

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 # 4782
Name Ensign Operating Co.
Address 621 17th St., Suite 1140
City/State/Zip Denver, CO 80293

Purchaser Northern Natural

Operator Contact Person Larry Hartnett
Phone (303) 293-9999

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

Wellsite Geologist Duane Moredock
Phone 303-629-7204

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
1-22-87 2-1-87 2-24-87
Spud Date Date Reached TD Completion Date
5900' 5,838'
Total Depth PBTD

Amount of Surface Pipe Set and Cemented at 1681 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. 15-175-20.926-0000
County Seward
C NE NE Sec. 24 Twp. 31 S Rge. 32 East
4620 Ft North from Southeast Corner of Section
660 Ft West from Southeast Corner of Section
(Note: Locate well in section plat below)

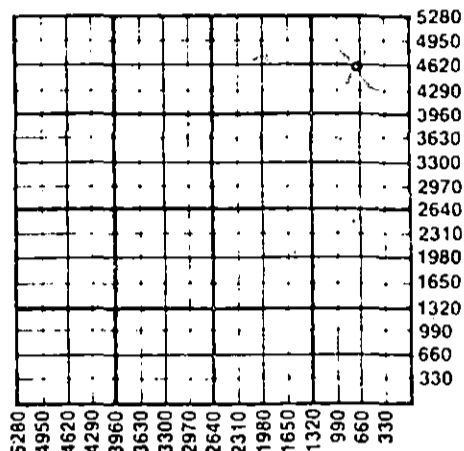
Lease Name Cove1 Trust Well # 1-24

Field Name Thirty-one

Producing Formation Morrow

Elevation: Ground 2,837' 2,849' KB

Section Plat



WATER SUPPLY INFORMATION

Disposition of Produced Water: N/A Disposal
Docket # Repressuring

Questions on this portion of the ACO-1 call:

Water Resources Board (913) 296-3717

Source of Water:
Division of Water Resources Permit # T87-32

Groundwater 4620 Ft North from Southeast Corner
(Well) 660 Ft West from Southeast Corner of
Sec 24 Twp 31 S Rge 32 East 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 Lawrence T. Hartnett
Title Manager, Operations Date 3-18-87

Subscribed and sworn to before me this 18th day of March 1987
Notary Public Cheryl B. Seibert

Date Commission Expires 9/12/90

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)

Operator Name Ensign Operating Co. Lease Name Covel Trust Well # 1-24

Sec. 24 Twp. 31S Rge. 32 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

Formation Description
 Log Sample

DST #1: 5,410-5,493' 30,60,30,120
 FP: 555-555, 555-555
 SIP: 1346-1357
 HP: 2782-2759
 BHT: 124°
 Gas to surface/3"

DST #2: 5,502-5,538' 30,60,60,120
 FP: 284-225, 177-142
 SIP: 1334-1299
 HP: 2977-2954
 BHT: 124°
 Gas to surface/5"

Name	Top	Bottom
Sand	0	228'
Sand and Shale	228'	538'
Sand and Red Bed	538'	1,165'
Red Bed, Sand and Anhydrite	1,165'	1,741'
Red Bed and Shale	1,741'	2,190'
Anhydrite	2,190'	2,515'
Lime and Red Bed	2,515'	3,030'
Lime and Shale	3,030'	3,567'
Shale and Lime	3,567'	3,953'
Lime and Shale	3,953'	5,900'
Rotary Total Depth		5,900'

RECORDED

APR 19 1962

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
Conductor	16"	16"		40'	4yd. 6 sks. grout		
Surface	12-1/4"	8-5/8"	24#	1681'	35-45 Class H	650	6% gel 2% cc
Production	7-7/8"	4-1/2"	10.5#	5900'	Class H	325	2% CBL .7% halad
PERFORATION RECORD				Acid, Fracture, Shot, Cement Squeeze Record % KCL			
Shots Per Foot	Specify Footage of Each Interval Perforated			(Amount and Kind of Material Used)		Depth	
4 jspf (20)	5475-5480'						
4 jspf (16)	5482-5486'						
4 jspf (12)	5488-5491'						
4 jspf (20)	5505-5510'						
4 jspf (1)	5512'						
TUBING RECORD				Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Size 2-3/8"		Set At 5,514.31'	Packer at N/A				
Date of First Production Not available at this time		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	
	-0-	1631 MCFGD CAOF	-0-	N/A			
	Bbls	MCF	Bbls	CFPB			

METHOD OF COMPLETION

Production Interval

Disposition of gas: Vented Open Hole Perforation
 Sold Other (Specify)
 Used on Lease

SI-Awaiting Pipeline N/A Dually Completed Commingled

5,475-5,512'

TIGHT HOLE