FORM OG 1

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS DIVISION

NOTICE OF PROPOSED LOCATION OF OIL AND GAS WELL

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

COAL OPERATOR OR COAL OWNER	UNITED FUEL GAS CO. — NAME OF WELL OPERATOR
ADDRESS	% G. H. Moore P.O. Box 1273, Charleston 25, W. Va. — COMPLETE ADDRESS
COAL OPERATOR OR COAL OWNER	September 3, 19 48 — PROPOSED LOCATION
ADDRESS	Union District
Laura A. Childers et al — OWNER OF MINERAL RIGHTS	Wayne County
Route #1 Lavalette, W. Va. — ADDRESS	Well No. 6417 38° 20' 82° 20'
	Laura A. Childers et al Farm

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 May 10, 1945, made by Laura A. Childers et al, to UNITED FUEL GAS CO., and recorded on the 31st day of July 1945, in the office of the County Clerk for said County in Book 33, page 411.

The enclosed plat was prepared by a competent engineer and shows the proposed location of a well to be drilled for oil and gas by the undersigned well operator on the farm and in the Magisterial District and County above named, determined by survey and courses and distances from two permanent points, or land marks.

The undersigned well operator is informed and believes there are no coal operators operating beds of coal beneath said farm or tract of land on which said well is located, or within 500 feet of the boundaries of the same, who have mapped their workings and filed their maps as required by law, excepting the coal operators or coal owners (if any) above named as addressees.

The above named coal operators or coal owners (if any) are notified that any objections they may desire to make to such proposed location, or which they are required to make by Section 3 of said Code, if the drilling of a well at said proposed location will cause a dangerous condition in or about their respective coal mines, must be received by, or filed with the Department of Mines within ten* days from the receipt of a copy of this notice and accompanying plat by said Department. Said coal operators are further notified that forms for use in making such objections will be furnished to them by the Department of Mines promptly on request and that all such objections must set forth as definitely as is reasonably possible the ground or grounds on which such objections are based and indicate the direction and distance the proposed location should be moved to overcome same.

(The next paragraph is to be completed only in Department's copy.)

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 same day___ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours,

UNITED FUEL GAS CO.
WELL OPERATOR

Address of Well Operator
% G. H. Moore
STREET
P.O. Box 1273, Charleston 25
CITY OR TOWN
West Virginia.
STATE

WEST VIRGINIA DEPARTMENT OF MINES 1948

11/17/2023

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

JARRETT PRINTING COMPANY, CHARLESTON, W. VA.

WAY-609
PERMIT NUMBER

609

September 14, 1948

United Fuel Gas Company
c/o G. H. Moore
Box 1273
Charleston, West Virginia

Gentlemen:

Enclosed is permit WAY-609 to drill Well No. 6417 on the Laura A. Childers et al Farm, Union District, Wayne County.

Very truly yours,

Administrative Assistant
OIL AND GAS DIVISION

CHH:K
Encl-2

CC: Inspector D. E. Lawson

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime Shells			2085	2100			
Slate			2100	2102			
Shells			2102	2110			
Slate			2110	2185			
Coffee Shale			2185	2198			
Berea Sand			2198	2216			
Slate			2216	2270			
Black Slate			2270	2355			
White Slate			2355	2700	Gas	2700'	Show
Gray Shale			2700	2790	Gas	2790'	Show
Brown Shale			2790	3180	Gas	2850'	Small Show
White Slate			3180	3190			
Total Depth			3190'				

Not enough gas to test before shot.
Shot 12-29-48 with 3266-2/3# Gel.
2700-3190'.
Test after shot 28/10 W 2" 223 M.

OPEN FLOW - 223 M - Shale

48 Hr. R.P. 365#.

Way-
609

Shut in 12-30=48 in 5-3/16" Casing.

11/17/2023

Date January 21, 19 49

APPROVED United Fuel Gas Co., Owne

By G. H. Moore

Chief Engineer (Title)

R.

