

31-31-31w
CONFIDENTIAL

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

ORIGINAL

API NO. 15- 175-21,348
County Seward
- SE - SW - NW Sec. 31 Twp. 31S Rge. 31 X E

Operator: License # 04782

Name: Ensign Operating Co.

Address P.O. BOX 2161

City/State/Zip Liberal, Kansas 67905

Purchaser: _____

Operator Contact Person: Reed Wacker

Phone (316) 626-8131

Contractor: Name: Murfin Drilling Co., Inc **KCS**

License: 6033

Wellsite Geologist: Duane Moredock **NOV 24**

Designate Type of Completion
 New Well Re-Entry Workover

Oil SWD S10W Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If 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 _____ PBTB
 Commingled _____ Docket No. _____
 Dual Completion _____ Docket No. _____
 Other (SWD or Inj?) _____ Docket No. _____

11/9/93 11/18/93 P&A 11/19/93
Spud Date Date Reached TD Completion Date

2310' Feet from S/W (circle one) Line of Section

990' Feet from E/W (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
NE, SE, N or SW (circle one)

Lease Name Felan Well # 1-31

Field Name Wildcat

Producing Formation D & A

Elevation: Ground 2836' KB 2845'

Total Depth 5950' PBTB ----

Amount of Surface Pipe Set and Cemented at 1731' Feet

Multiple Stage Cementing Collar Used? Yes No

yes, show depth set _____ Feet

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ ex cat.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content 2200 ppm Fluid volume 4500 bbls

De-watering method used Evaporation

Location of fluid disposal if hauled offsite: _____

Operator Name N/A

Lease Name _____ License No. _____

Quarter Sec. DEC 2 Exp. 2, 1994 S Rng. _____ E/W

County _____

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FROM CONFIDENTIAL

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 Reed Wacker
Title Prod Supt Date 12/1/93

Subscribed and sworn to before me this 1 day of DECEMBER, 1993.

Notary Public Herb Brady
Date Commission Expires _____
NOTARY PUBLIC, State of Kansas
HERB BRADY
My Appt. Exp. 9/14/97

RECEIVED
STATE CORPORATION COMMISSION
K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
DEC 6 6 40 PM '93
 Wireline Log Received
 Geologist Report Received
CONSERVATION DIVISION
Wichita, Kansas
KCS
Distribution
 SWD/Rep
 Plug
 NGPA
 Other (Specify)

Operator Name Ensign Operating Co. Lease Name Felan Well # 1-31

Sec. 31 Twp. 31 Rge. 31 East County Seward
 West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests given 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.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

List All E.Logs Run:
See attached

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#	1731'	HLC Class C	575 150	2%CC 1/4#Floc 3% CC

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				

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

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or Inj. D & A 11/19/93 Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION

Open Hole Perf. Dually Comp. Commingled Other

Production Interval _____

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FORMATION TOPS

Ensign Operating Co.
 No. 1-31 Felan
 SE SW NW Sec. 31, T31S, R31W
 Seward County, Kansas

G.L. 2836' K.B. 2845'	Comparison Well E/2 NW 36-31S-32W K.B. 2850'	Drill Time And Samples	Wire Line Geophysical Logs
Tertiary	Surface +2841	Surface +2836'	Surface +2836'
Cretaceous			
Albian			
Kiowa	NL	541' +2304'	542' +2303'
Cheyenne	NL	651' +2194'	652' +2193'
Permian			
Glaudalupian			
White Horse	NL	790' +2055'	795' +2050'
Leonardian			
Nipewalla Gr.			
Blaine	NL	1056' +1789'	1058' +1787'
Flower Pot	NL	1145' +1700'	1148' +1697'
Cedar Hills	NL	1190' +1655'	1190' +1655'
Sumner Gr.			
Stone Corral	NL	1622' +1223'	1625' +1220'
Ninnescah	NL	1751' +1094'	1754' +1091'
Wellington	NL	2146' +699'	2150' +695'
Hutchinson	NL	2228' +617'	2225' +620'
Wolfcampian			
Chase Gr.			
Herington	NL	2654' +191'	2650' +195'
Krider	NL	2715' +130'	2713' +132'
Winfield	NL	2759' +86'	2760' +85'
Towanda	NL	2815' +30'	2810' +35'
Fort Riley	NL	2866' -21'	2860' -15'
Wreford	NL	2973' -128'	2968' -123'
Council Grove Gr.	NL	3067' -222'	3062' -223'
Admire Gr.	NL	3307' -462'	3308' -463'
Pennsylvanian			
Virgilian			
Wabaunsee Gr.	NL	3381' -536'	3376' -531'
Shawnee Gr.			
Topeka	NL	3805' -960'	3796' -951'

G.L. 2836'
K.B. 2845

Comparison Well
E/2 NW 36-31S-31W
K.B. 2850'

Drill Time
And Samples

Wire Line
Geophysical Logs

	Comparison Well E/2 NW 36-31S-31W K.B. 2850'	Drill Time And Samples	Wire Line Geophysical Logs
Pennsylvanian			
Virgilian			
Douglas Gr.			
Base Heebner	4230' -1380'	4245' -1400'	4242' -1397'
Toronto	4238' -1388'	4254' -1409'	4250' -1405'
Missourian			
Lansing Gr.	4328' -1478'	4335' -1490'	4332' -1487'
Demoinesian			
Marmaton Gr.	4950' -2100'	4973' -2128'	4972' -2127'
Cherokee Gr.	5130' -2280'	5154' -2309'	5152' -2307'
Atokian			
Morrowian	5277' -2427'	5281' -2436'	5276' -2431'
U. Morrow Sd	5462' -2612'	5471' -2621'	5466' -2627'
M. Morrow Unc.	5516' -2666'	NP	NP
Terra Rossa	5528' -2678'	5539' -2694'	5538' -2693'
	5664' -2814'	5670' -2825'	5670' -2825'
Mississippian			
Mermecian			
Ste. Genevieve	5710' -2860'	5716' -2871'	5714' -2869'
Total Depth	5916' -3016'	5950' -3105'	5949' -3104'