

15-159-20800

State Geological Survey

WICHITA BRANCH
KANSAS DRILLERS LOG

S. 11 T. 20 R. 8 ^W
Loc. 125' SNL & 50' WEL
County Rice

API No. 15 — 159 — 20,800
County Number

Operator
Northern Natural Gas Co.

Address
P. O. Box 88 Lyons, Kansas 67554

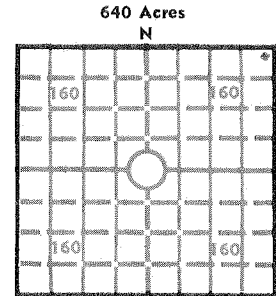
Well No. #11-12 Lease Name Goodfellow

Footage Location
125 feet from (N) (S) line 50 feet from (E) (W) line

Principal Contractor Sterling Drilling Geologist

Spud Date March 15, 1979 Total Depth 3616 P.B.T.D.

Date Completed March 30, 1979 Oil Purchaser



Locate well correctly
Elev.: Gr. 1704

DF _____ KB 1717'

CASING RECORD

Report of all strings set — surface, intermediate, production, etc.

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs/ft.	Setting depth	Type cement	Sacks	Type and percent additives
Surface	12 1/2"	8 5/8"	24	1078'	50-50 poz-mix	500	3% cc
Production	7 7/8"	5 1/2"	15.5	3662'	50-50 poz-mix	750	500 sks. w/4% Gel & 5# Gil w/.5% Halad 250 sks. w/2% Gel & 18% Salt w/.75% CFR

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			4	D.P. Jet	3396'-3440'
			4	D.P. Jet	3450'-3490'

TUBING RECORD

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
1800 Gal. 15% HCL	3396'-3440'
1600 Gal. 15% HCL	3450'-3490'

INITIAL PRODUCTION

Date of first production Gas Storage Well Producing method (flowing, pumping, gas lift, etc.)

RATE OF PRODUCTION PER 24 HOURS	Oil	Gas	Water	Gas-oil ratio
	bbis.	MCF	bbis.	CFPB

Disposition of gas (vented, used on lease or sold) Producing interval (s)

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

Operator

Northern Natural Gas Company

DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:

Gas Storage Well

Well No.

11-12

Lease Name

Goodfellow

S 11 T 20 R 8 E W

WELL LOG

Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM	NAME	DEPTH
			GRN	Surf.-3607
Hutchinson Salt	748	1005	Density	1084-3615
Chase Group	1180		IES	2800-3614
Council Grove Group	1525		BCS-Int.	1084-36-8
Tarkio Lime	2062		SCB/SS	Surf.-1084
Howard Lime	2293			
Heebner Shale	2685			
Lansing/K.C. Group	2863			
Basal Penn. SH. & Cong.	3201			
Simpson Group	3333			
Arbuckle Dolomite Group	3393			

USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.

Date Received

Gary Wilson

Signature

Director of Reservoir Engineering & Operations

Title

April 4, 1979

Date