

OIL AND GAS WELL
SUMMARY REPORT

API No. 45-195-20228-00-03 VDMR Well
Rep. No. W-4785
DMQ File No. WS-30

Operator COLUMBIA GAS TRANSMISSION CORPORATION
Farm PENN-VIRGINIA CORPORATION #9
Co. Well No. 20,253-T

County WISE Quadrangle NORTON - 7-1/2'
Location (UTM) N 4,095,040; E 348,920 UTM Zone 17
(Lat. and Long.) _____

Field _____ Province APPALACHIAN PLATEAUS

Elev. (specify) 2548.09' GR. TD 6900' Form. at TD CORNIFEROUS
INITIAL FLOW - 267,000 CU. FT. Age DEVONIAN

Date compl. or abandoned NOVEMBER 17, 1975

Result DRY HOLE

Gas Shows _____

Gas Pays _____

Main Production _____ Prod. Form. _____
Age _____

Treatment: WELL SHOT ON 9-7-75 FROM 5916' to 4500' WITH 15,500 POUNDS OF
80% GELATINE. AFTER SHOOTING SHALE FORMATION A BRIDGE PLUG WAS SET AT 4310'
SO THAT BIG LIME FORMATION COULD BE ACIDIZED. ATTEMPT TO TREAT BIG LIME
FORMATION FAILED DUE TO WATER AND CAVINGS.

Initial Production _____
FINAL FLOW 253,000 CU. FT.

Oil shows _____

Water FW X at 129' at _____ at _____
SW _____ at _____ at _____ at _____

Coal 129' to 131'; 403' to 405'; 436' to 439'; 885' to 888'; 945' to 950'; 978' to 981';
1179' to 1182'; 1256' to 1261'; 1296' to 1298'; 1342' to 1345'; 1843' to 1846';
Plat X Plotted X Completion Report X 1937' to 1940'

Drillers Log X Geologic Log _____

Samples X Interval Sheet X

Sample Interval 100' to 6900'

Remarks _____

Geophysical Logs S.P. _____ Res _____ Gamma X Neutron _____
Density X Sonic _____ Other CALIPER; CASING INSPECTION; TEM-
PERATURE

NO-2-1

OIL AND GAS WELL
SUMMARY REPORT

API No. 45-195-20228-00-03 VDMR Well Rep. No. W-4785
DMQ File No. WS-30

Operator COLUMBIA GAS TRANSMISSION CORPORATION

Farm PENN-VIRGINIA CORPORATION #9

Co. Well No. 20,253-T

County WISE Quadrangle NORTON - 7-1/2'

Location (UTM) N 4,095,040; E 348,920 UTM Zone 17

(Lat. and Long.) _____

Field _____ Province APPALACHIAN PLATEAUS

Elev. (specify) 2548.09' ^{2559 KB} GR. TD 6900' Form. at TD CORNIFEROUS

INITIAL FLOW - 267,000 CU. FT. Age DEVONIAN

Date compl. or abandoned NOVEMBER 17, 1975

Result DRY HOLE

Gas Shows _____

Gas Pays _____

Main Production _____ Prod. Form. _____

Age _____

Treatment: WELL SHOT ON 9-7-75 FROM 5916' to 4500' WITH 15,500 POUNDS OF 80% GELATINE. AFTER SHOOTING SHALE FORMATION A BRIDGE PLUG WAS SET AT 4310' SO THAT BIG LIME FORMATION COULD BE ACIDIZED. ATTEMPT TO TREAT BIG LIME FORMATION FAILED DUE TO WATER AND CAVINGS.

Initial Production _____

FINAL FLOW 253,000 CU. FT.

Oil shows _____

Water FW X at 129' _____ at _____ at _____

SW _____ at _____ at _____ at _____

Coal 129' to 131'; 403' to 405'; 436' to 439'; 885' to 888'; 945' to 950'; 978' to 981';

1179' to 1182'; 1256' to 1261'; 1296' to 1298'; 1342' to 1345'; 1843' to 1846';

Plat X Plotted X Completion Report X 1937' to 1940'

Drillers Log X Geologic Log _____

Samples X Interval Sheet X

Sample Interval 100' to 6900'

Remarks _____

Geophysical Logs S.P. _____ Res _____ Gamma X Neutron _____

Density X Sonic _____ Other CALIPER; CASING INSPECTION; TEM-

PERATURE

Stratigraphic Data Source

(E.LOG) FRANK H. JACOBEEEN, JR.