OG-10

Guyandot

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. WAY-609

Oil or Gas Well Gas (KIND)

Company United Fuel Gas Co.
Address P. O. Box 1273, Charleston 25, W. Va.
Farm Laura A. Childers, etal Acres 105
Location (waters) Booten Br. of Millers Fork
Well No. 6417 Elev. 591.62
District Union County Wayne
The surface of tract is owned in fee by
Address
Mineral rights are owned by Laura A. Childers, Agt.
Route #1, Address Lavalette, W. Va.
Drilling commenced 10-7-48
Drilling completed 12-28-48
Date Shot 12-29-48 From 2700 To 3190
With 3266-2/3 Gel.
Open Flow 28 /10ths Water in 2" Inch
/10ths Merc. in Inch
Volume 223 M Cu. Ft.
Rock Pressure 365 lbs. 48 hrs.
Oil bbls., 1st 24 hrs.
Fresh water feet feet
Salt water 1040,1055 feet feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
13			
10	20	20	Size of
8¼	205'	205'	
6⅝	1424	1424	Depth set
5 3/16	2018	2018	
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
Surface			0	20			
Fire Clay			20	30			
White Slate			30	50			
Sand			50	60			
Black Slate			60	70			
Sand			70	100			
Slate			100	120			
Sand			120	155			
Slate			155	230			
Sand			230	240			
Blue Slate			240	260			
White Sand			260	337			
White Slate			337	460			
Sand			460	531			
Blue Slate			531	630			
Sand			630	662			
Slate			662	666			
Sand			666	695			
Slate			695	725			
Sand			725	735			
Slate			735	772			
Sand			772	800			
Slate			800	955	Water	1040'	Salt.
Salt Sand			955	1130	Water	1055'	
Black Lime			1130	1156			
Sand			1156	1255			
Slate			1255	1270			
Red Rock			1270	1276			
Slate			1276	1355			
Little Lime			1355	1379			
Big Lime			1379	1565			
Keener Sand			1565	1585			
Slate			1585	1635			
Injun Sand			1635	1666			
Shells			1666	1674			
White Slate			1674	2016			
Lime Shells			2016	2019			
White Slate			2019	2085			

JAN 1949 WEST VIRGINIA DEPARTMENT OF MINES

11/17/2023

(Over)

U 97-P C & D

UNITED FUEL GAS CO.
COMPANY

RIAL WELL NO. 6417 LEASE NO. 44755 MAP SQUARE 22-53

RECORD OF WELL NO. 6417 on the
aura A. Childers farm of 105 Acres
in Union District
Wayne County
State of: West Virginia
Field: Branchland
Rig Commenced 10/5 1948
Rig Completed 10/7 1948
Drilling Commenced 10/7 1948
Drilling Completed 12/28 1948
Drilling to cost $2.50 / $2.75 per foot
Contractor is: E. L. Lusher
Address: 334 Main Street, Gerald, W. Va.
Driller's Name Rene Nichols
E. L. Lusher

Elevation: 591.62

CASING AND TUBING

SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL
10"	32.75#	20-3	20-3
8-1/4"	24#	205-7	205-7
6-5/8"	20#	1435-0	None
5-3/16"	14#	2036-7	2036-7

SHUT IN
Date 12/30/48
5-3/16in. Tubing Casing
Size of Packer 5-3/16"X6-5/8"
Kind of Packer Bottom Hole
1st. Perf. Set ____ from ____
2nd Perf. Set ____ from ____

TEST BEFORE SHOT
0 /10 of Water in 1 inch
/10 of Merc. in ____ inch
Volume 0 Cu. ft.

TEST AFTER SHOT
28 /10 of Water in 2 inch
/10 of Merc. in ____ inch
Volume 223 MCF Cu. ft.
48 Hours After Shot
Rock Pressure 365#
Date Shot 12/29/48
Size of Torpedo 3266 2/3#
Oil Flowed ____ bbls. 1st 24 hrs.
Oil Pumped ____ bbls. 1st 24 hrs.
Well abandoned and
Plugged ____ 194

