

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 # 04782
Name Ensign Operating Co.
Address 621 Seventeenth St., Suite 1800
City/State/Zip Denver, CO 80293

Purchaser Northern Natural

Operator Contact Person L. I. Hartnett
Phone (303) 293-9999

Contractor: License # 5107
Name H-30 Drilling, Inc.

Wellsite Geologist Duane Moredock
Phone (303) 298-9226

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

If ONWO: old well info as follows:
Operator
Well Name
Comp. Date Old Total Depth

WELL HISTORY

Drilling Method: Mud Rotary Air Rotary Cable
9-22-89 10-2-89 10/30/89
Spud Date Date Reached TD Completion Date
6750' 6407' NOV 13 1989
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 1760 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 #

County Stevens FROM CONFIDENTIAL

C NW NW Sec. 15 Twp. 34S Rge. 36 East X West

4584 Ft North from Southeast Corner of Section
4620 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

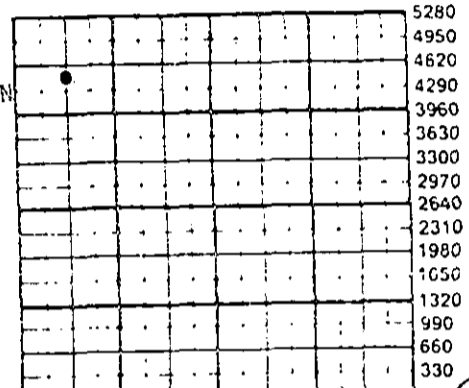
Lease Name Davis 1-15
Wall #

Field Name Wildcat KCC Gm

Producing Formation Morrow

Elevation: Ground 3069' KB 3080'

Section Plat



RECEIVED
NOV 15 1989
11-15-89
CONSERVATION DIVISION
Wichita, Kansas

KANSAS GEOLOGICAL SURVEY
WICHITA 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: 7791
Division of Water Resources Permit #

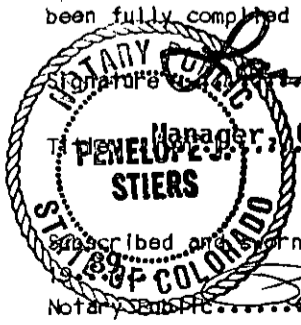
Groundwater 4290 Ft North from Southeast Corner
(Well) 990 Ft West from Southeast Corner of
Sec 15 Twp 34 Rge 36 East X West

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 duplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 90 days after completion or recompletion of any well. Rule 82-3-130 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 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: L. I. Hartnett
Title: Manager, Operations
Date: 11/10/89

Subscribed and sworn to before me this 10 day of November 1989
Notary Public Penelope J. Stiers

Date Commission Expires My Commission expires October 21, 1991
621 17th St. Suite 1800
Denver, Colorado 80293

K.C.C. OFFICE USE ONLY
 Letter of Confidentiality Attached
 Wireline Log Received
 Drillers Time Log Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other
(Specify)

SIDE TWO

Operator Name Ensign Operating Co. Lease Name Davis Well # 1-15

RELEASED

Sec. 15 Twp. 34S Rge. 36 East West County Stevens

JAN 18 1991

WELL LOG

FROM CONFIDENTIAL

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

Formation Description
 Log Sample

DST #1: 6214-6260', Lower Morrow Sand. 30, 56, 50, 120. 1st Open - Bottom of bucket immediately, GTS/13 min, 23 mins/436 MCFG, 30 mins/436 MCFG. 2nd Open - 10 min/436 MCFG, 20 min/487 MCFG, 30 min/510 MCFG, 40 mins/522 MCFG, 50 mins/546 MCFG.
 Recovered: 100' gassy drilling mud
 Pressures: HP 3096-2956
 SIP 1884-1884
 FP 128-138, 286-345
 BHT 133
 Sampler: 3500 ML gas @ 1700 psi.

Name	Top	Bottom
Red Bed	0	1,065'
Red Bed and Sand	1,065'	1,520'
Anhydrite	1,520'	1,760'
Shale and Sand	1,760'	2,240'
Lime and Shale	2,240'	6,750'
Rotary Total Depth		6,750'
Sample Tops:		
BSC	1765'	Morrow Sd 6285'
Chase	2698'	Chester 6285'
Shawnee	3830'	Ste Gen 6466'
Heebner	4266'	St. Louis 6583'
Lansing	4330'	LTD 6396'
Kansas City	4723'	
Marmaton	5132'	
Top Morrow	5872'	
Lwr Morrow	6195'	

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> 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#	1760'	35-65 Class C	500	6% gel 2% cc
Production	7-7/8"	4-1/2"	10.5#	6452'	Class H	350	2% cc 2% CPL 3% KC
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth			
Shots Per Foot	Specify Footage of Each Interval Perforated						
7	6195-6198'			900 gals, 7-1/2% Fe-HCl			
13	6218-6224'						
7	6230-6233'			83,590 gal. 70% CO2 foam &			
21	6236-6246'			132,500# 20/40 Mesh Sand			
17	6251-6259'						
25	6264-6276'						
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Size		Set At		Packer at			
2-3/8"		6407'					
Date of First Production When hooked up to gas sales line.		Producing Method <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (explain).....					
Estimated Production Per 24 Hours		Oil	Gas	Water	Gas-Oil Ratio	Gravity	
4 Bbls		4831 MCF	0 Bbls	1,207,750 CPFB			

METHOD OF COMPLETION Vented Sold Used on Lease Open Hole Perforation Other (Specify).....

Production Interval 6195-6276'

1. IS...
 and Daily Completed
 and Commingled