

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

RELEASED

1997 2 8 2001

CONFIDENTIAL

API NO. 15- 175 21783 0000

ORIGINAL

County Seward

C - N2 - NE - Sec. 14 Twp. 33 Rge. 32 ^E _W660 Feet from S ^N (circle one) Line of Section1,320 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 City of Liberal Well # 1-14

Field Name Kismet

Producing Formation Chase Group

Elevation: Ground 2783 (2785 ELOG) 2788 (2791 ELOG)

Total Depth 2825 PBD 2779

Amount of Surface Pipe Set and Cemented at 661 Feet

Multiple 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.

Drilling Fluid Management Plan ALT 1 3/27/01 (Data must be collected from the Reserve Pit)

Chloride content 7,800 ppm Fluid volume 6,500 bbls

Dewatering method used Evaporation & Backfill To Original Contour.

Location of fluid disposal if hauled offsite:

Operator Name

Lease Name License No.

Quarter Sec. Twp. S Rng. E/W

County Docket No.

Operator: License # 04782

Name: Ensign Operating Co.

Address P. O. Box 2161

City/State/Zip Liberal, KS. 67905-2161

Purchaser: Duke Energy

Operator Contact Person: Wes Willimon

Phone (316) 626-8131

Contractor: Name: Cheyenne Drlg., Inc.

License: 5382

Wellsite Geologist: None

Designate Type of Completion

☒ New Well ☐ Re-Entry☒ Oil ☐ SWD ☐ SIOW ☐ Temp. Abandon☒ Gas ☐ ENHR ☐ SIGW☐ Dry ☐ Other (Core, WSW, Expl., Cathodic, etc)

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

Operator: 17 2000

Well Name: CONFIDENTIAL

Comp. Date Old Total Depth

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

11/19/99 11/21/99 01/19/2000

Spud Date Date Reached TD Completion Date

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 Wes Willimon

Title Production Supt. Date Feb. 17th, 2000

Subscribed and sworn to before me this 17th day of February, 2000.

Notary Public William L. Waldo

Date Commission Expires Sept. 19th, 2002

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)

NOTARY PUBLIC - State of Kansas
WILLIAM L. WALDO
My Appl. Exp. 09-19-2001

66665

SIDE TWO

Operator Name Ensign Operating Co. Lease Name City of Liberal Well # 1-14
County Seward
Sec. 14 Twp. 33 Rge. 32 ☐ East ☒ West

INSTRUCTIONS: Show important tops and base of formations penetrated. 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.)
List All E.Logs Run: GR - Neutron Only
Bond Log

☒ Log Formation (Top), Depth and Datum ☐ Sample
Name Top Datum
Herrington 2591' +197
Upper Krider 2626' +162
Lower Krider 2658' +130
Winfield 2724' + 64

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#	661'	Class C Lite	125 180	2%CC, 1/4#/Sx Flocc
Production	7-7/8"	4 1/2"	10.5#	2825'	50/50 Poz Class C	240 150	1/4#/Sx.Floccle

ADDITIONAL CEMENTING/SQUEEZE RECORD				
Purpose:	Depth Top 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	Acid, Fracture, Shot, Cement Squeeze Record
	Specify Footage of Each Interval Perforated	(Amount and Kind of Material Used) Depth
1 JSPE	2596, 2598, 2600, 2608, 2629, 2635, 2638, 2641, 2644, 2669, 2671, 2673, 2675, & 2685.	AZ w/1125 Gals. 7 1/2% MCA(75 Gals./ft) w/30 Gals.Morflo III, 2 Gal. HC-2, 2 Gal./HAI-81, 10# Ferchek.
		Foam Frac'ed w/11,214 28% HCL Acid & 150,000 SCF N2.

TUBING RECORD		Size	Set At	Packer At	Liner Run	☐ Yes ☒ No		
		2-3/8"	2711'	None				
Date of First, Assumed Production Shut-in			Producing Method					
Jan.19th, 2000			☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)					
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water	Bbls.	Gas-Oil Ratio	Gravity
		N/A		50	20		N/A	.70

Disposition of Gas: ☐ Vented ☒ Sold ☐ Used on Lease (If vented, submit ACO-18.)
METHOD OF COMPLETION: ☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled
Production Interval: 2596 - 2685'