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface	0	20	20	
Fire Clay	20	30	10	
White Slate	30	50	20	
Sand	50	60	10	
Black Slate	60	70	10	
Sand	70	100	30	
Slate	100	120	20	
Sand	120	155	35	
Slate	155	230	75	
Sand	230	240	10	Water at 1040'
Blue Slate	240	260	20	Water at 1055'
W. Sand	260	275	15	
Slate	275	330	55	Show of gas at 2700'
Sand	330	337	7	Show of gas at 2790'
White Slate	337	460	123	Small show of gas at 2850'
Sand	460	531	71	
Black Slate	531	630	99	

APPROVED
H. E. G. [illegible]

11/17/2023

FORM U 97-1-P C 9 D

SERIAL WELL NO. 6417 LEASE NO. 44755 MAP SQUARE 22-53

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sand	630	662	32	
Slate	662	666	4	
Sand	666	695	29	
Slate	695	725	30	
Sand	725	735	10	
Slate	735	772	37	
Sand	772	800	28	
Slate	800	955	155	
Salt Sand	955	1130	175	
Black Lime	1130	1156	26	
Sand	1156	1255	99	
Slate	1255	1270	15	
Red Rock	1270	1276	6	
Slate	1276	1355	79	
Little Lime	1355	1379	24	
Big Lime	1379	1565	186	
Kener Sand	1565	1585	20	
Slate	1585	1635	50	
Injun Sand	1635	1666	31	
Shell	1666	1674	8	
White Slate	1674	2016	342	
Lime Shell	2016	2019	3	
White Slate	2019	2085	66	
Lime Shell	2085	2100	15	
Slate	2100	2102	2	
Shell	2102	2110	8	
Slate	2110	2185	75	
Coffee Shale	2185	2198	13	
Berea Sand	2198	2216	18	
Shale	2216	2270	54	
Black Slate	2270	2355	85	
White Slate	2355	2700	345	
Gray Shale	2700	2790	90	
Brown Shale	2790	3180	390	
White Slate	3180	3190	10	
Total Depth	3190			

Devonian Shale - 2216' to 3190'
Total Shale - 974'
no sand logged
no electric log

Mary S. Friend
Geologist

11/17/2023

FORM U 127-8 C 6 D

December 29, 19 48

Mr. J. R. Hussey, Div. Supt.

Well No. 6417 (Serial No.) on Laura A. Childers, et al Farm

Was shot this date with 3266 2/3# Du Pont Geltain quarts

Number of Shells

Length of Shells 4½"X10½

Top of Shot 2700'

Bottom of Shot 3190'

Top of Gray Shale (Name of Sand) Sand 2700' feet

Bottom of White Slate (Name of Sand) Sand 3190' feet

Total Depth of Well ~~Rk~~ 3190'

Results: before shot 0/10 W-1"
after shot 28/10 W-2" (223 MCF)

Remarks:

Signed H. E. Gibson District Supt.

NOTE-When a well is shot this form must be filled out and sent to the General Superintendent.

11/17/2023

FERC-121

Form Approved
OMB No. 038-R0381

U.S. DEPARTMENT OF ENERGY
Federal Energy Regulatory Commission
Washington, D.C. 20426

APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA)

(Sections 102, 103, 107 and 108)

PLEASE READ BEFORE COMPLETING THIS FORM:

General Instructions:

Complete this form if you are applying for price classification under sections 102, 103, 107 or 108 of the NGPA. A separate application is required for each well. If any reservoir qualifies for a category which differs from the category applicable to the producing well, separate applications must be made for the producing well and the reservoir. Complete each appropriate item on the reverse side of this page. The code numbers used in items 4.0 and 6.0 can be obtained from the Buyer/Seller Code Book. If there is more than one purchaser or contract, identify the additional information in the space below. Enter any additional remarks in the space below.

Submit the completed application to the appropriate Jurisdictional Agency as listed in title 18 of the CFR, part 274.501. If there are any questions, call (202) 275-4539.

