

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 # 5447
Name OXY USA Inc.
Address P. O. Box 26100
Oklahoma City, OK 73126-0100
City/State/Zip

Purchaser Northern Natural

Operator Contact Person Raymond Hui
Phone (405) 749-2471

Contractor: License # 3098
Name Exeter Drilling Company

Wellsite Geologist Robert Vick
Phone (405) 749-2000

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

WELL HISTORY

Drilling Method:
☒ Mud Rotary ☐ Air Rotary ☐ Cable
10-31-88 11-11-88 4-7-89
Spud Date Date Reached TD Completion Date
3250 3191
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 1713 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
Cement Company Name
Invoice #

API NO. 15-175-21045

County Seward

C-SE/4 NE/4 Sec. 17 Twp. 32S Rge. 34 East
X West

3300 Ft North from Southeast Corner of Section
660 Ft West from Southeast Corner of Section

(Note: Locate well in section plat below)
(formerly Jerman B #2)

Lease Name Jerman A Well # 3

Field Name Kansas Hugoton Gas

Producing Formation Chase

Elevation: Ground 2942' 2953' KB

Section Plat

APR 13 1989

RECEIVED
STATE CORPORATION COMMISSION

CONSERVATION DIVISION
Wichita, Kansas

KANSAS GEOLOGICAL SURVEY
WICHITA BRANCH

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: T88-508
Division of Water Resources Permit #

X Groundwater 2660 Ft North from Southeast Corner
(Well) 70 Ft West from Southeast Corner of
Sec 17 Twp 32S Rge 34 East X 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 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. 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 Bryan Humphries

Title Engineering Manager Date 4-7-1989

Subscribed and sworn to before me this 7th day of April 1989

Notary Public Marsha G. Wilson

Date Commission Expires 4-1-92

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)

Operator Name OXY USA Inc Lease Name Jerman A Well # 3

Sec. 17 Twp. 32S Rge. 34 ☐ East
☒ West County Seward

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

Ran DIL-SFL w/SP and GR log; CNL-Litho. w/GR & Caliper log & Microlog. Ran CBL, CET, CCL and cement scan logs from 3191 to 200'. Ran Natural GR log from 3070-2400'.

Spotted 100 sx CL H cmt. plug from 5550-5700'; pulled DP to 3300' & spotted 100 sx CL H cmt.

Formation Description
☒ Log ☐ Sample

Name	Top	Bottom
Lime & Shale	0	1714
Shale	1714	2525
Dolomite	2525	3080
Lime	3080	4960
Shale	4960	5400
Lime & Shale	5400	5960
Lime	5960	6400
	TD	--3250
	PBTD	3191

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
Conductor Pipe	32"	20"		37'	Red-MIX	4 yds.	
Surface	12-1/4"	8-5/8"	24#	1713'	CL C	635	6% gel; 2% CaCl ₂
Production	7-7/8"	5-1/2"	14#	3246'	CL H	1250	6% gel; 1#/sx Cello
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)			
Shots Per Foot	Specify Footage of Each Interval Perforated			Depth			
4	Winfield 2730-2756'; Krider 2682-2714'; Herington 2661-2666'; 2651-2654'; Hollenberg 2624-2636'			Acidized w/5000 gal 15% HCl Frac'd w/60,500 gal of 70 quality 40# gal Nitrogen foam			
TUBING RECORD		Size	Set At	Packer at	Liner Run	☐ Yes ☒ No	
Date of First Production		Producing Method					
4-7-1989		☒ Flowing ☐ Pumping ☐ Gas Lift ☐ Other (explain).....					
Estimated Production Per 90 min.		Oil	Gas	Water	Gas-Oil Ratio		Gravity
		---	3/4" choke 1407 MCF		---		

METHOD OF COMPLETION

Production Interval

Disposition of gas: ☐ Vented ☐ Open Hole ☒ Perforation
☐ Sold ☐ Other (Specify) Chase
☐ Used on Lease ☐ Dually Completed 2624-2756'
☐ Conmingled

