

COPY

SIDE ONE

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

Operator: License # 5428Name: Graves Drilling Co., Inc.Address P.O. Box 8250City/State/Zip Wichita, KS 67208Purchaser: Hoch & KP&LOperator Contact Person: Fredrick W. StumpPhone (316) 687-2777Contractor: Name: Lobo Drilling Co.License: 5864Wellsite Geologist: Fred Stump

Designate Type of Completion

☒ New Well ☐ Re-Entry ☐ Workover
☒ Oil ☐ SWD ☐ Temp. Abd.
☐ Gas ☐ Inj ☐ Delayed Comp.
☐ Dry ☐ Other (Core, Water Supply, etc.)

If OWO: old well info as follows:

Operator: _____

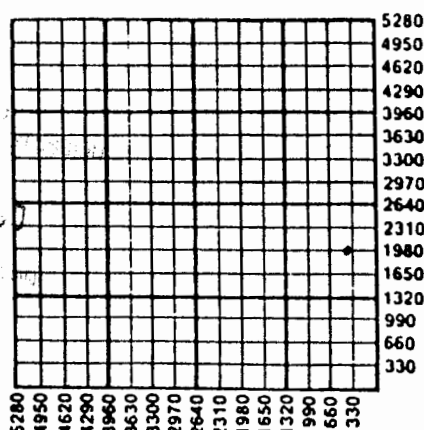
Well Name: _____

Comp. Date _____ Old Total Depth _____

Drilling Method:

☒ Mud Rotary ☐ Air Rotary ☐ Cable

08-01-90 08-07-90 8-24-90
Spud Date Date Reached TD Completion Date

API NO. 15- 007-22,324County BarberApprox. E/2 NE SE Sec. 10 Twp. 32 Rge. 12 X East West1980 Ft. North from Southeast Corner of Section350 Ft. West from Southeast Corner of Section
(NOTE: Locate well in section plat below.)Lease Name Cunningham Well # 4Field Name Bloom NorthProducing Formation MississippianElevation: Ground 1465' KB 1474Total Depth 4350 PBTD _____Amount of Surface Pipe Set and Cemented at 528 FeetMultiple 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.

INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 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. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

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 Fredrick W. StumpTitle Geologist Date 8-28-90cribed and sworn to before me this 28th day of August1990.Notary Public Phyllis A. FreemanDate Commission Expires June 9, 1994

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)

106/500

Form ACO-1 (7-89)

SIDE TWO

Operator Name Graves Drilling Co., Inc. Lease Name Cunningham Well # 4
 Sec. 10 Twp. 32 Rge. 12 ☐ East ☒ West
 County Barber

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.)

Formation Description

☒ Log ☐ Sample

Name	Top	Bottom
Elgin Shale	3392	
Elgin Sand	3394	
Heebner	3524	
Douglas Sand	3666	
Lansing	3702	
Miss.	4262	
TD	4349	

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 1/4"	8-5/8"	23#	528'	60/40poz	275	60/40poz 2% 3%
Production	7-7/8"	5 1/2"		4349'	Surfil	50	5# seal flake w/500 gal mud flush

PERFORATION RECORD

Shots Per Foot Specify Footage of Each Interval Perforated

Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth

2	4286-94, 4267-79	2250 gal 7 1/2% Acid	
		FRAC 70,000 gal gel water and 120,000# Sand	

TUBING RECORD

Size Set At Packer At
 2 3/8 4318 none

Liner Run ☐ Yes ☒ No

Date of First Production Aug. 24, 1990 Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	25	50 000	25	2000 + 1	32

Disposition of Gas:

☐ Vented ☒ Sold ☐ Used on Lease
 (If vented, submit ACO-18.)

METHOD OF COMPLETION

☐ Open Hole ☒ Perforation ☐ Dually Completed ☐ Commingled
☐ Other (Specify) _____

Production Interval