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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 # 5208
Name Mobil Oil Corporation
Address P. O. Box 5444
City/State/Zip Denver, CO 80217-5444

Purchaser Northern Natural Gas

Operator Contact Person J. L. Douglass
Phone (303) 298-2047

Contractor: License # 9137
Name Unit Drilling Company

Wellsite Geologist Pinar Yilmaz
Phone (303) 298-2555

Designate Type of Completion
 New Well Re-Entry Workover
 Off 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
4/14/84 4/27/84 11/14/84
Spud Date Date Reached TD Completion Date
6550' 3275'
Total Depth PBT
Amount of Surface Pipe Set and Cemented at 1762 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. 15-189-20,711-00-00
County Stevens
NE NE NW Sec. 24 Twp. 34S Rge. 36 East West

4933.6' Ft North from Southeast Corner of Section
3006.7' Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

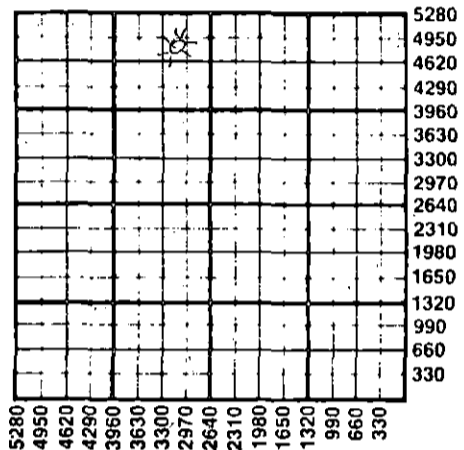
Lease Name Haworth #2 Ut. Well # 3

Field Name Panoma*

Producing Formation Council Grove*

Elevation: Ground 3047' KB 3063.5

Section Plat



WATER SUPPLY INFORMATION

Disposition of Produced Water: Disposal Repressuring
Docket # CD-3805 (C-19,820)

Questions on this portion of the ACO-1 call:
Water Resources Board (913) 296-3717

Source of Water:
Division of Water Resources Permit # N/A when drilled
 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 J. E. Dawson
Producing Accounting Supervisor Date 8/29/85

Subscribed and sworn to before me this 29 day of August 1985
Notary Public Clara M. Biddleman

Date Commission Expires My Commission expires February 14, 1988.

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 Plug Other (Specify)
RECEIVED
STATE CORPORATION COMMISSION
Form ACO-1 (7-84)

SEP 9 1985

Sec 24 Twp 34 Rge 36 W

SIDE TWO

Operator Name Mobil Oil Corporation Lease Name Haworth #2 Ut. Well # 3

Sec. 24 Twp. 34S Rge. 36 East West County Stevens

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

Acid/Frac Record

Acidize formation down 5 1/2" casing w/2100 gals. 15% HCL acid at 15 BPM. Dropped 63 ball sealers through treatment. Good ball action. Frac'd formation w/110,000 gals. gelled water containing 270,000# 20/40 sand at the following concentrations:

- 10,000 gal. pad
- 10,000 gal w/1 ppg sand
- 10,000 gal w/2 ppg sand
- 10,000 gal w/3 ppg sand
- Flushed with 3,055 gals. water

Name Top Bottom

Chase 2620
 Council Grove 3036
 T. D. 6550

CASING RECORD New 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	12-14"	9-5/8"	36#	1762'	Class H	530	12% gel 3% CaCl ₂
Production	8-3/4"	5-1/2"	15.5#	3300'	Class H	125	3% CaCl ₂
					Class H	580	12% gel 2.3% CaCl ₂
					Class H	240	3% CaCl ₂

Shots Per Foot	Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2	3056-3068 Council Grove 3070-3702 "A"	Acid/Frac Record detailed above	

TUBING RECORD Size 2-3/8" Set At 3068' Packer at Liner Run Yes No

Date of First Production Producing Method Flowing Pumping Gas Lift Other (explain)

Estimated Production Per 24 Hours	Oil Bbls	Gas MCF	Water Bbls	Gas-Oil Ratio	Gravity

METHOD OF COMPLETION

Production Interval

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

3056-3072 O.A.

