

33132 MUST BE TYPED

SIDE ONE

COPY

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

Operator: License # 32119
Name: Northern Natural Gas
Address P.O. Box 178

City/State/Zip Cunningham, KS 67035
Purchaser: N/A
Operator Contact Person: Dan Dobbins
Phone (316) 298-6117
Contractor: Name: Pratt Well Service
License: 5893
Wellsite Geologist: None

Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover:
Operator: Northern Natural Gas
Well Name: Prentice 19-32
Comp. Date 4-8-78 Old Total Depth 4072
 Deepening Re-perf. Conv. to Inj/SWD
 Plug Back PBTB
 Commingled Docket No.
 Dual Completion Docket No.
 Other (SWD or Inj?) Docket No.
6-24-98 7-7-98 7-17-98
Spud Date Date Reached TD Completion Date

API NO. 15- 095-206910101
County Kingman
NE - NW - NE - SE - Sec. 19 Twp. 27 Rge. 10 X ^EW
2395 Feet from (S)N (circle one) Line of Section
827 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 Prentice Well # 19-32
Field Name Cunningham Storage
Producing Formation Viola
Elevation: Ground 1760 KB 1773
Total Depth 5497 MD 4064 TVD PBTD 5350 MD 4064 TVD
Amount of Surface Pipe Set and Cemented at 1477 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 DU/NO, 9-9-98 v.c.
(Data must be collected from the Reserve Pit)
Chloride content 800 ppm Fluid volume 400 bbls
Dewatering method used N/A
Location of fluid disposal if hauled offsite:
Operator Name Geary Mud Disposal
Lease Name Gray License No. 284168
 Quarter 15 Sec. 14N & Rng. 7 ^W
County Garfield, OK Docket No. 284168

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 Dan Dobbins
Title SR. Reservoir Analyst Date 8/26/98
Subscribed and sworn to before me this 26 day of August, 1998.
Notary Public Karen Elliot
Date Commission Expires January 25, 1999

NOTARY PUBLIC - State of Kansas
KAREN ELLIOT
My Appt. Exp. 1-25-99

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
C Geologist Report Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other
(Specify) IS

33732 Y900

SIDE TWO

Operator Name Northern Natural Gas Lease Name Prentice Well # 19-32
 Sec. 19 Twp. 27 Rge. 10 East West
 County Kingman

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 (Attach Additional Sheets.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Log Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Name	Top Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Electric Log Run (Submit Copy.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
List All E.Logs Run:			

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
Conductor	20"	13 3/8"	54	136	Common	100	-----
Surface	12 1/4"	8 5/8"	22	1468	Reg Poz. Mix	650	3% cc 1/4 Flo. cele
Production	7 7/8"	5 1/2"	15 1/2	4090	50-50 Poz Mix	700	5# Gil 4% Ge 18% Salt

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose: Set	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Liner <input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	3695-4146	Standard	50	5#FWCA, 29# Halad-344

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	

TUBING RECORD		Size	Set At	Packer At	Liner Run	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Date of First, Resumed Production, SMD or Inj. Storage Well		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 N/A	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity	

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: _____