

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

API NO. 15- 189-22344-0000 ORIGINAL

County Stevens
SE $\frac{1}{4}$ - SE $\frac{1}{4}$ - SE $\frac{1}{4}$ Sec. 3 Twp. 34S Rge. 37W E

Operator: License # 32119

Name: Northern Natural Gas

Address Route 1, Box 17

City/State/Zip Hugoton, KS 67951

Purchaser: _____

Operator Contact Person: Mike Livesay

Phone (316) 544-5013

Contractor: Name: McLean, H.L. Drilling

License: 09322

Wellsite Geologist: _____

Designate Type of Completion
 New Well Re-Entry Workover

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

If Workover: _____

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

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

4-26-00 8-10-00
Spud Date Date Reached TD Completion Date

320' Feet from S/N (circle one) Line of Section
300' 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 Rectifier Well # #4

Field Name Rectifier

Producing Formation _____

Elevation: Ground _____ KB _____

Total Depth 360' PBDT _____

Amount of Surface Pipe Set and Cemented at 160' 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 AH3-Dlg-2/26/09
(Data must be collected from the Reserve Pit)

Chloride content _____ ppm Fluid volume _____ bbls

Dewatering method used _____

Location of fluid disposal if hauled offsite: _____

Fluid disposal in Station Yard/Northern Natural Gas
Operator Name Northern Natural Gas

Lease Name Rectifier License No. 32119

SE $\frac{1}{4}$ Quarter Sec. 3 Twp. 34S S Rng. 37W E/W

County Stevens 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 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 Cindy Brown

Title Office Date 8-17-2000

Subscribed and sworn to before me this 19 2000

Notary Public Patsy Vance

Date Commission Expires May 30, 2001

K.C.C. OFFICE USE ONLY

Letter of Confidentiality Attached
 Wireline Log Received
 Geologist Report Received

Distribution

KCC SWD/Rep NCPA
 KGS Plug Other (Specify)

RECEIVED

Operator Name Northern Natural Gas Lease Name Rectifier Well # 14

Sec. 3 Twp. 34S Rge. 37W East West County Stevens

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 (Attach Additional Sheets.) Yes No

Samples Sent to Geological Survey Yes No

Cores Taken Yes No

Electric Log Run (Submit Copy.) Yes No

List All E.Logs Run:

Log Formation (Top), Depth and Datum Sample Name

CASING RECORD <input 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
	17 1/2"	10"		160'	Neat	146	Portland w/ water

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 Yes No

Date of First, Resumed Production, SMD or Inj. 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 (Specify)

Production Interval

ORIGINAL

#3



40153

Rt. 3 / 303 South Rd. I
Ulysses, Kansas 67880
(316) 356-2110

Box 142
Colby, Kansas 67701
(913) 462-7432

CUSTOMER'S ORDER NO. _____ DATE Aug 12 2000
SOLD TO McLain's
ADDRESS Amarillo Texas

DRIVER	CASH	CHARGE	ON ACCT.		
<u>205</u>		<input checked="" type="checkbox"/>		<u>H. P. Hart</u>	
QTY.	DESCRIPTION	PRICE	AMOUNT		
	YDS SACK CONCRETE				
	% CALCIUM CHLORIDE				
	OZ WRDA				
	OZ AIRE				
	<u>13,750 cement</u>				
<u>21</u>	MILE HAUL				
	LBS OR % ROCK				
	HOT WATER <u>750 gal</u>				
	SERV CHG ORD OF 1 TO 3 YDS				
	WAITING TIME				
		TAX			
	YDS				
	MI HAUL				
RECEIVED BY NO. 100	<u>Colby McLain</u>	TOTAL			

All claims and returned goods MUST be accompanied by this bill.

ALL PURCHASES MADE ON CREDIT DURING THE MONTH ARE DUE AND PAYABLE BY THE 10th OF THE FOLLOWING MONTH. ANY BALANCE NOT PAID BY THE 25th DAY OF THE FOLLOWING MONTH SHALL BE SUBJECT TO A FINANCE CHARGE COMPUTED AT A PERIODIC RATE OF 1 1/2% PER MONTH, OR A MINIMUM CHARGE OF 50c. THIS IS AN ANNUAL PERCENTAGE RATE OF 18%.

RECEIVED
STATE CORPORATION COMMISSION

AUG 21 2000

CONSERVATION DIVISION
Wichita, Kansas

ORIGINAL

OB NO. _____

FACILITY/LINE _____

CLIENT Northern Natural Gas

DRILLING CONTRACTOR McLean's C P Installation, Inc.

OBJECT Deep Well

DEPTH 360' DIA. 9 7/8" CASING 160' STATE Kansas COUNTY Stevens DATE _____

TYPE BACKFILL Loresco SG2 ANODE DESCRIPTION (1) set of (15) 4"X80" graphite anodes

REMARKS: Agreement #: 965005014 Work Offer #: 00404061

Drill Stem Reading: 14.5 amps

DEPTH FT.	GEOLOGICAL DRILLING LOG	ELECTRICAL LOG				ANODE NO.	ANODE DEPTH	FINAL PLACEMENT		
		VOLT	AMP	OHM				VOLT	AMP COKE	OHM
0'-5'	Top Soil	1.4			180'					
5'-15'	Dirt	1.5			190'					
15'-40'	Sandy Clay	1.8			200'					
40'-85'	Hard Sandy Clay	1.7			210'					
85'-155'	Very Sandy Clay	1.6			220'					
155'-360'	Sandy Clay	1.5			230'					
		1.7			240'					
		1.4			250'					
		1.6			260'					
		1.6			270'					
		1.7			280'					
		1.7			290'					
		1.5			300'					
		1.7			310'					
		1.8			320'					
		1.7			330'					
		1.9			340'					
		1.9			350'					
		1.8			360'					

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Wichita, Kansas