

COAL OWNED BY _____
 Reopened _____
 NEW LOCATION...
 DRILL DEEPER...
 ABANDONMENT...

COMPANY COLUMBIA GAS TRANSMISSION 175
 ADDRESS P.O. Box 1273 CHARLESTON, WV, 25314
 FARM Valentine Foland
 TRACT _____ ACRES 46 LEASE NO. 26468
 WELL (FARM) No. 1 SERIAL No. 3519
 ELEVATION (SPIRIT LEVEL) 1321 67 681
 QUADRANGLE LITTLETON 15 WILEYVILLE NW,
 COUNTY Wetzel DISTRICT Proctor 7
 ENGINEER John A. Loudon
 ENGINEER'S REGISTRATION No. 12710
 FILE No. _____ DRAWING No. Y-13-882
 DATE AUG 19, 1953 SCALE 1"=800'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP

FILE No. Wet-100-REDRILLED

JUL 21 1986

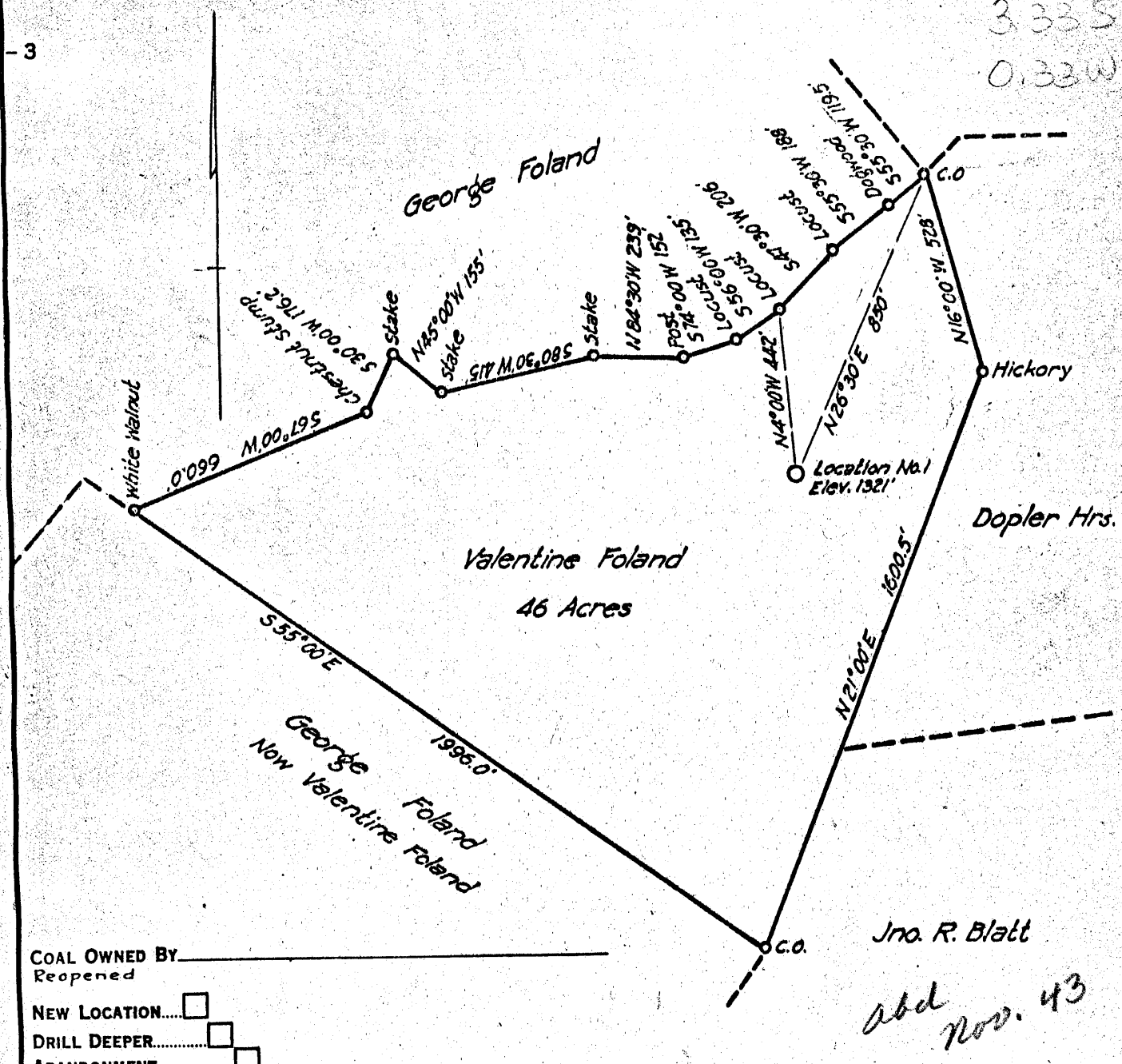
+ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS, SCALE 1 TO 62,500. LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.

- DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

7M

LATITUDE 39 0 45

LONGITUDE 80 0 40



COAL OWNED BY _____
 Reopened _____

NEW LOCATION.....

DRILL DEEPER.....

ABANDONMENT.....

COMPANY The Manufacturers Light & Heat

ADDRESS 800 Union Trust Bldg. Pgh. Pa.

FARM Valentine Foland

TRACT _____ ACRES 46 LEASE No. 26468

WELL (FARM) No. 1 SERIAL No. 3519

ELEVATION (SPIRIT LEVEL) 1321'

QUADRANGLE LITTLETON

COUNTY Wetzel DISTRICT Proctor

ENGINEER John A. Loudon

ENGINEER'S REGISTRATION No. 12710

FILE No. _____ DRAWING No. Y-13-882

DATE AUG. 19, 1953 SCALE 1"=800'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP

FILE No. Wet-100-Redrill

+ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS; SCALE 1 TO 62,500. LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN.

- DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.



WR-35

RECEIVED
DEC 18 1986

State of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Date DEC 16 1986
Operator's Well No. L-3519
Farm V. Foland
API No. 47 - 103 - 0100D

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas X / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production ___ / Underground Storage X / Deep ___ / Shallow X /)

LOCATION: Elevation: 1346' Watershed Middle Fork of Lynn Camp Run
District: Proctor County Wetzel Quadrangle Wileyville

COMPANY Columbia Gas Transmission Corp.

ADDRESS Charleston, W. Va.

DESIGNATED AGENT Robert C. Weidner

ADDRESS Charleston, W. Va.

SURFACE OWNER Anna C. Foland

ADDRESS New Martinsville, W. Va.

MINERAL RIGHTS OWNER Anna C. Foland

ADDRESS New Martinsville, W. Va.

OIL AND GAS INSPECTOR FOR THIS WORK Mike

Underwood ADDRESS Salem, W. Va.

PERMIT ISSUED July 15, 1986

DRILLING COMMENCED August 14, 1986

DRILLING COMPLETED August 26, 1986

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON _____

Casing Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cord.			
13-3/8	306'	306'	None
10-3/4	1354'	1354'	200 sks
8 5/8	1880	1880	415 sks
7	2062	2062	
5 1/2			
4 1/2	2228	2228	250 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Maxton Depth 2130 feet

Depth of completed well 2195 feet Rotar X / Cable Tools _____

Water strata depth: Fresh 180 & 280 feet; Sal 1147 feet

Coal seam depths: 1140 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Maxton Salt Pay zone depth 2130' feet

Gas: Initial open flow 513 Mcf/d Oil: Initial open flow None Ebl/d

Final open flow 400 Mcf/d Final open flow None Ebl/d

Time of open flow between initial and final tests 2 hours

Static rock pressure 652 psig (surface measurement) after 24 hours shut in

(If applicable due to multiple completion--)