Specific Instructions for Item 2.0, Type of Determination:

Section of NGPA	Category Code	Description
102	1	New OCS Lease
102	2	New onshore well (2.5 mile test)
102	3	New onshore well (1,000 feet deeper test)
102	4	New onshore reservoir
102	5	New reservoir on old OCS Lease
103	–	New onshore production well
107	–	High cost natural gas
108	–	Stripper well

Other Purchasers/Contracts:

Contract Date (Mo. Day Yr.)	Purchaser	Buyer Code

Remarks:

FT7900806/1-2

11/17/2023

FERC-121

1.0 API well number (If not assigned, leave blank 14 digits.)	47-099-00609-
2.0 Type of determination being sought (Use the codes found on the front of this form.)	107DV (Section of NGPA) — (Category Code)
3.0 Depth of the deepest completion location (Only needed if sections 103 or 107 in 2.0 above.)	3190 feet
4.0 Name, address and code number of applicant (35 letters per line maximum. If code number not available, leave blank.)	Name: Columbia Gas Transmission Corporation; Seller Code: 004030 Street: P. O. Box 1273 City: Charleston; State: WV; Zip Code: 25325
5.0 Location of this well (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name.)	Field Name: WV Field Area B County: Wayne; State: WV
(b) For OCS wells	Area Name: NA; Block Number: Date of Lease: Mo. Day Yr.; OCS Lease Number:
(c) Name and identification number of this well (35 letters and digits maximum.)	L. A. Childers etal 806417
(d) If code 4 or 5 in 2.0 above, name of the reservoir (35 letters maximum.)	NA
6.0 (a) Name and code number of the purchaser (35 letters and digits maximum. If code number not available, leave blank.)	Name: * ; Buyer Code: 004030
(b) Date of the contract	Mo. Day Yr. *
(c) Estimated total annual production from the well	16 Million Cubic Feet

		(a) Base Price	(b) Tax	(c) All Other Prices (Indicate (+) or (-).)	(d) Total of (a), (b) and (c)
7.0 Contract price (As of filing date. Complete to 3 decimal places.)	$/MMBTU	—.—	—.—	—.—	—.—
8.0 Maximum lawful rate (As of filing date. Complete to 3 decimal places.)	$/MMBTU	Dereg	—.—	—.—	—.—

9.0 Person responsible for this application	Name: Albert H. Mathena, Jr.; Title: Director, Production Eng. Signature: Albert H. Mathena Date Application is Completed: 5-20-82; Phone Number: (304) 346-0951
Agency Use Only Date Received by Juris. Agency: JUN 3 - 1982 Date Received by FERC	

*This is a pipeline production well. No contract exists and no sales are made.

11/17/2023

FORM IV-55WC
(12-78)

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES OIL AND GAS DIVISION

Date 5-20-82

Operator's
Well No. 806417

API Well No.
47 - 099 - 0060
State County Permit

WELL CLASSIFICATION FORM
HIGH COST GAS WELL - DEVONIAN SHALE
NGPA Section 107

DESIGNATED AGENT James L. Weekley
ADDRESS P. O. Box 1273
Charleston, WV 25325

LOCATION Elevation 659.48'
Watershed
Dist. Union County Wayne Quad.
Gas Purchase
Contract No. N.A.
Meter Chart Code
Date of Contract N.A.

WELL OPERATOR Columbia Gas Trans. Corp.
ADDRESS P. O. Box 1273
Charleston, WV 25325
GAS PURCHASER N.A.
ADDRESS

This is a pipeline production well and no gas purchase contract exists.

Date surface drilling began: 10-7-1948

Indicate the bottom hole pressure of the well and explain how this was calculated.

See Supplement

AFFIDAVIT

I, Albert H. Mathena, Jr., having been first sworn according to law, state that I have calculated the percentage of footage of the producing interval which is not Devonian Shale as indicated by a Gamma Ray index of less than 0.7 if a Gamma Ray log described in subparagraph (3)(i) or (3)(ii)(A) has been filed, or as indicated by the report described in subparagraph (3)(ii)(B); I have demonstrated that the percentage of potentially disqualifying non-shale footage is equal to or less than five (5) percent of the gross Devonian age interval; and I have no knowledge of any information not described in the application which is inconsistent with a conclusion that the well qualifies as a high-cost natural gas well.

Albert H Mathena Jr

STATE OF WEST VIRGINIA

COUNTY OF KANAWHA, TO-WIT:

I, Larry G. Burdette, a Notary Public in and for the state and county aforesaid, do certify that Albert H. Mathena, Jr., whose name is signed to the writing above, bearing date the 20 day of May, 1982, has acknowledged the same before me, in my county aforesaid.

