

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 # 5539
Name Southwest Gas Storage
Address Box 1348
City/State/Zip Kansas City, MO 64141

Purchaser Panhandle Eastern Pipeline Co.

Operator Contact Person D.R. Carlile
Phone 316-873-5465

Contractor: License # _____
Name McClellan Drilling Co.

Wellsite Geologist _____
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 OWWO: old well info as follows:
Operator Panhandle Development
Well Name Nichols "A"1-2
Comp. Date 8-15-62 Old Total Depth 5813

WELL HISTORY

Drilling Method:
 Mud Rotary Air Rotary Cable
6-9-1962 8-15-62
Spud Date Date Reached TD Completion Date
.5813 .5784
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 1231 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. _____
County Meade
C NW SW Sec. 2 Twp. 33 Rge. 28 East West

1980 Ft North from Southeast Corner of Section
4620 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

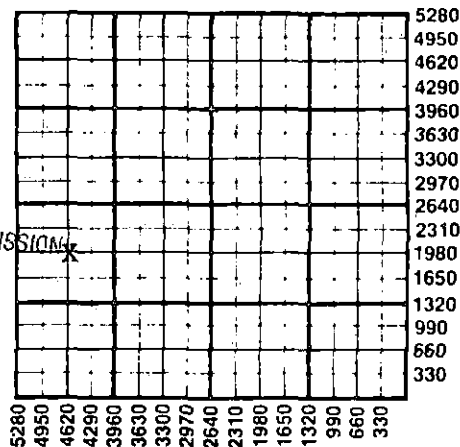
Lease Name Nichols Well # "A"1-2

Field Name Borchers North

Producing Formation Morrow-Miss.

Elevation: Ground 2525 KB 2535

Section Plat



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STATE CORPORATION COMMISSION
4-19-85
APR 19 1985
CONSERVATION DIVISION
Wichita, Kansas

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 # _____
 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. #)

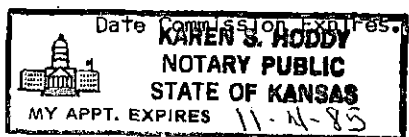
INSTRUCTIONS: This form shall be completed in duplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of any well. Rule 82-3-130 and 82-3-107 apply. Information on side two of this form will be held 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 [Signature]
Title Field Superintendent Date 4-1-85

Subscribed and sworn to before me this 1st day of April
1985
Notary Public [Signature]
Karen S. Hoddy

Date Commission Expires 11-4-85



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

Sec. 33 Twp. 33 Rge. 28

SIDE TWO

Operator Name Southwest Gas Storage Lease Name Nichols Well # "A"1-2

Sec. 2 Twp. 33 Rge. 28 East West County Meade

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

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"	24#	1231	Pox-Common	600	
Production	8-3/4"	4-1/2"	9.5	5794	Common	150	
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
4	5669-5672			Frac 10,000 Gal. 3% 10,000#sd.		5669-72	
4	5717-27 5761-65 5775-84			Acid -W- 1,000Gal. F-E 15%		5717-84	
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Size 2-3/8"		Set At 5688	Packer at 5678				
Date of First Production		Producing Method					
8-15-62 11-20-84		<input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (explain).....					
Estimated Production Per 24 Hours		Oil	Gas	Water	Gas-Oil Ratio	Gravity	
Morrow Storage		Bbls	Miss. 402 MCF	Bbls	CFPB		

METHOD OF COMPLETION

Production Interval

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

.....
 RECORD OF PERFORATION
 OIL/GAS RATIO
 SAMPLED 11-20-84

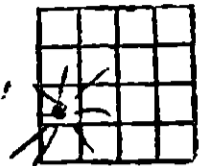
W LOG BUREAU—KANSAS GEOLOGICAL SOCIETY
508 East Murdock, Wichita, Kansas

Company- PANHANDLE DEVELOPMENT CO., INC.
Farm- Nichols "A" No. 1

SEC. 2 T. 33 R. 28W
C NW SW

Total Depth. 5813'
Comm. 6-7-62 Comp. 6-28-62
Shot or Treated.
Contractor.
Issued. 11-24-62

County Meade
KANSAS



Elevation. 2535' RL

Production. 2,900,000 CFGPD

CASING:

8 1/2" 1221.31' cem w/600 sx.
4 1/2" 5794' cem w/150 sx.

Figures indicate Bottom of Formations.

clay	40
red bed & sand	400
red bed & shells	1610
red bed & Anhydrite	1910
lime & shale	2574
lime	3060
lime & shale	3190
lime	3344
lime & shale	3995
chalk & shale	4080
lime & shale	4300
shale w/lime strks.	4440
lime & shale	4630
lime	5690
lime & shale	5810 ETD
lime & shale	5813
Total Depth	

TOPS: LOG

Heebner	4410
Toronto	4460
Lansing	4606
Cherokee	5364
Morrow	5613
Morrow Sand	5667-82
Mississippi	5769

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STATE CORPORATION COMMISSION

MAY 06 1985

CONSERVATION DIVISION
Wichita, Kansas