Second producing formation None Pay zone depth _____ feet

Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Ebl/d

Final open flow _____ Mcf/d Oil: Final open flow _____ Ebl/d

Time of open flow between initial and final tests _____ hours

Static rock pressure _____ psig (surface measurement) after _____ hours shut in

DEC 23 1986
(Continue on reverse)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Drilled 6 1/4" hole to 2226'. Ran 4 1/2" K-55, 11.6# Casing to T.D. with Float Shoe on bottom and Latch Down Baffle and Plug at 2200'. There is 5 feet of cement on top of plug. P.B.T.D. = 2195'. Perforated Maxton Sand from 2133' to 2144', 4 Shots/ft. Did not acididize, did not frac. *Salt*

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
			180'		Water, 2 bailers per hour*
			280'		Water, 8 bailers per hour*
Pittsburgh Coal		<u>1/</u>	1133'	1140'	
			1147'		Water, 1 bailer per hour*
			1232'	1260'	Water in Sand*
Big Dunkard			1600	1673	
Freeport Coal			1700	1706	
Gas Sand			1723	1764	
First Salt Sand			1877	1893	
Second Salt Sand			1953	1973	
Third Salt Sand			2039	2065	
Ravencliff			2085	2105	
Maxton			2130	2145	

Salt

*From original 1935 well record.

1/ All geologic formations were picked from the Gamma Ray log ran in 1954.

(Attach separate sheets as necessary)

Columbia Gas Transmission Corporation

Well Operator

By: *R. Decker*

Date: DEC 16 1980

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including minerals, encountered in the drilling of a well."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Littleton

WELL RECORD

Storage

Permit No. WET-100-Redrill

Oil or Gas Well Gas
(KIND)

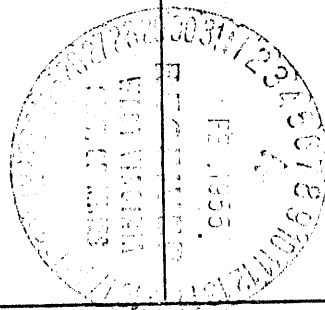
Company THE MANUFACTURERS LIGHT AND HEAT COMPANY
Address 800 Union Trust Building, Pgh., Penna.
Farm V. Foland Acres 46
Location (waters) _____
Well No. 3519 Elev. 1321
District Proctor County Wetzel
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced March 17, 1953
Drilling completed August 31, 1954
Date Shot _____ From _____ To _____
With _____
Open Flow 0/10ths Water in 3/8 Inch
_____ /10ths Merc. in _____ Inch
Volume 0.000 Cu. Ft.
Rock Pressure 0 lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet _____ feet
Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
18		306'2"	
10		1354'6"	Size of
8 1/4		1880'0"	
7		2077'1"	Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Top of Maxon Sand			2133		Schlumberger	Measurement	
Bottom of Maxon Sand			2148				
2 lead plugs set			2148				
Total Depth			2148				
					Cemented 10" casing with 200 bags cement no return of cement.		200 bags cement
					Cemented between 8" and 7"--8" & 10" w 415 bags cement good return.		
					Cemented caves with 2336 bags of cement		



Proctor District, Wetzel County, W. Va.
 By The Manufacturers Light & Heat Co., 800 Union Trust Bldg.,
 Pittsburgh, Pa.
 On 50 acres, surface owned by Valentine Foland, New Dale, W. Va.,
 and mineral rights by ML&H Co., Pittsburgh, Pa.
 Drilled under permit Wet-100, issued Sept. 17, 1935.
 Elevation, 1321'.
 13" conductor, 16'; 13" casing, 302' 2"; 10" casing, 1460' 7";
 8 1/2" casing, 1879' 8"; 6-5/8" casing, 2158' 11"; 4" tubing,
 2174' 10".
 Anchor packer, 4 x 6-5/8, set at 2143' 0".
 Coal was encountered at 1140-1147'.
 Completion reported to Dept. of Mines Jan. 23, 1936.
 Fresh water at 1147 and 1192'; also 180' and 280'.