<u>Formation</u>	<u>Top</u>	<u>Datum (Subsea)</u>	<u>Thickness</u>
TOP GREENBRIER	4102	-1543	
BASE GREENBRIER	4598	-2039	
SUNBURY	4814	-2255	
BEREA	5004	-2445	
DEVONIAN SHALE	5064	-2505	
CORNIFEROUS	5860	-3301	
BIG SIX	6267	-3708	
CLINTON	6290	-3731	
CLINCH	6614	-4059	
SEQUATCHIE	6822	-4263	

Remarks

References

Released to Open File: Completion FEBRUARY 15, 1976
Samples YES

(Note: UTM measurements in meters, all others in feet)

VIRGINIA DIVISION OF MINERAL RESOURCES
Box 3667, Charlottesville, VA 22903

INTERVAL SHEET

Page 1 of 4

Well Repository No.: R-4785

Date rec'd: Date Processed: July, 1977

Sample Interval: from 100 to: 6900'

PROPERTY: Penn-Virginia Corporation
No. 20,253-T

Number of samples: 660

COMPANY: Columbia Gas Transmission Corporation

Total Depth: 6900'

COUNTY: Wise

Oil or Gas: X Water: Exploratory:

From-To	From-To	From-To	From-To
100_110	400_410	700_710	1000_1010
110_120	410_420	710_720	1010_1020
120_130	420_430	720_730	1020_1030
130_140	430_440	730_740	1030_1040
140_150	440_450	740_750	1040_1050
150_160	450_460	750_760	1050_1060
160_170	460_470	760_770	1060_1070
170_180	470_480	770_780	1070_1080
180_190	480_490	780_790	1080_1090
-	490_500	790_800	1090_1100
200_210	500_510	800_810	1100_1110
210_220	510_520	810_820	1110_1120
220_230	520_530	820_830	1120_1130
230_240	530_540	830_840	1130_1140
240_250	540_550	840_850	1140_1150
250_260	550_560	850_860	1150_1160
260_270	560_570	860_870	1160_1170
270_280	570_580	870_880	1170_1180
-	580_590	880_890	1180_1190
290_300	590_600	890_900	1190_1200
300_310	600_610	900_910	1200_1210
-	610_620	910_920	1210_1220
320_330	620_630	920_930	1220_1230
330_340	-	930_940	1230_1240
340_350	640_650	940_950	1240_1250
350_360	650_660	950_960	1250_1260
360_370	660_670	960_970	1260_1270
370_380	670_680	970_980	1270_1280
380_390	680_690	980_990	1280_1290
390_400	690_700	990_1000	1290_1300

VIRGINIA DIVISION OF MINERAL RESOURCES
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INTERVAL SHEET
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Well Repository No.: W-4785

From-To	From-To	From-To	From-To	From-To
130Q-1310	1700-1710	2100-2110	2500-2510	2900-2910
131Q-1320	1710-1720	2110-2120	2510-2520	2910-2920
132Q-1330	1720-1730	2120-2130	2520-2530	2920-2930
133Q-1340	1730-1740	2130-2140	2530-2540	2930-2940
134Q-1350	1740-1750	2140-2150	2540-2550	2940-2950
135Q-1360	1750-1760	2150-2160	2550-2560	2950-2960
136Q-1370	1760-1770	2160-2170	-	2960-2970
137Q-1380	1770-1780	2170-2180	2570-2580	2970-2980
138Q-1390	1780-1790	-	2580-2590	2980-2990
139Q-1400	1790-1800	2190-2200	2590-2600	2990-3000
140Q-1410	1800-1810	2200-2210	2600-2610	3000-3010
141Q-1420	1810-1820	2210-2220	2610-2620	3010-3020
142Q-1430	1820-1830	2220-2230	2620-2630	3020-3030
143Q-1440	1830-1840	2230-2240	2630-2640	3030-3040
144Q-1450	1840-1850	2240-2250	2640-2650	3040-3050
145Q-1460	1850-1860	2250-2260	2650-2660	3050-3060
146Q-1470	1860-1870	2260-2270	2660-2670	3060-3070
147Q-1480	1870-1880	2270-2280	2670-2680	3070-3080
148Q-1490	1880-1890	2280-2290	2680-2690	3080-3090
149Q-1500	1890-1900	2290-2300	2690-2700	3090-3100
150Q-1510	1900-1910	2300-2310	2700-2710	3100-3110
151Q-1520	1910-1920	2310-2320	2710-2720	3110-3120
152Q-1530	1920-1930	2320-2330	2720-2730	3120-3130
153Q-1540	1930-1940	2330-2340	2730-2740	3130-3140
154Q-1550	1940-1950	2340-2350	2740-2750	3140-3150
155Q-1560	1950-1960	2350-2360	2750-2760	3150-3160
156Q-1570	1960-1970	2360-2370	2760-2770	3160-3170
157Q-1580	1970-1980	2370-2380	2770-2780	3170-3180
158Q-1590	1980-1990	2380-2390	2780-2790	3180-3190
159Q-1600	1990-2000	2390-2400	2790-2800	3190-3200
160Q-1610	2000-2010	2400-2410	2800-2810	3200-3210
161Q-1620	2010-2020	2410-2420	2810-2820	3210-3220
162Q-1630	2020-2030	2420-2430	2820-2830	3220-3230
163Q-1640	2030-2040	2430-2440	2830-2840	3230-3240
164Q-1650	2040-2050	2440-2450	2840-2850	3240-3250
165Q-1660	2050-2060	2450-2460	2850-2860	3250-3260
166Q-1670	2060-2070	2460-2470	2860-2870	3260-3270
167Q-1680	2070-2080	2470-2480	2870-2880	3270-3280
168Q-1690	2080-2090	2480-2490	2880-2890	3280-3290
169Q-1700	2090-2100	2490-2500	2890-2900	3290-3300

