FORM MUST BE TYPED

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 # 5398

Name: ARCO Oil & Gas Company

Address Box 1610

City/State/Zip Midland, TX 79702

Purchaser: NA

Operator Contact Person: Ken W. Gosnell

Phone (915) 688-5672

Contractor: Name: Zenith Drlg. Corp.

License: 5141

Wellsite Geologist: Ben Francka

Designate Type of Completion
X New Well ___ Re-Entry ___ Workover

___ Oil ___ SWD ___ SIOW ___ Temp. Abd.
___ Gas ___ ENHR ___ SIGW
X Dry ___ Other (Core, WSW, Expl., Cathodic, etc)

Workover/Re-Entry: old well info as follows:

Operator:

Well Name:

Comp. Date ___ Old Total Depth ___

___ Deepening ___ Re-perf. ___ Conv. to Inj/SWD
___ Plug Back ___ PBTD
___ Commingled Docket No.
___ Dual Completion Docket No.
___ Other (SWD or Inj?) Docket No.

8-31-91 Spud Date | 9-10-91 Date Reached TD | 9-11-91 Completion Date

API NO. 15- 067-21164

County Grant

S/2 N/2 NW Sec. 32 Twp. 29 Rge. 38 E X W

989 Feet from S (N) (circle one) Line of Section

1320 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 Lora Hickok Well# 2

Field Name Big Bow

Producing Formation St. Louis

Elevation: Ground 3092.6 KB 3103.6

Total Depth 5800 PBTD surface

Amount of Surface Pipe Set and Cemented at 1756 Feet

Multiple Stage Cementing Collar Used? ___ Yes X No

If yes, show depth set ___ Feet

If Alternate II completion, cement circulated from ___

feet depth to ___ w/ ___ sx cmt.

Drilling Fluid Management Plan 6-18-93
(Data must be collected from the Reserve Pit)

Chloride content 1150 ppm Fluid volume 1500 bbls

Dewatering method used evaporation

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name License No.

___ Quarter Sec. ___ Twp. ___ S Rng. ___ E/W

County ___ Docket No.

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, 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 Ken W Gosnell

Title Regulatory Coordinator Date 12-12-91

Subscribed and sworn to before me this 7th day of January, 19 92.

Notary Public LISA A. GORDY Lisa A. Gordy
Notary Public, State of Texas

Date Commission Expires: My Comm. Exp. 6-6-92

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)

Form ACO-1 (7-91)

SIDE TWO

Operator Name ARCO Oil & Gas Company Lease Name Lora Hickok Well# 2

☐ East
Sec. 32 Twp. 29 Rge. 38 ☒ West

County Grant

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.) ☐ Yes ☐ No

Samples Sent to Geological Survey ☐ Yes ☐ No

Cores Taken ☒ Yes ☐ No

Electric Log Run (Submit Copy.) ☒ Yes ☐ No

List All E.Logs Run:

☐ Log Formation (Top), Depth and Datums ☐ Sample

Name	Top	Datum
Chase	2310	
Council Grove	2598	
Heebner	3792	
Lansing	3877	
Morrow	5152	
Chester	5478	
St. Genevieve	5555	
St. Louis	5602	

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	24	1756	600 sx HCL w/2%	cc+1/4#	
	7 7/8						

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top	Depth Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
___ Perforate					
___ Protect Casing					
___ Plug Back TD					
___ 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
		15 sx in RH	100 sx	3000
		10 sx in MH	50 sx	1790
			50 sx	900
			40 sx	600
			10 sx	40

TUBING RECORD Size Set At Packer At Liner Run ☐ Yes ☐ No

Date of First, Resumed Production, SWD or Inj. Producing Method ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	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