

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

API NO. 15- 101-20246 0003

County Lane

 -NW -NE -NE Sec. 1 Twp. 17S Rge. 29 X ^EW

4950 Feet from S/K (circle one) Line of Section

990 Feet from E/W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)

Lease Name Terwilliger NE Unit Well # 5

Field Name Terwilliger East

Producing Formation

Elevation: Ground 2785 KB 2796

Total Depth 4600 PBDT 4300

Amount of Surface Pipe Set and Cemented at 323 Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set Feet

If Alternate II completion, cement circulated from

feet depth to w/ sx cmt.

Drilling Fluid Management Plan OWWO 10-27-99 X
(Data must be collected from the Reserve Pit)

Chloride content ppm Fluid volume bbls

Dewatering method used

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name License No.

 Quarter Sec. Twp. S Rng. E/W

County Docket No.

Op. License # 5144

Name: Mull Drilling Company, Inc.

Address P.O. Box 2758

City/State/Zip Wichita, KS 67201

Purchaser: N/A

Operator Contact Person: Mark A. Shreve

Phone (316) 264-6366

Contractor Name: PLAINS INC.

License: 4072

Wellsite Geologist:

Designate Type of Completion

 New Well Re-Entry X Workover

 Oil S/W S/W Temp. Abd.

 Gas X ENHR SIGW

 Dry X Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Reentry: Old Well Info as follows:

Operator: Mull Drilling Company, Inc.

Well Name: James B #1

Comp. Date 10-20-77 Old Total Depth 4600

 Deepening Re-perf. X Conv. to Inj/S/W

 Plug Back PBDT

 Commingled Docket No.

 Dual Completion Docket No.

X Other (S/W or Inj?) Docket No. E-27,690

9-3-77 10-20-77 10-6-99

Spud Date Date Reached TD Completion Date

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 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 geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. 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 [Signature]

Title President Date 10/21/99

Subscribed and sworn to before me this 21st day of October, 19 99.

Notary Public [Signature]

Commission Expires March 26, 2003

TANNIG L. TRITT
Notary Public - State of Kansas
My Appt. Expires 3-26-2003

K.C.C. OFFICE USE ONLY

F Letter of Confidentiality Attached

C X Wireline Log Received

C Geologist Report Received

✓ FILE HAS COPY

Distribution

 KCC S/W/Rep NGPA

 KGS Plug Other (Specify)

Operator Name Mull Drilling Company, Inc. Lease Name Terwilliger NE Unit Well # 5

Sec. 1 Twp. 17S Rge. 29 East West
 County Lane

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
 (Attach Additional Sheets.)
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No
 Electric Log Run Yes No
 (Submit Copy.)
 List All E.Logs Run:
 RA Guard

Name	Top	Datum
Anhydrite	2189	
Heebner	3928	
Lasing	3969	
B/KC	4300	
Ft Scott	4472	
Cherokee	4497	
Miss	4568	
LTD	4601	

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
Surface	12 1/4	8 5/8	20#	323	Common	190	3% CC 2% Ge1
Production	7 7/8	5 1/2	14 & 15.5#	4599	Common 50-50 Poz	50 75	2% Ge1 18% Sa1 3/4 OF 1% CFR

ADDITIONAL CEMENTING/SQUEEZE RECORD (SEE ATTACHED)				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
	(SEE ATTACHED)		
	CIBA @ 4300		

TUBING RECORD		Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No
		2 3/8"	4096'	4096'	
Date of First, Resumed Production, SWD or Inj.		Producing Method <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)			
NOT IN USE AT THIS TIME					
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas: METHOD OF COMPLETION Production Interval
 Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled
 (If vented, submit ACO-18.) Other (Specify) _____

ACO-1 Supplemental Information
Terwilliger NE Unit #5

ADDITIONAL CEMENTING/SQUEEZE RECORD							
Date	Purpose	Depth		Type of Cement	# Sacks Used	Type and Percent Additives	Comment
		Top	Bottom				
9/10/99	Protect Casing	1415'	2240'	Mid Con II	130	3% Calcium Chloride	TOC found by temp survey
9/13/99	Protect Casing	1020'	1320'	Mid Con II	140	3% Calcium Chloride	TOC found by temp survey
9/14/99	Protect Casing	??	950'	60/40 Pozmix/Common	250/50	3% CaCl2 + 1/4# Flocele	Approved by R. Lacey to perf at 825'
9/15/99	Protect Casing	??	825'	60/40 Pozmix/Common	250/50	3% CaCl2 + 1/4# Flocele	Approved by R. Lacey to perf at 700'
9/16/99	Protect Casing	640'	700'	Liteweight/Common	150/50	3% CaCl2	TOC found by temp survey
9/17/99	Protect Casing	Surface	640'	Liteweight/Common	150/51	3% CaCl3	Cmt down annulus. Approved by R. Lacey.
9/28/99	Protect Casing	2233'	2257'	Micro-matrix	15		Squeeze leak
INJECTION PERFORATION RECORD							
		Perforated Interval					
Shots Per Foot		Top	Bottom	Zone			
4		4174'	4180'	Lansing KC 'T'			
4		4233'	4237'	Lansing KC 'K'			
4		4256'	4261'	Lansing KC 'L'			
4		4269'	4281'	Lansing KC 'L'			
PERFORATED INTERVALS OPEN, BUT ABANDONED BELOW CAST IRON BRIDGE PLUG							
		4321'	4325'	Marmaton			
		4372'	4384'	Marmaton			
		4396'	4401'	Marmaton			
PERFORATIONS USED FOR ALTERNATE II CEMENTING							
		2240'	2241'	Squeeze Perfs			
		1320'	1321'	Squeeze Perfs			
		950'	951'	Squeeze Perfs			
		825'	826'	Squeeze Perfs			
		700'	701'	Squeeze Perfs			