VIRGINIA DIVISION OF MINERAL RESOURCES
 Box 3667, Charlottesville, VA 22903

INTERVAL SHEET
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Well Repository No.: W- 4785

From-To	From-To	From-To	From-To	From-To
3300-3310	3700-3710	4100-4110	4500-4510	4900-4910
3310-3320	3710-3720	4110-4120	4510-4520	-
3320-3330	-	4120-4130	-	4920-4930
3330-3340	3730-3740	4130-4140	4530-4540	4930-4940
3340-3350	3740-3750	4140-4150	4540-4550	4940-4950
-	3750-3760	4150-4160	-	4950-4960
3360-3370	3760-3770	4160-4170	4560-4570	4960-4970
3370-3380	3770-3780	4170-4180	4570-4580	4970-4980
3380-3390	3780-3790	4180-4190	4580-4590	4980-4990
3390-3400	3790-3800	4190-4200	-	4990-5000
3400-3410	3800-3810	4200-4210	4600-4610	5000-5010
3410-3420	3810-3820	4210-4220	4610-4620	5010-5020
3420-3430	3820-3830	4220-4230	4620-4630	5020-5030
3430-3440	3830-3840	4230-4240	4630-4640	5030-5040
3440-3450	3840-3850	4240-4250	4640-4650	5040-5050
3450-3460	3850-3860	4250-4260	4650-4660	5050-5060
3460-3470	3860-3870	4260-4270	4660-4670	5060-5070
3470-3480	3870-3880	4270-4280	4670-4680	5070-5080
3480-3490	3880-3890	4280-4290	4680-4690	5080-5090
3490-3500	3890-3900	4290-4300	4690-4700	5090-5100
3500-3510	3900-3910	4300-4310	4700-4710	5100-5010
3510-3520	3910-3920	4310-4320	4710-4720	5110-5120
3520-3530	3920-3930	-	4720-4730	5120-5130
3530-3540	3930-3940	4330-4340	4730-4740	5130-5140
3540-3550	3940-3950	4340-4350	4740-4750	5140-5150
3550-3560	3950-3960	4350-4360	4750-4760	5150-5160
-	-	4360-4370	4760-4770	5160-5170
3570-3580	3970-3980	4370-4380	4770-4780	5170-5180
3580-3590	3980-3990	4380-4390	4780-4790	5180-5190
3590-3600	3990-4000	-	4790-4800	5190-5200
3600-3610	4000-4010	4400-4410	4800-4810	5200-5210
3610-3620	4010-4020	4410-4420	4810-4820	5210-5220
3620-3630	4020-4030	4420-4430	4820-4830	5220-5230
3630-3640	4030-4040	4430-4440	-	5230-5240
3640-3650	4040-4050	4440-4450	4840-4850	5240-5250
3650-3660	4050-4060	4450-4460	4850-4860	5250-5260
3660-3670	4060-4070	4460-4470	4860-4870	5260-5270
3670-3680	4070-4080	4470-4480	4870-4880	5270-5280
3680-3690	4080-4090	4480-4490	4880-4890	5280-5290
3690-3700	4090-4100	4490-4500	4890-4900	5290-5300

VIRGINIA DIVISION OF MINERAL RESOURCES
Box 3667, Charlottesville, VA 22903

INTERVAL SHEET
Continued

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Well Repository No.: W-4785

From-To	From-To	From-To	From-To	From-To
5300-5310	5700-5710	6100-6110	6500-6510	-
5310-5320	5710-5720	6110-6120	-	-
5320-5330	5720-5730	6120-6130	6520-6530	-
5330-5340	5730-5740	6130-6140	6530-6540	-
5340-5350	5740-5750	6140-6150	6540-6550	-
5350-5360	5750-5760	6150-6160	6550-6560	-
5360-5370	5760-5770	6160-6170	6560-6570	-
5370-5380	5770-5780	6170-6180	6570-6580	-
5380-5390	5780-5790	6180-6190	6580-6590	-
5390-5400	5790-5800	6190-6200	6590-6600	-
5400-5410	5800-5810	6200-6210	6600-6610	-
5410-5420	5810-5820	6210-6220	6610-6620	-
5420-5430	5820-5830	6220-6230	6620-6630	-
5430-5440	5830-5840	6230-6240	6630-6640	-
5440-5450	5840-5850	6240-6250	6640-6650	-
5450-5460	5850-5860	6250-6260	6650-6660	-
5460-5470	5860-5870	6260-6270	6660-6670	-
5470-5480	5870-5880	6270-6280	6670-6680	-
5480-5490	5880-5890	6280-6290	6680-6690	-
5490-5500	5890-5900	6290-6300	6690-6700	-
5500-5510	5900-5910	6300-6310	6700-6710	-
5510-5520	5910-5920	6310-6320	6710-6720	-
5520-5530	5920-5930	6320-6330	6720-6730	-
5530-5540	5930-5940	6330-6340	6730-6740	-
5540-5550	5940-5950	6340-6350	6740-6750	-
5550-5560	5950-5960	6350-6360	6750-6760	-
-	5960-5970	6360-6370	6760-6770	-
5570-5580	5970-5980	6370-6380	6770-6780	-
5580-5590	5980-5990	6380-6390	6780-6790	-
5590-5600	5990-6000	6390-6400	6790-6800	-
5600-5610	6000-6010	6400-6410	6800-6810	-
-	6010-6020	6410-6420	6810-6820	-
5620-5630	6020-6030	6420-6430	6820-6830	-
5630-5640	6030-6040	6430-6440	6830-6840	-
5640-5650	6040-6050	6440-6450	6840-6850	-
5650-5660	6050-6060	6450-6460	6850-6860	-
5660-5670	6060-6070	6460-6470	6860-6870	-
5670-5680	6070-6080	6470-6480	6870-6880	-
5680-5690	6080-6090	6480-6490	6880-6890	-
5690-5700	6090-6100	6490-6500	6890-6900	-