17-32-34 W

And

SIDE ONE

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
RECOMPLETION FORM
ACQ-2 AMENDMENT TO WELL HISTORY

API NO. 15- 175-21045

County Seward

C-SE/4 NE/4 Sec 17 Twp 32S Rge 34 ☒ East
☒ West

Operator: License # 5447
Name OXY USA Inc.
Address P. O. Box 26100
Oklahoma City, OK 73126-0100
City/State/Zip

3300 Ft North from Southeast Corner of Section
600 Ft West from Southeast Corner of Section

(Note: Locate well in section plat below)
(Formerly Jerman B #1)

Lease Name Jerman A Well # 3

Field Name Holt

Name of New Formation Pending Completion

Elevation: Ground 2942 KB 2953
Section Plat

Designate Type of Original Completion

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

Date of Original Completion: Pending

DATE OF RECOMPLETION:

N/A N/A
Commenced Completed

Designate Type of Recompletion/Workover:

☐ Deepening ☒ Delayed Completion
☐ Plug Back ☐ Re-perforation
☐ Conversion to Injection/Disposal

Is recompleted production:

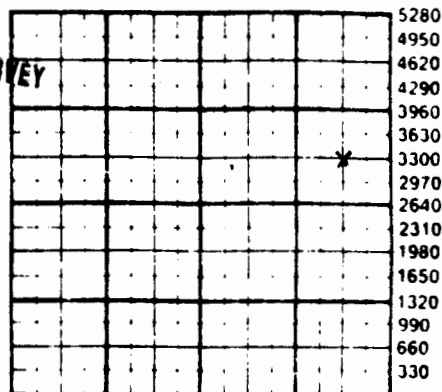
☐ Commingled; Docket No.
☐ Dual Completion; Docket No.
☐ Other (Disposal or Injection)?

JAN 18 1989

KANSAS GEOLOGICAL SURVEY
WICHITA BRANCH

RECEIVED
STATE CORPORATION COMMISSION
JAN 18 1989

CONSERVATION DIVISION
Wichita, Kansas



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)

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 recompletion of any well. Rules 82-3-107 and 82-3-141 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 any additional wireline logs and driller's time logs (not previously submitted) shall be attached with this form. Submit ACQ-4 prior to or with this form for approval of commingling or dual completions. Submit OP-4 with all plugged wells. Submit OP-111 with all temporarily abandoned wells. NOTE: Conversion of wells to either disposal or injection must receive approval before use; submit form U-1.

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 Bryan Humphries *Bryan Humphries* Engineering Manager Date 1-11-89

Subscribed and sworn to before me this 11th day of January 19 89

Notary Public *Marsha G. Wilson* Date Commission Expires 4-1-92

SIDE TWO

(Formerly Jerman B #1)

Operator Name OXY USA Inc. Lease Name Jerman A Well # 3Sec 17 Twp 32S Rge 34 X East
West County Seward

RECOMPLETED FORMATION DESCRIPTION:

 Log X SampleNameTopBottom

Lime & Shale

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth		Type of Cement	# Sacks Used	Type & Percent Additives
	Top	Bottom			
<u> </u> Perforate					
<u> </u> Protect Casing					
<u> </u> Plug Back TD					
<u> </u> Plug Off Zone					

8-5/8" casing, 24# at 1713'. Cmt. w/570 sx C1 C Poz. w/6% total gel, 2% CaCl + 1/sx Cello-Seal; followed by 125 sx C1 C cmt. w/2% CaCl & 1#/sx Cello-Seal.

Shots Per Foot	PERFORATION RECORD	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)
	Specify Footage of Each Interval Perforated	
<u>Waiting for</u>	<u>perforation,</u>	<u>Acidizing & fracturing</u>

P8TD --- Plug Type ---

TUBING RECORD:

Size --- Set At --- Packer At --- Was Liner Run? Y NDate of Resumed Production, Disposal or Injection .Estimated Production Per 24 Hours bbl/oil bbl/water MCF gas gas-oil ratio