	Top.	Bottom.
Clay	0	13
Slate (2 bailers water per hour at 180')	13	250
Gritty lime	250	270
Slate (8 bailers water per hour at 280')	270	310
Red rock	310	325
Slate	325	595
Red rock	595	607
Slate and lime	607	1140
✓ Pittsburgh Coal	1140	1147
Slate and lime (water at 1147' - one bailers per hour)	1147	1180
Red rock	1180	1190
Slate, lime, sand (water, 1192'; water in sand, 1232-1260')	1190	1260
Red rock	1260	1270
Lime	1270	1285
Red rock	1285	1300
Slate and lime	1300	1510
✓ Little Dunkard Sand	1510	1540
Gritty lime	1540	1560
Slate	1560	1636
✓ Big Dunkard Sand	1636	1667
Slate and sand	1667	1867
✓ Salt Sand	1867	1912
Slate and lime	1912	2020
Slate and shells	2020	2135
<i>Salt</i> ✓ Marston Sand (gas, 2144')	2135	
Total depth		2153

RECEIVED
JUN 23 1986



1) Date: May 28, 1986
2) Operator's Well No. L-3519
3) API Well No. 47-103-0100-D
State County Permit 103-0100

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, OIL AND GAS DIVISION
DEPT. OF ENERGY APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas X
B (If "Gas", Production / Underground storage X / Deep / Shallow X /)
- 5) LOCATION: Elevation: 1346' Watershed: Middle Fork of Lynn Camp Run
District: Proctor 1757 County: Wetzel Quadrangle: Wileyville, W. Va. 680
- 6) WELL OPERATOR Columbia Gas Trans CODE: 10450 7) DESIGNATED AGENT R. C. Weidner
Address P. O. Box 1273 Address Columbia Gas Trans. Corp.
Charleston, W. Va. 25314 Charleston, W. Va. 25314
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED: Name Donald Ellis Mike Underwood
Address 2604 Crabapple Lane
Fairmont, W. Va. 26554
- 9) DRILLING CONTRACTOR: Name Pool Well Servicing Company
Address P. O. Box 28
Ripley, W. Va. 25271
- 10) PROPOSED WELL WORK: Drill / Drill deeper X / Redrill / Stimulate
Plug off old formation / Perforate new formation
Other physical change in well (specify) Set casing through formation, cement & perforate
- 11) GEOLOGICAL TARGET FORMATION, Maxton 325
- 12) Estimated depth of completed well, 2250 feet
- 13) Approximate trata depths: Fresh, 180' & 280' feet; salt, 1147' & 1232' feet.
- 14) Approximate coal seam depths: 1140' - 1147' Is coal being mined in the area? Yes / No X

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	Size	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
		Grade	Weight per ft.	New	Used	For drilling	Left in well			
Conductor *	13 3/8"	N/A	48#	X		306	306	None	Kinds	
Fresh water							<u>180' & 280'</u>			
Coal							<u>1140'</u>		Sizes	
Intermediate *	10 3/4	N/A	40.5	X		1354'	1354'	200		
Production *	8 5/8	N/A	24	X		1880'	1880'	215	Depths set	
Tubing *	7	N/A	20	X		2062'	2062'	200		
Lin.	4 1/2	K-55	11.6	X		2250'	2250'	250	Perforations:	
									Top	Bottom
									2132	2143

*Now Existing

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-103-0100-D Date July 15 1986

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
Permit expires July 15, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>ASB</u>	Agent: <u>✓</u>	Plat: <u>AS</u>	Casing: <u>AS</u>	Fee: <u>15307684</u> <u>129</u>	WPCP: <u>AS</u>	S&F: <u>AS</u>	Other: <u> </u>
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NOTE: Keep one copy of this permit posted at the drilling location.

John H. Johnston
Director, Division of Oil and Gas
Margaret J. Kasse File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.