COMMONWEALTH OF VIRGINIA
 DIVISION OF MINES AND QUARRIES
 DEPARTMENT OF LABOR AND INDUSTRY
 BIG STONE GAP, VIRGINIA

~~XXXXXXXX~~
 APPLICATION FOR PERMIT TO DRILL ~~OIL OR~~ GAS WELL
~~XXXXXXXX~~

(Required by Section 45-115, Code of Virginia, 1950. To be accompanied by Permit fee of twenty-five dollars and bond and surety therefor, as specified by Section cited. To be submitted in duplicate, one copy to be returned to applicant after action by Division of Mines and Quarries.)

TO: DIVISION OF MINES AND QUARRIES
 BIG STONE GAP, VIRGINIA

Charleston, W. Va.
 Place
 July 23, 1975

Date

Gentlemen:

The undersigned hereby makes application for a Permit to drill, ~~re-drill~~ (strike out two) a well for ~~oil or~~ gas on the Penn Virginia Corp. Farm, comprising 90,000 acres, in the Gladeville District of Wise County, Virginia, having the fee title thereto, or as the case may be, under grant or lease dated October 1, 19 72 made by Penn Virginia Corp. to Columbia Gas Transmission Corp. and recorded on the 3rd day of October, 19 74 in the office of the County Clerk for the said County in Book 248 page 654.

The proposed location of the well is shown on a location plat or map submitted to the Division of Mines and Quarries, by the undersigned, together with Notice of Intention to Drill, ~~Re-drill~~ ~~Drill~~ a Well for ~~Oil or~~ Gas (Form 2) on the 23 day of July, 19 75.

The proposed well will be known as Well No. 20253-T of Columbia Gas Trans. Corp. (company, etc.) It is proposed to drill this well to a depth of about 5750 feet.

The proposed location is about 2660 feet distant from the nearest property or lease line; about - feet distant from the nearest mining opening, or quarry (strike out words not applicable); and/or about 11,300 feet distant from the nearest ~~drilling, abandoned~~ producing, ~~or permitted for~~ (strike out words not applicable) ~~oil or~~ gas (strike out words not applicable) well.

There is enclosed herewith a certified check or U. S. Postal Money Order, in the amount of twenty-five (\$25.00), payable to the Treasurer of Virginia, covering fee for a Permit to Drill a Well for Oil or Gas, as required by Section 45-115, Code of Virginia, 1950.

Bond and surety therefor to insure compliance with the provisions of Chapter 8, Title 45, Code of Virginia, 1950, for this well, in the amount of \$4,400.00 is submitted herewith of (give status of) Policy No. 80617188

Correspondence regarding this well should be addressed to Mr. John R. Henning, P.O. Box 1273, Charleston, W. Va. 25325

Signature of officer or certifying party:

[Signature]
 Name
Director, Exploration & Dev.
 Title

Very truly yours,

Columbia Gas Transmission Corp.
 Drilling Company or Operator
P.O. Box 1273
 Street
Charleston
 City of Town
West Virginia 25325
 State

Space below this line is for the use of the Board only.
 ACTION OF DIVISION OF MINES AND QUARRIES

Received on 7-28-, 19 75.
 Approved and Permit (No. 228) granted on 8-8-, 19 75.
 Denied _____
 Reasons for denial _____

DIVISION OF MINES AND QUARRIES
 By [Signature] Title State of West Virginia

File No. 115-30 Well No. 20253-T Permit No. 228

VIRGINIA DIVISION OF

RECEIVED

AUG 13 1975

MINERAL RESOURCES

Commonwealth of Virginia
DEPARTMENT OF LABOR AND INDUSTRY
Division of Mines
Big Stone Gap, Virginia

~~XXXXXXXX~~
NOTICE OF INTENTION TO DRILL ~~OR REDRILL OR DEEPEN~~ GAS WELL
~~XXXXXXXX~~

(One copy of this report and three identical copies of a plat or map, on a scale not smaller than 400 feet to the inch, and showing information required by Section 45-114, Code of Virginia, 1950, must be submitted to the Division of Mines, and copies sent by registered mail to all persons defined in above law, prior to obtaining a permit to drill.)

