

O: KCC WBH ERN
C: KGS PKL File
CBS AJM

15-189-20451

KANSAS DRILLERS LOG

API No. 15 — 189 — 20451
County Number

Operator

NORTHERN NATURAL GAS PRODUCING CO.

Address

P.O. Box 5444, Denver, CO 80217

Well No.

2

Lease Name

LOGAN #1-A UNIT (formerly FRED BROWNELL #1)

Footage Location

1980

feet from (N) line

1980

feet from (E) line

Principal Contractor

Zenith Drilling Co.

Geologist

Gary Chavez

Spud Date

5/28/79

Total Depth

6500

P.B.T.D.

3017

Date Completed

7/1/79

Purchaser GAS

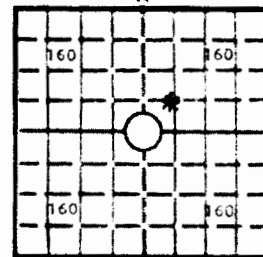
Northern Natural Gas Co.

S. 2 T. 32 R. 35 W

Loc. SW NE

County Stevens

640 Acres
N



Locate well correctly

Elev.: Gr. 2977

DF KB 2989

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 Casing	12 1/4"	8-5/8"	24#	1750'	CL. H. REG.	500	12% GEL 2% CaCl ₂
					CL. H. REG.	150	3% CaCl ₂
Production Casing	7-7/8"	5 1/2"	14#	3079'	HOWCO LITE	500	1/4#SK/FLOCELE
					CL. H. REG	150	18% SALT + 3/4% CFR-2

LINER RECORD

Top, ft.	Bottom, ft.	Sacks cement

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval
			3	Welex	2950 - 2953
			3	Welex	2955 - 2962

TUBING RECORD

Size	Setting depth	Packer set at
2-3/8"	2980	

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
20,000 GALS. WTR + 40,000 #20/40 SD + 12 1/2#/1000 GALS WG-6 +	2950 - 2962
1 GAL/1000 GALS HOWCO SUDS + ADDITIVES	

INITIAL PRODUCTION

Date of first production	Producing method (flowing, pumping, gas lift, etc.) Pumping
RATE OF PRODUCTION PER 24 HOURS	Oil --- bbls. Gas 1 PT.O.F. 520 MCF Water --- bbls. Gas-oil ratio --- CFPB
Disposition of gas (vented, used on lease or sold) Shut in awaiting connection	Producing interval(s) 2950 - 2962

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 PRODUCING CO.

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

Well No.

2

Lease Name

Logan 1

GAS

S 2 T 32 R 35 E 1 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

Sand & Red Bed

0

840

WINFIELD

2685

Red Bed

840

1740

COUNCIL GROVE

2914

Anhydrite

1740

2445

ADMIRE

3178

Anhydrite & Lime

2445

3250

WABAUNSEE

3305

Dolomite

3250

3460

SHAWNEE

3610

Lime & Shale

3460

3875

TORONTO

4154

Dolomite & Lime

3875

4390

LANSING

4236

Dolomite

4390

4540

KANSAS CITY

4484

Lime & Shale

4540

6047

MARMATON

4932

Sand & Shale

6047

6069

CHEROKEE

5140

Lime & Shale

6069

6500

MORROW

5547

CHESTER

5815

ST. GENEVIEVE

6078

ST. LOUIS

6195

SPERGEN

6407

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

Date Received

C. J. Park

Signature

Producing Accounting Supervisor

Title

SEP 17 1970

Date

WELL LOG

COMPANY Mobil Oil Corporation

SEC. 2-32S-35W

FARM Fred Brownell

NO. 1

LOC. NE/4

TOTAL DEPTH 6500

COUNTY Stevens

COMM. 5-28-79

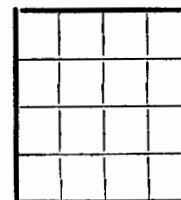
COMP. 6-14-79

CONTRACTOR Zenith Drilling Corporation, Inc.

CASING

1750' of 8-5/8", 24# casing, cemented with 900 sacks cement

3085' of 5-1/2" casing, cemented with 650 sacks cement



ELEVATION

PRODUCTION

FIGURES INDICATE BOTTOM OF FORMATIONS

840	Sand & Red Bed
1740	Red Bed
2445	Anhydrite
3250	Anhydrite & Lime
3460	Dolomite
3875	Lime & Shale
4390	Dolomite & Lime
4540	Dolomite
6047	Lime & Shale
6069	Sand & Shale
6500	Lime & Shale

RECEIVED
STATE GEOLOGICAL SURVEY
JUN 19 1979
WICHITA, KANSAS

State of Kansas }
County of Sedgwick } SS