u>FROM</u>	<u>TO</u>	
0	2159	Shale and Sand
2159	2185	Anhydrite
2185	2375	Shale and Sand
2375	2700	Shale and Lime
2700	3179	Shale and Sand
3179	4145	Shale and Lime
4145	4205	Lime
4205	4295	Shale and Lime
4295	4395	Lime
4395	4428	Shale and Lime
4428	4468	Lime
4468	4500	Shale and Lime
4500	4523	Lime
4523	4591	Shale and Lime
4591		Total Depth

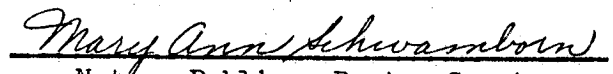
STATE OF KANSAS

COUNTY OF BARTON ss

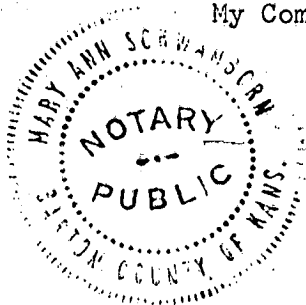
George E. Miller, Jr., President of Blue Goose Drilling Co., Inc.  
being first duly sworn on oath says: That I have knowledge of the facts,  
statements and matters herein contained and the log of the above described  
well as filed and that the same are true and correct.

  
George E. Miller, Jr.

Subscribed and sworn before me this 10th day of July, 1979.

  
Notary Public Barton County

My Commission Expires 8-1-81.



RECEIVED  
STATE CORPORATION COMMISSION

OCT 15 1987

CONSERVATION DIVISION  
Wichita, Kansas