TO: DIVISION OF MINES
BIG STONE GAP, VIRGINIA

Charleston, W. Va.
Place

July 23, , 19 75
Date

Gentlemen:

The undersigned proposes to begin as soon as a permit therefor is obtained from the Division of Mines, to drill, ~~redrill or deepen~~ (strike out two) a well for ~~oil or gas~~ gas on the Penn Virginia Corp. Farm, comprising 90,000 acres, in the Gladeville District of Wise County, Virginia, having the fee title thereto, or as the case may be, under grant or lease dated October 1, 1972, made by Penn Virginia Corp. to Columbia Gas Trans. Corp. and recorded on the 3rd. day of October, 19 74 in the office of the County Clerk for said County in Book 248, page 654.

The proposed location of the well, as shown on the attached plat or map, is about 5600 feet West Southwest of Mouth of Buckeye Branch and about 7700 feet East Southeast of Mouth of Pine Branch.

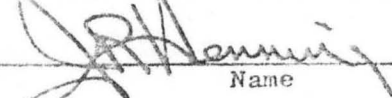
It is proposed to drill this well to a depth of about 5750 feet. Samples or cuttings therefrom ~~will~~ will be available for examination by a member of the staff of the Virginia Geological Survey. Cuttings ~~will~~ will be furnished the Survey.

A plat or map, in triplicate, on a scale not smaller than 400 feet to the inch, showing the proposed location of the well and other information, required in Section 45-114, Code of Virginia, 1950, is attached hereto. Copies of the plat and notice of intention to drill, redrill or deepen the aforementioned well have been sent to all interested persons as required by Section 45-114, above cited, as follows (List names and mail address of each. Use back of sheet if additional space is required):

1. Penn Virginia Corp. Big Stone Gap, Virginia 24219
2. Westmoreland Coal Co. Big Stone Gap, Virginia
3. _____
4. _____
5. _____
6. _____

Very truly yours,

Signature of officer or certifying party:


Name
Director, Exploration & Dev.
Title

Columbia Gas Transmission Corp.
Drilling Company or Operator
P.O. Box 1273
Street Address
Charleston, W. Va. 25325
City or Town, and State

File 105-30 Date Received 7-28-75 Well No. 20253-T

VIRGINIA DIVISION OF

RECEIVED

AUG 13 1975

MINERAL RESOURCES

VDMR Well No.: W-4785

Operator: Columbia Gas Transmission Corporation
Farm: Penn-Virginia Corporation (No. 9)
Well No.: 20,253-T
Location: Wise County
 3300' S. of 37°00'00"
 3150' E. of 82°42'30"
Elevation: 2548.09' Gr.
Total Depth: 6900' RKB
Drilling Commenced: August 17, 1975
Drilling Completed: September 6, 1975
Result: Plugged on November 17, 1975

DRILLERS LOG

<u>Formation</u>	<u>Top (feet)</u>	<u>Bottom (feet)</u>
Sand	0	97
Slate, Water @ 129'	97	129
Coal	129	131
Shale	131	139
Sand	139	403
Coal	403	406
Sand	406	436
Coal	436	439
Sand	439	604
Shale	604	733
Sandy Shale	733	885
Coal	885	888
Sand & Shale	888	945
Coal	945	950
Sand & Shale	950	978
Coal	978	981
Sand	981	1113
Slate	1113	1179
Coal	1179	1182
Sand & Shale	1182	1256
Coal	1256	1261
Sand & Shale	1261	1296
Coal	1296	1298
Sand Shale	1298	1342
Coal	1342	1345
Shale	1345	1693
Sand	1693	1843
Coal	1843	1846
Sand & Shale	1846	1937
Coal	1937	1940

VDMR Well No.: W-

<u>Formation</u>	<u>Top (feet)</u>	<u>Bottom (feet)</u>
Sand	1940	2232
Sand & Shale	2232	2330
Sand	2330	3118
Sandy Shale	3118	3140
Shale	3140	3422
Sand & Shale	3422	3715
Sand	3715	4030
Shale	4030	4049
Lime	4049	4524
Siltstone	4524	4601
Sand	4601	4970
Shale	4970	5840
Lime	5840	6286
Shale	6286	6426
Sandy Shale	6426	6716
Sand	6716	6900