11/17/2023

Given under my hand and official seal this 20 day of May, 1982.
My term of office expires on the 13 day of August, 1989.

Larry G Burdette
Notary Public

(NOTARIAL SEAL)

FORM IV-48WC
[12-78]

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES, OIL AND GAS DIVISION

Date 5-20, 1982

Operator's Well No. 806417

API Well No. 47 - 099 - 00609
State County Permit

Previous File No. _____ (If Applicable)

STATE APPLICATION FOR WELL CLASSIFICATION

WELL OPERATOR Columbia Gas Trans. Corp.
ADDRESS P. O. Box 1273
Charleston, WV 25325

DESIGNATED AGENT James L. Weekley
ADDRESS P. O. Box 1273
Charleston, WV 25325

Gas Purchase Contract No. NA* and Date _____ (Month, day and year)

Meter Chart Code _____

Name of First Purchaser NA*

(Street or P. O. Box)

(City) (State) (Zip Code)

FERC Seller Code NA*

FERC Buyer Code NA*

TYPE OF DETERMINATION BEING SOUGHT:

[X] (1) Initial determination (See FERC Form 121.) 107 DV (Section of NGPA) — (Category Code)

[ ] (2) Determination that increased production is the result of enhanced recovery technology.

[ ] (3) Determination of a seasonally affected well.

*This well is a pipeline production and no gas purchase contract exists.

Albert H. Mathena, Jr. (Name (Print))
Director, Production Engineering (Title)
Albert H. Mathena Jr. (Signature)
P. O. Box 1273 (Street or P. O. Box)
Charleston WV 25325 (City State (Zip Code))
(304) 346-0951 (Area Code Phone Number)

(Certificate of Proof of Service to Purchaser)

A copy of this filing is being retained by Columbia Gas Transmission Corporation, owner and operator of the identified well.

(All of the above to be completed by the Operator/Applicant)

(To be completed by Jurisdictional Agency. Executed copy to be returned to Operator/Applicant and purchaser, if known).

The Department of Mines has received a request, [ ] for certification of the above described well as meeting the requirements of Section _____ under the Natural Gas Policy Act of 1978, (NGPA); [ ] or for determination that increased production is the result of enhanced recovery technology under Section 108 of (NGPA); [ ] or for determination of a seasonally affected well under Section 108 of (NGPA).

All interested parties are hereby notified that on the ____ day of _____, 19____, at the office of the Oil and Gas Division in Charleston, West Virginia, or as soon thereafter as it may be heard, there will be a public hearing, if requested, or if objection is filed.

This Application is assigned File No. _____.

Initial review of information submitted indicates the well [ ] is, [ ] is not entitled to certification as claimed under the Natural Gas Policy Act (NGPA). A review of this evidence and any additional evidence will be made at the time appointed for a public hearing or as soon thereafter as the matter may be heard.

Unless objections are timely filed or a request for a hearing is made within fifteen (15) days, a hearing will not be held except on ex parte motion of the department and the matter will go to determination.

WEST VIRGINIA DEPARTMENT OF MINES

_____ Director

By _____

Title _____

JUN 3 - 1982
Date received by Jurisdictional Agency

11/17/2023

State of West Virginia
Department of Mines
Oil and Gas Division
Charleston 25305

WALTER N. MILLER
DIRECTOR

THEODORE M. STRSIT
ADMINISTRATOR

BEFORE THE OFFICE OF OIL AND GAS
OF THE DEPARTMENT OF MINES
OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE APPLICATIONS OF COLUMBIA GAS TRANSMISSION CORPORATION REQUESTING CLASSIFICATION UNDER SECTION 107 OF THE NATURAL GAS POLICY ACT OF CERTAIN WELLS IN BOONE, CABELL, JACKSON, KANAWHA, LINCOLN, LOGAN, MINGO AND WAYNE COUNTIES, WEST VIRGINIA.)	CAUSE NO. 33 ORDER NO. 1

REPORT OF THE OFFICE

This cause came before the Administrator of the Office of Oil and Gas on June 28, 1982, at 1:00 p.m., in Conference Room C, Capitol Conference Center, Charleston, West Virginia, after giving notice of hearing as required by law on the applications of Columbia Gas Transmission Corporation for certification of certain wells in Boone, Cabell, Jackson, Kanawha, Lincoln, Logan, Mingo and Wayne Counties as Devonian Shale wells under Section 107(c)(4) of the Natural Gas Policy Act.

