KANSAS

# WELL COMPLETION REPORT AND RILLER'S LOG

REVISED Dup

S. 14 T. 32 R. 35 E/W

Loc. C W/2

County STEVENS

API No. 15 — 189 (County) — 20,489 (Number)

Operator: Northern Natural Gas Producing Co.

Address: Attn: A. J. McCredie, Box 5444, Denver, Col. 80217

Well No.: 2 Lease Name: Downing No. 1B

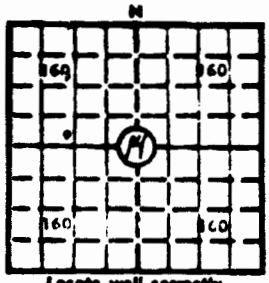
Footage Location: 2500 feet from (N) (S) line X 1250 feet from (E) (W) line X

Principal Contractor: Wakefield Drilling Co. Geologist: P.B. Nichols

| Spud Date | Date Completed | Total Depth | P.B.T.D. |
|---|---|---|---|
| 1-25-80 | 2-26-80 | 2900 | 2885 |

Directional Deviation: Oil/Gas Purchaser: Northern Natural Gas

640 Acres N



Locate well correctly

Elev.: Gr. 2989

DF KB 2996

## 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 | 12¼" | 8-5/8" | 24# | 603' | Class H Reg<br>Class H Reg | 150<br>150 | 12% gel + 3%$CaCl_2$<br>3% $CaCl_2$ |
| Production Casing | 7-7/8" | 5½" | 14# | 2900' | HOWCO LITE<br>Class H Reg | 400 | ¼#/sk Flocele<br>18% salt + .75% CFR2 |
| | | | | | | | |
| | | | | | | | |

## LINER RECORD

| Top, ft. | Bottom, ft. | Sacks cement |
|---|---|---|
| | | |

## TUBING RECORD

| Size | Setting depth | Packer set at |
|---|---|---|
| | | |

## PERFORATION RECORD

| Shots per ft. | Size & type | Depth interval |
|---|---|---|
| 2 | | 2620-2640 |
| 2 | | 2656-2670 |
| 2 | | 2672-2676 |
| 2 | | 2678-2694 |
| 2 | | 2698-2708 |
| 2 | | 2713-2728 |
| | | 2748-2756 |
| | | 2759-2771 2806-2813 |

## ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

| Amount and kind of material used | Depth interval treated |
|---|---|
| 1050 gals. of MOD 2000 acid + additives + 25 ball sealers | 2806-2813 |
| 13,500 gals MOD 202 + additives + 200 ball sealers | 2629-2813 |
| 194,000 gals fresh water containing 582,000 # of 20/40 sand + additives + 100 ball sealers | |

## INITIAL PRODUCTION

| Date of first production | Producing method (flowing, pumping, gas lift, etc.) |
|---|---|
| 3-14-1980 | Flowing |

| RATE OF PRODUCTION PER 24 HOURS | Oil | Gas | Water | Gas-oil ratio |
|---|---|---|---|---|
| | bbls. | 1 PT OFP 4968 MCF | bbls. | CFPB |

Disposition of gas (vented, used on lease or sold): Sold

Producing interval(s): 2629-2813'

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, 245 No. Water, Wichita, Kansas 67202. 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 | DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.: |
|---|---|
| Northern Natural Gas Producing Co. | |
| **Well No.** 2 — **Lease Name** Downing No. 1B | Gas |
| S 14 T 32S R 35 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 |
|---|---|---|
| Sand, Clay & Blue Shale | 0 | 555 |
| Red Bed | 555 | 930 |
| Red Bed & Gyp | 930 | 1265 |
| Sand | 1265 | 1450 |
| Shale | 1450 | 1460 |
| Red Bed & Gyp | 1460 | 1762 |
| Anhydrite | 1762 | 1785 |
| Shale & Shells | 1785 | 1835 |
| Red Bed & Shale | 1835 | 2165 |
| Shale & Lime | 2165 | 2385 |
| Shale, Shells | 2385 | 2565 |
| Shale & Lime | 2565 | 2705 |
| Lime | 2705 | 2895 |
| Shale, Shells | 2895 | 2900 |
| TOTAL DEPTH 2900 | | |

| NAME | DEPTH |
|---|---|
| Chase-Herrington | 2629 |
| Upper Krider | 2656 |
| Lower Krider | 2698 |
| Winfield | 2738 |
| Upper Ft. Riley | 2806 |
| Lower Ft. Riley | 2856 |

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

Date Received

C. J. PARK
Signature

Producing Accounting Supervisor
Title

3-21-80
Date

15-189-20489

Dell

KANSAS DRILLER'S LOG

LEASE: DOWNING No. 1 - B UNIT #2
OWNER: MOBIL OIL CORPORATION
CONT: EARL F. WAKEFIELD, INC.
SPUD: 1-25-80
COMP: 1-30-80

LOCATION: SECTION 14-32S-35W
STEVENS COUNTY, KANSAS
CASING: 8 5/8" SET @ 603'
5 1/2" SET @ 2900'

| | |
|---|---|
| Sand, Clay, & Blue Shale | 555 |
| Red Bed | 930 |
| Red Bed & Gyp | 1265 |
| Sand | 1450 |
| Shale | 1460 |
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| R.T.D. | 2900 |

STATE OF KANSAS )
) ss.
COUNTY OF SEDGWICK )