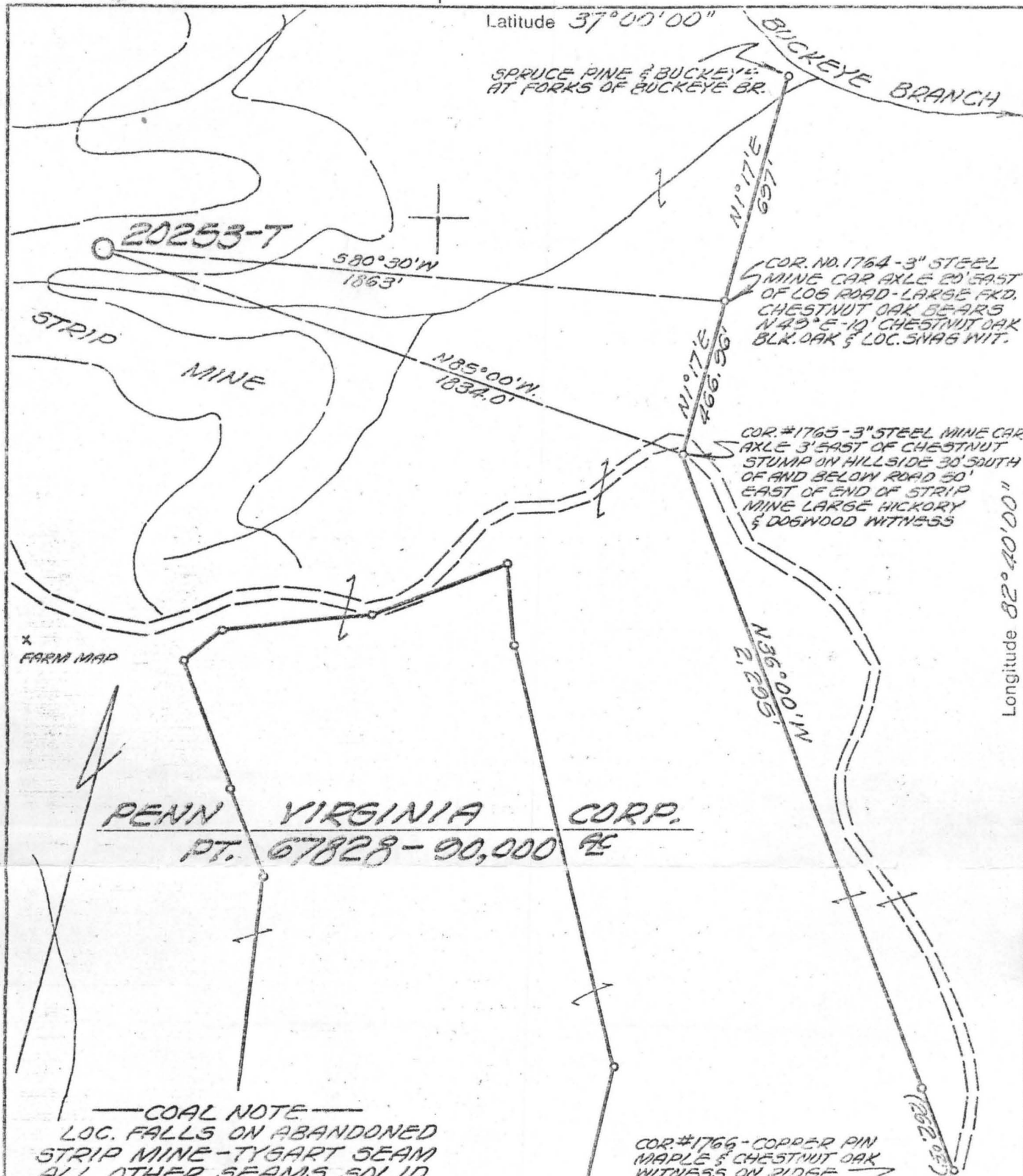
Remarks: Fresh water at 129'

Initial open flow gas - 267,000

After shot on 9/7/75 from 5916-4500' with 15,500 lbs.
80% gelatine: first 12 hours 158,000; 2nd 36 hours
253,000

Gas from all formation after shot gauged 253 mcf.
After shooting Shale Formation a bridge plug was
set @ 4310' so that the Big Lime Formation could
be acidized. Gas was then gauging 153 mcf from
that formation. Attempt to treat Big Lime for-
mation failed due to water and cavings. Abandoned
well.

Logs: FDC-GR 6899' to 100'
Temperature 6899' to 3685'
Induction 6893' to 3685'



PENN VIRGINIA CORP.
PT. 67828 - 90,000 AC

COAL NOTE
LOC. FALLS ON ABANDONED STRIP MINE - TYGART SEAM
ALL OTHER SEAMS SOLID COAL.

COR #1766 - COPPER PIN
MAPLE & CHESTNUT OAK
WITNESS ON RIDGE

New Location	<input checked="" type="checkbox"/>	I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by the rules and regulations of the oil and gas section of the mining laws of <u>VIRGINIA</u> Minimum degree of accuracy is one part in <u>200</u> LAND SURVEYOR #949 (R.V.) BOX 1273 CHARLESTON, W.VA.
Storage	<input type="checkbox"/>	
Drill Deeper	<input type="checkbox"/>	
Abandonment	<input type="checkbox"/>	
Re-Drill/Fracture	<input type="checkbox"/>	

