



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

MAR 12 1980

Oil and Gas Division

WELL RECORD

Quadrangle Westernport, WV-Md.

Permit No. Min., -22

OIL & GAS DIVISION
 Rotary EXL DRILLING
 Cable _____ Gas X
 Recycling _____ Comb _____
 Water Flood _____ Storage _____
 Disposal _____ (Kind)

Company Columbia Gas Transmission Corp.
 Address P.O. Box 1273, Chas., WV 25314
 Farm Mastellar Coal Co. Acre. 4957
 Location (waters) Hoffman Run
 Well No. 20616 Elev. 1919.04
 District New Creek County Mineral

| Casing and Tubing | Used in Drilling | Let in Well | Cement fill up Cu. Ft. (Sks.) |
|-------------------|------------------|-------------|-------------------------------|
| Size 20-16 | | | |
| Cond. 20" | 65' | 65' | 75 sacks |
| 13-10" 13 3/8 | 431' | 431' | 250 sacks |
| 9 5/8 | 2,544' | 2,544' | 650 sacks |
| 8 5/8 | | | |
| 7 | 8,534' | 8,534' | 300 sacks |
| 5 1/2 | | | |
| 4 1/2 | | | |
| 3 | | | |
| 2 3/8" | | 8,580' | Not cemented |
| Liners Used 5 " | | 105' | Not cemented |

The surface of tract is owned in fee by _____
Mastellar Coal Co.

Address R.F.D. 4, Keyser, WV 26726

Mineral rights are owned by Same as above

Address _____

Drilling Commenced May 3, 1979

Drilling Completed July 10, 1979

Initial open flow 21,920 M cu. ft. _____ bbls.

Final production 88,148 M cu. ft. per day _____ bbls.

Well open 3 hrs. before test 3567 RP.

Well treatment details:

Attach copy of cementing record.

Treated with 4,000 gallons Mud Acid by Dowell on Oct. 16, 1979. Treating pressure was 2500-2900 psig.

Coal was encountered at None Feet _____ Inches _____

Fresh water _____ Feet _____ Salt Water _____ Feet _____

Producing Sand Oriskany Depth 8,559' - 8,610'

| Formation | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|-----------------------|-------------|--------------|----------|-------------|-------------------|------------|
| Sandstone | Brown | | 0' | 550' | | |
| Siltstone | Red | | 550' | 750' | | |
| Sandstone | Gray | | 750' | 870' | | |
| Siltstone & Sh. | Gray | | 870' | 1,000' | | Water 890' |
| Sandstone | Gray | | 1,000' | 1,080' | | |
| Siltstone & Sh. | Gray | | 1,080' | 1,360' | | |
| Sandstone & Sh. | Gray & Brn | | 1,360' | 1,590' | | |
| Siltstone & Sh. | Gray | | 1,590' | 2,300' | | |
| Shale & Chert | | | 2,300' | 2,320' | | |
| Sandstone & Sh. | Gray | | 2,320' | 4,210' | | |
| Calcite, Gypsum & Sh. | | | 4,210' | 4,270' | | |
| Sandstone & Sh. | Dark Gray | | 4,270' | 4,800' | | |
| Siltstone & Sh. | Gray | | 4,800' | 5,100' | | |
| S.S. & Siltstone, | Dr. Gray | | 5,100' | 5,600' | | |
| S.S., Sh. & Siltstone | | | 5,600' | 6,580' | | |
| Siltstone & Sh. | Gray | | 6,580' | 6,860' | | |
| Shale & L.S. | Brn. & Gray | | 6,860' | 6,879' | | |
| Limestone - Tully | | | 6,879' | 6,882' | | |
| Shale | | | 6,882' | 7,232' | | |
| Siltstone | | | 7,232' | 7,415' | | |
| Shale & Silty Shale | | | 7,415' | 8,317' | | |
| Limestone - Purcell | | | 8,317' | 8,381' | | |

(over)

* Indicates Electric Log tops in the remarks section.

MAR 17 1980

| Formation | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | Remarks |
|-------------------------|-------|--------------|----------|-------------|-------------------|---------|
| Shale Black - Marcellus | | | 8,381' | 8,446' | | |
| Shale - Needmore | | | 8,446' | 8,559' | | |
| Sandstone - Oriskany | | | 8,559' | 8,610' | Gas @ 8,559' | |

Date February 27, 1980

APPROVED

Reuben J. Leahan

Owner

By

Manager, Drilling

(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

JAN 8 1979

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE January 2, 1979

Surface Owner Mastellar Coal Company

Company Columbia Gas Transmission Corporation

Address R.F.D. #4, Keyser, W. Va.

Address P. O. Box 1273, Charleston, W. Va.

Mineral Owner Same as above

Farm Mastellar Coal Company Acres 4957

Address _____

Location (waters) Hoffman Run

Coal Owner Same as above

Well No. 20616 Elevation 1919.04

Address _____

District New Creek County Mineral

Coal Operator Unoperated

Quadrangle Westernport

Address _____

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 9-20-79.

INSPECTOR
TO BE NOTIFIED Robert Stewart

ADDRESS P.O. Box 345, Jane Lew, W. Va.

PHONE 884-7782

Robert Stewart
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated July 29, 1971 by Mastellar Coal Co. made to United Fuel Gas Co. and recorded on the _____ day of _____ 19____ in Mineral County, Book 178 Page 95

NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE
 OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

W. VA. OIL & GAS CONSERVATION COMMISSION
1613 WASHINGTON STREET, EAST
CHARLESTON WEST VIRGINIA 25311

Address
of
Well Operator

Very truly yours,
(Sign Name) [Signature]
Well Operator
Director, Exploration & Development
P. O. Box 1273
Street
Charleston
City or Town
West Virginia 25325
State

*SECTION 3 . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

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