

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
September 1999  
Form Must Be Typed

**CONFIDENTIAL**

**WELL COMPLETION FORM**  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

**COPY**

Operator: License # 04782  
Name: Ensign Operating Co.  
Address: P. O. Box 2161  
City/State/Zip: Liberal, KS. 67905-2161  
Purchaser: Williams Field Services  
Operator Contact Person: Godfrey J. Holasek Jr.  
Phone: (620) 626-8131  
Contractor: Name: Cheyenne Drlg. Inc.  
License: 5382  
Wellsite Geologist: N/A

Designate Type of Completion:

☒ New Well ☐ Re-Entry ☐ Workover  
☐ Oil ☐ SWD ☐ SLOW ☐ Tapered  
☒ Gas ☐ ENHR ☐ SIGW  
☐ Dry ☐ Other (Core, WSW, Expl., Cathodic Protection)

If Workover/Re-entry: Old Well Info as follows:

Operator: FROM CONFIDENTIAL  
Well Name: \_\_\_\_\_  
Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_  
☐ Deepening ☐ Re-perf. ☐ Conv. to Enhr./SWD  
☐ Plug Back \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_  
☐ Commingled \_\_\_\_\_ Docket No. \_\_\_\_\_  
☐ Dual Completion \_\_\_\_\_ Docket No. \_\_\_\_\_  
☐ Other (SWD or Enhr.?) \_\_\_\_\_ Docket No. \_\_\_\_\_

12/05/2000 12/07/2000 01/26/2001  
Spud Date or Date Reached TD Completion Date or  
Recompletion Date Recompletion Date

API No. 15-175-21810-0000  
County: Seward  
SE NW NW Sec. 4 Twp. 31 S. R. 33 ☐ East ☒ West  
4030 feet from S / N (circle one) Line of Section  
4030 feet from E / W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:

(circle one) NE SE NW SW  
Lease Name: Warner F.R. Well #: 2-4

Field Name: Hugoton  
Producing Formation: Chase  
Elevation: Ground: 2923' Kelly Bushing: 2929'  
Total Depth: 2749' Plug Back Total Depth: 2741'  
Amount of Surface Pipe Set and Cemented at 593' Feet  
Multiple Stage Cementing Collar Used? ☐ Yes ☒ No  
If yes, show depth set \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from \_\_\_\_\_  
\_\_\_\_\_ depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan Alt 1 7/30/01 LB  
(Data must be collected from the Reserve Pit)  
Chloride content 15,000 ppm Fluid volume 2,700 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. R. \_\_\_\_\_ ☐ East ☐ West  
County: \_\_\_\_\_ Docket No.: \_\_\_\_\_

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 of 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: Godfrey J. Holasek Jr.  
Title: District Manager Date: March 14th, 2001  
Subscribed and sworn to before me this 14th day of March,  
2001  
Notary Public: William L. Waldorf  
Date Commission Expires: Sept. 19th, 2002

KCC Office Use ONLY	
<input checked="" type="checkbox"/>	Letter of Confidentiality Attached
<input checked="" type="checkbox"/>	If Denied, Yes <input type="checkbox"/> Date: _____
<input checked="" type="checkbox"/>	Wireline Log Received
<input checked="" type="checkbox"/>	Geologist Report Received
<input checked="" type="checkbox"/>	UIC Distribution
RECEIVED STATE CORPORATION COMMISSION MAR 26 2002 LDG	

**NOTARY PUBLIC - State of Kansas**  
**WILLIAM L. WALDORF**  
My Appt. Exp. 09-19-2002

**CONFIDENTIAL**

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KANSAS

ORIGINAL

Side Two

Operator Name: Ensign Operating Co. Lease Name: Warner F.R. Well #: 2-4  
 Sec. 4 Twp. 31 S. R. 33 ☐ East ☒ West County: Seward

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

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:

CBL, NEUTRON - SEE ATTACHED

RELEASED  
 APR 25 2002

☒ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Base of Stone Corral	1784'	1145'
Wellington	2196'	733'
Herrington (Chase)	2598'	331'
Upper Krider	2624'	305'
Lower Krider	2660'	269'
Winfield	2698'	231'

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
FROM CONFIDENTIAL							
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#	593'	Prem + HLC	125 170	2% CC & 1/4# / Sx. Flocele
Production	7-7/8"	4 1/2"	10.5#	2749'	Class 'C' 50/50 Poz	150 485	1/4# / Sx. Flocele & 10# / Sx. Gilsonite

#### ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				ORIGINAL

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
4 JSPF	2628 - 2656'	- SEE ATTACHMENT -	
KCC			
CONFIDENTIAL		MAR 14 2001	RECEIVED STATE CORPORATION COMMISSION
CONFIDENTIAL		MAR 15 2001	
TUBING RECORD	Size Set At 2-3/8" 2675'	Packer At None	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No CONSERVATION DIVISION Kansas
Date of First, Resumed Production, SWD or Enhr. Jan. 26th, 2001	Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)		
Estimated Production Per 24 Hours	Oil Bbls. 0	Gas Mcf 77	Water Bbls. 0 Gas-Oil Ratio N/A Gravity 1.10

Disposition of Gas

METHOD OF COMPLETION

Production Interval

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

☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled 2628 - 2656'  
☐ Other (Specify)

DRILLER'S LOG

ORIGINAL

ENSIGN OIL & GAS, INC.  
F.R. WARNER 2-4  
SECTION 4-31S-R33W  
SEWARD COUNTY, KANSAS

COMMENCED: 12-05-00  
COMPLETED: 12-07-00

RELEASED

APR 25 2002

SURFACE CASING: 593' OF 8 5/8" CMTD  
W/170 SKS HLC + 2% CC + 1/4#/SK  
FLOCELE. TAILED W/125 SKS PREMIUM  
PLUS + 2%CC + 1/4#/SK FLOCELE.

FROM CONFIDENTIAL

FORMATION

DEPTH

SURFACE HOLE	0 - 593
RED BED	593 - 1280
GLORIETTA	1280 - 1435
RED BED	1435 - 2542
SHALE & LIMESTONE	2542 - 2749 RTD

I DO HEREBY CERTIFY THAT THE FOREGOING STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

CHEYENNE DRILLING, INC.

*Wray Valentine*

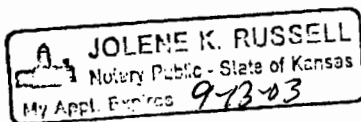
WRAY VALENTINE

STATE OF KANSAS: ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 12TH DAY OF DECEMBER, 2000.

JOLENE K. RUSSELL

*Jolene K. Russell*  
NOTARY PUBLIC



KCC

MAR 14 2001

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01/09/01 OPERATIONS @ 7:00 AM: RTD 2749': PBDT 2741'. PERF: U. KRIDER 2628'-2656'.  
PREPARE TO FRACTURE TREAT U. KRIDER ZONE 2628'-2656'.

WORK DONE 01/08/01 (DAY 4) MI 3-500 BBL FRAC TANKS AND FILL EACH W/400  
BFW. SICP 240 PSIG. BLOW WELL DEAD IN 15 MINUTES. MIRU EAGLE WELL  
SERVICE RIG #2. ND WELLHEAD AND INSTALL 4½" 2000 PSIG WP ORBIT VALVE.  
SLIGHT GAS BLOW ON CSG. RU SWAB TOOLS. RIH W/4½" CSG SWAB AND FIND  
30' FLUID IN HOLE. MAKE AN ADDITIONAL SWAB RUN AND FIND NO FLUID IN  
HOLE. SLIGHT GAS BLOW ON CSG. SHUT WELL IN AND SDFN.

01/10/01 OPERATIONS @ 7:00 AM: RTD 2749': PBDT 2741'. PERF: U. KRIDER 2628'-2656'.  
PREPARE TO CHECK FOR SAND FILL AND SWAB TEST.

WORK DONE 01/09/01 (DAY 5) 20 HR SICP 210 PSIG. MIRU HES. ACIDIZE U.  
KRIDER 2628'-2656' DOWN 4½" CSG W/2000 GALS 7.5% FE-HCL ACID AND 150 1.3  
SPGR BALL SEALERS. FLUSHED ACID W/38.5 BBLS 20# WATERFRAC "G" LINEAR  
GEL. FORMATION BROKE @ 880 PSIG. FORMATION BALLED OF W/1800 GALS  
ACID IN FORMATION. MTP: 2300 PSIG. ATP: 500 PSIG. AIR: 8.0 BPM. CSG ON  
VACUUM 5 MINUTE APSD. ND ACID EQUIPMENT. RIH W/4½" CSG SWAB  
MANDREL AND JARS ON SAND LINE AND KNOCK BALL SEALERS OFF  
PERFORATIONS. ND 4½" ORBIT VALVE AND NU FRAC HEAD. RU FRAC  
EQUIPMENT. FRACTURE TREAT U. KRIDER 2628'-2656' DOWN 4½" CSG W/40,000  
GALS 20# DELTA FRAC 140 AND 130,400# 12/20 BRADY SAND AS FOLLOWS:

RELEASED

RECEIVED  
STATE CORPORATION COMMISSION

APR 25 2002

MAR 15 2001

FROM CONFIDENTIAL

CONSERVATION DIVISION  
Wichita, Kansas

## COMPLETION REPORT 01/10/01 CON'T

STAGE	VOLUME (GALS)	EVENT	SAND (#/GAL)	RATE (BPM)	PRESSURE (PSIG)
1	15000	PAD	0	20.0	375
2	8000	SLF*	1-6	20.0	100
3	17000	SLF*	6	20.0	350
4	1753	FLUSH	0	20.0	680

\* SAND LADEN FLUID

ACID CONTAINED 2 GAL SSO-21M (SURFACTANT) AND 2 GAL HAI-81M  
(INHIBITOR). ACID AND FRAC FLUSHES (20# WATERFRAC G) CONTAINED 5  
GAL/1000 GALS LGC-IV (GELLING AGENT), .15#/1000GALS BE-6 (BIOCIDE), 2  
GAL/1000 GALS CLAYFIX II (CLAY CONTROL), .005 GAL/1000 GALS N-ZYME 3  
(BREAKER) AND 2 GAL/1000 GAL SSO-21M (SURFACTANT). PAD AND SLF (20#  
DELTA FRAC 140) CONTAINED .15#/1000 GALS BE-6 (BIOCIDE), 2 GAL/1000 GALS  
CLAYFIX II (CLAY CONTROL), .005 GAL/1000 GALS N-ZYME 3 (BREAKER), 5  
GAL/1000 GALS LGC-IV (GELLING AGENT) AND 2 GAL/1000 GALS SSO-21M  
(SURFACTANT). TOTAL LOAD AND TREATMENT = 48 BBLS ACID, 1057 BFW AND  
130,400# 12/20 BRADY SAND. ISIP: 580 PSIG. 5 MIN SIP: 510 PSIG. 10 MIN SIP:  
439 PSIG. 15 MIN SIP: 348 PSIG. MTP: 780 PSIG. ATP: 280 PSIG. AIR: 20 BPM.  
SHUT WELL IN 2½ HRS TO ALLOW GEL TO BREAK. SITP = 0 PSIG. ND FRAC  
HEAD AND INSTALL 4½" ORBIT VALVE. PU AND RIH W/3" OD SAND PUMP. TAG  
UP @ 2651' (90' SAND FILL). CLEAN OUT 4½" CSG FROM 2651' TO 2711' (60') IN 3  
HRS AND 15 SAND PUMP RUNS. RECOVER 61 GALS SAND. FL @ 2400' WHILE  
SAND PUMPING. SHUT WELL IN AND SDFN.

01/11/01 OPERATIONS @ 7:00 AM: RTD 2749': PBDT 2741'. PERF: U. KRIDER 2628'-2656'.  
PREPARE TO CHECK FOR SAND FILL AND SWAB TEST.

WORK DONE 01/10/01 (DAY 6) 14 HR SICP 190 PSIG. BLOW WELL DOWN IN 15  
MINUTES. RIH W/SAND PUMP AND TAG UP @ 2711' (NO SAND FILL OVERNIGHT).  
CLEAN OUT SAND IN 4½" CSG FROM 2711' TO PBDT @ 2741' (30') IN 2½ HRS AND  
13 SAND PUMP RUNS. RECOVER 36 GALS SAND. LD SAND PUMP. RIH W/SWAB  
TOOLS AND FIND IFL @ 2200'. SWAB TEST U. KRIDER 2628'-2656' THROUGH 4½"  
CSG FOR 4 HRS AND 28 SWAB RUNS. RECOVER 51 BLW. FL @ 2450' AFTER 3  
SWAB RUNS. LAST HR SWAB 11 BLW IN 7 SWAB RUNS. FFL @ 2450' AND  
SCATTERED. GOOD GAS BLOW BEHIND SWAB. SLIGHT STEADY GAS BLOW  
BETWEEN SWAB RUNS. RIH W/SWAB JARS AND TAG UP @ 2726' (15' SAND FILL  
WHILE SWABBING). 1070 BLWTR.

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