Signed Shirley Foster

Company COLUMBIA GAS TRANS. CORP.
 Address BOX 1273 CHARLESTON W.VA.
 Farm PENN-VIRGINIA CORP.
 Lease PT. 67828 Acres 90,000
 Well Farm No. 9 Ser. No. 20253-T
 Elevation - Spirit Level 2548.09'
 Quadrangle NORTON, VIRGINIA
 Township or District GLADEVILLE
 County WISE
 Sec., Lot, Qr. _____ T _____ R _____
 Coordinates LAT. 36°59'28" LONG. 82°41'51"
 File No. 4-375 Dwg. No. _____
 Date 7-8-1975 Scale 1" = 400'

WELL LOCATION MAP
STATE OF VIRGINIA
(+) Denotes Values Of Well On United States Topographic Maps
Scale 15' 7 1/2'
FILE NO. WS-30
PERMIT NO. 228

WS-0030

VDMR Well No.: W-

Operator: Columbia Gas Transmission Corporation

Farm: Penn-Virginia Corporation (No. 9)

Well No.: 20,253-T

Location: Wise County

3300' S. of 37°00'00"

3150' E. of 82°42'30"

UTM. N. 4094980

E. 348890.

Elevation: 2548.09' Gr.

Total Depth: 6900' RKB

Drilling Commenced: August 17, 1975

Drilling Completed: September 6, 1975

Result: Plugged on November 17, 1975

DRILLERS LOG

<u>Formation</u>	<u>Top (feet)</u>	<u>Bottom (feet)</u>
Sand	0	97
Slate, Water @ 129'	97	129
Coal	129	131
Shale	131	139
Sand	139	403
Coal	403	406
Sand	406	436
Coal	436	439
Sand	439	604
Shale	604	733
Sandy Shale	733	885
Coal	885	888
Sand & Shale	888	945
Coal	945	950
Sand & Shale	950	978
Coal	978	981
Sand	981	1113
Slate	1113	1179
Coal	1179	1182
Sand & Shale	1182	1256
Coal	1256	1261
Sand & Shale	1261	1296
Coal	1296	1298
Sand Shale	1298	1342
Coal	1342	1345
Shale	1345	1693
Sand	1693	1843
Coal	1843	1846
Sand & Shale	1846	1937
Coal	1937	1940

2548
604
1944
2548
439
109
2548
606
1944
2548
131
2417

Don't take?

VDMR Well No.: W-

<u>Formation</u>	<u>Top (feet)</u>	<u>Bottom (feet)</u>
Sand	1940	2232
Sand & Shale	2232	2330
Sand	2330	3118
Sandy Shale	3118	3140
Shale	3140	3422
Sand & Shale	3422	3715
Sand	3715	4030
Shale	4030	4049
<i>Greenbush</i> Lime	4049	4524 - <i>Big Lime</i>
Siltstone	4524	4601
Sand	4601	4970
Shale	4970	5840
Lime	5840	6286
Shale	6286	6426
Sandy Shale	6426	6716
Sand	6716	6900

Remarks: Fresh water at 129'

Initial open flow gas - 267,000

After shot on 9/7/75 from 5916-4500' with 15,500 lbs.
80% gelatine: first 12 hours 158,000; 2nd 36 hours
253,000

Gas from all formation after shot gauged 253 mcf.
After shooting Shale Formation a bridge plug was
set @ 4310' so that the Big Lime Formation could
be acidized. Gas was then gauging 153 mcf from
that formation. Attempt to treat Big Lime for-
mation failed due to water and cavings. Abandoned
well.

Logs: FDC-GR 6899' to 100'
Temperature 6899' to 3685'
Induction 6893' to 3685'

(To be filled in by Division of Mines)

COMMONWEALTH OF VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY

(To be filled in by Division of Mines)

County, District, Map, File, Well No., Permit No., Office No., Location Plat

DIVISION OF MINES BIG STONE GAP, VIRGINIA DEEPENED OIL AND GAS WELL COMPLETION REPORT ABANDONMENT

(This report and a copy of electrical log, if made, must be submitted to the Division of Mines within 30 days after abandonment or completion of well, as required by Section 45-113, Code of Virginia, 1950.)

Company: Columbia Gas Transmission Corporation; Farm: Penn-Virginia Corporation #9; County: Wise; Well No. (Company): 20,253-T; Address: P. O. Box 1273, Charleston, West Virginia 25325; Acres: 90,000; District: Gladeville; Elevation (ground surface): 2548.09 ft.

Location: (Give direction and distance in feet or tenths of a mile from two (2) location reference points or map coordinates shown on location plat or map previously filed with the Division of Mines or shown on quadrangle topographic map of area.)

5,600 feet West, South West of The Mouth of Buckeye Br. and 7,700 feet East, South East of The Mouth of Pine Branch.