FINDINGS OF FACT

1. Applicant is an operator within the meaning of paragraph (w) of Chapter 22-4-1.

2. Applicant has made filings for certification pursuant to Rule 34.04.

3. The Natural Gas Policy Act (NGPA) in Section 107, Ceiling Price For High-Cost Natural Gas--(c) Definition of High-Cost Natural Gas-- "For purposes of this section, the term "high-cost natural gas" means natural gas determined in accordance with Section 503 to be....(4) produced from Devonian Shale."

4. The Federal Energy Regulatory Commission (FERC) by Rule 272.101-(c) prescribes the method by which the jurisdictional agency may determine gas produced from Devonian Shale.

5. Exhibits refer to evidence gathered at a public hearing held June 28, 1982.

6. Exhibits No. 2 and 3 lists the wells to be under consideration for Section 107 pricing. All these wells are located on Exhibits No. 4 and 5 and have been completed in the Devonian Shale.

7. Applicant, by letter dated June 25, 1982 (Exhibit No. 3) requested that eight (8) of the wells listed on Attachment A be stricken from the docket for hearing and they have been withdrawn.

8. Exhibit No. 6 shows random sampling of already qualified Devonian Shale wells.

9. Various cross-sections throughout the interval show gamma ray logs of the wells (see Exhibits Nos. 7, 8 and 9).

10. No well has any non-shale greater than 5% in the Devonian interval penetrated.

11. No gamma ray logs are available on these wells since they were all drilled before logging was common in West Virginia.

CONCLUSION OF LAW

1. That due notice of the time, place and purpose of the hearing has been given in all respects as required by law.

2. That pursuant to Chapter 22, Article 4, Code of West Virginia of 1931, as amended, the Office has jurisdiction over the subject matter embraced in said notice, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

ORDER

NOW, therefore, based on the aforementioned Findings of Fact and Conclusion of Law, it is found by the Administrator that Columbia Gas Transmission Corporation's applications for classification under Section 107 of the Natural Gas Policy Act for certain wells in Boone, Cabell, Jackson, Kanawha, Lincoln, Logan, Mingo and Wayne Counties, identified in Attachment A, are approved.

The Office of Oil and Gas further incorporates the Report of the Office and Findings of Fact and Conclusion of Law dated June 28, 1982, as if the same were fully set forth and includes hereto the Report of the Office and Findings of Fact and Conclusion of Law as a part of this Order.

Entered this 12th day of July, 1983.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

OFFICE OF OIL AND GAS
OF THE DEPARTMENT OF MINES
OF THE STATE OF WEST VIRGINIA

By: _____
Theodore M. Streit, Administrator

COLUMBIA GAS TRANSMISSION CORPORATION

WELL NO. 806417

SUPPLEMENT:

METHOD OF CALCULATION OF BOTTOM HOLE PRESSURE

PBH = PWH + PWH (E**0.0000347*G*L - 1.)

WHERE:

PBH = BOTTOM HOLE PRESSURE (PSIA) = 379.7

PWH = WELLHEAD PRESSURE (PSIA) = 0.7170

G = SPECIFIC GRAVITY OF GAS = 2945

L = DEPTH TO MIDDLE OF PERFORATIONS (FT.)

STEPS:

PBH = 379.7 + 379.7 (E**0.0000347*2111.565 -1.)

PBH = 379.7 + 379.7 (E**0.073271 -1.)

PBH = 379.7 + 379.7 (1.07602 -1.)

PBH = 379.7 + 379.7 (0.076)

PBH = 379.7 + 28.9

PBH = 408.6 (PSIA)

11/17/2023

11/17/2023