Surface of tract is owned in fee simple by Penn-Virginia Corporation; Address: Big Stone Gap, Virginia 24219; Mineral rights are owned by Penn-Virginia Corporation; Coal: Westmoreland Coal Company; Address: Big Stone Gap, Virginia 24219; Location made by C. T. Tolley 7/8/75; Drilling commenced August 17, 1975; Drilling contractor Lohmann-Johnson Drilling Co.; Drilling completed September 6, 1975; Address: Suite 814 Commerce Sq., Charleston, West Virginia 25301; Well completed as gas well on Plugged

Well abandoned at 6900 feet on November 17, 1975; Reason: Affidavit filed December 3, 1975; Total depth 6900 RKB; Steel line measurement Electric Log 6901 RKB; Commenced producing on 1975

Oil Well; Initial production, oil: 1st 24 hours, 2nd 24 hours; After shot on; Settled production; Gravity and grade of oil; Oil pays at (1) to (4); Oil shows at (1) to (4); Main production at (5)

Gas Well; Gaged; Initial open flow, gas: Volume 267,000 cu. ft.; After shot on 9/7/75 from 5916 feet to 4500 feet with 15,500 lbs. 80% Gelatine; Settled production; Gas pays at (1) to (4); Gas shows at (1) to (4); Main production at (5)

Fresh water at (1) 129 feet, GPM; (2) feet, GPM; (3) feet, GPM. Salt water at (1) feet; (2) feet; (3) feet; (4) feet. Coal: from See Back feet inches to feet inches; from feet inches to feet inches. Well acidized from feet to feet with (quantity) of acid. Remarks: Gas from all formations after shot gauged 253 mcf. After shooting Shale Formation a bridge plug was set @ 4310' so that the Big Line Formation could be acidized. Gas was then gauging 153 mcf from that formation. Attempt to treat Big Line formation failed due to water and cavings. Abandoned well.

Table with columns: CASING AND TUBING (SIZE, USED IN DRILLING, LEFT IN WELL, PERFORATED) and JACKERS (KIND, SIZE, SET AT). Includes LINERS section with columns: SIZE, USED IN DRILLING, LEFT IN WELL, PERFORATED.

Remarks: (Shut down, depths, dates; fishing jobs, depths, dates; caving; other notes)

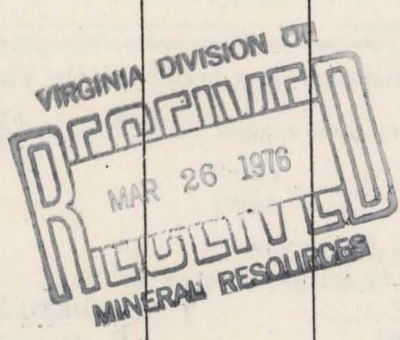
Samples or cuttings will be available for examination by a member of the Virginia Geological Survey Yes (Yes) (No) Will be furnished the Virginia Geological Survey upon request Yes (Yes) (No), if sacks for same are furnished by the Survey Yes (Yes) (No) Electrical log made X or not made (check which). Copy furnished herewith or will be submitted on or by 19 Depths FDC-GR 6899' to 106' Columbia Gas Transmission Corporation Temperature 6899' to 3685' P. O. Box 1273 Induction 6893' to 3685' Charleston, West Virginia 25325

The operator requests that information given herein and log or logs be kept confidential for a period of ninety days after completion of the well covered by this report Yes (Yes) (No)

LOG

Furnished by Date
 Compiled by R. Robinson Date 2/2/76

SAMPLE No.	FORMATION	COLOR	HARD OR SOFT	TOP (feet)	BOTTOM (feet)	THICKNESS (feet)	REMARKS OIL, GAS, WATER DEEPS SHUT DOWN FISHING, ETC.
	Sand			0	97	97	
	Slate			97	129	32	Water @ 129'
	Coal			129	131	2	
	Shale			131	139	8	
	Sand			139	403	264	
	Coal			403	406	3	
	Sand			406	436	30	
	Coal			436	439	3	
	Sand			439	604	165	
	Shale			604	733	129	
	Sandy Shale			733	865	132	
	Coal			865	888	23	
	Sand & Shale			888	945	57	
	Coal			945	950	5	
	Sand & Shale			950	978	28	
	Coal			978	981	3	
	Sand			981	1113	132	
	Slate			1113	1179	66	
	Coal			1179	1182	3	
	Sand & Shale			1182	1256	74	
	Coal			1256	1261	5	
	Sand & Shale			1261	1296	35	
	Coal			1296	1298	2	
	Sand Shale			1298	1342	44	
	Coal			1342	1345	3	
	Shale			1345	1693	348	
	Sand			1693	1843	150	
	Coal			1843	1846	3	
	Sand & Shale			1846	1937	91	
	Coal			1937	1940	3	
	Sand			1940	2232	292	
	Sand & Shale			2232	2330	98	
	Sand			2330	3110	780	
	Sandy Shale			3110	3140	30	
	Shale			3140	3422	282	
	Sand & Shale			3422	3715	293	
	Sand			3715	4030	315	
	Shale			4030	4049	19	
	Lime			4049	4524	475	
	Siltstone			4524	4601	77	
	Sand			4601	4970	369	
	Shale			4970	5840	870	
	Lime			5840	6286	446	
	Shale			6286	6426	140	
	Sandy Shale			6426	6716	290	
	Sand			6716	6900	184	



THIS FORM MUST BE SIGNED BY AUTHORIZED PERSON:

Camden Bennett