



**BENCH MARK DESCRIPTION**  
 U.S.G.S. MONUMENT - STANDARD MARK  
 STAMPED DATA 1948 BEAR. 513.88'

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 WEST VIRGINIA.  
 Accuracy of accuracy is one part in 200

EMER. REG. NO. 2330 Signed William E. Hughes  
 67173 CHARLESTON, W. VA.

Company COLUMBIA GAS TRANS. CORP  
 Address BOX 1273 CHARLESTON, W. VA.  
 Farm GEORGES CREEK LAND MIN. CO.  
 Lease PT. 21661 Acres 610 (MERGER)  
 Well Farm No. 18 Well No. 20520  
 Elevation - Spirit Level 1328.91  
 Quadrangle CHARLESTON EAST 52  
 Township or District MALDEN  
 County KANAWHA  
 Sec., Lot, Or. \_\_\_\_\_  
 Coordinates LAT. 38° 17' 25" LONG. 81° 52' 43"  
 File No. 66-55 Dwg. No. \_\_\_\_\_  
 Date 3-17-1977 Scale 1" = 1000'

**WELL LOCATION MAP**  
 STATE OF WEST VIRGINIA

(+) Denotes Values Of Well On United States Topographic Maps

**039-3638**

Scale 15' □ 7 1/2' ■

6715 TUSCARORA

# Oil and Gas Division

## WELL RECORD

Quadrangle Charleston-East

Permit No. 47-029-3638

Rotary  Oil \_\_\_\_\_  
 Cable \_\_\_\_\_ Gas   
 Recvling \_\_\_\_\_ Comb \_\_\_\_\_  
 Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
 Disposal \_\_\_\_\_ (Kind)

Company Columbia Gas Trans. Corp.  
 Address P.O. Box 610 Clendenin, WV  
 Farm Georges Ck. Land & Mining Acres 640  
 Location (waters) Georges Creek  
 Well No. 20520 Elev 132662  
 District Malden County Kanawha  
 The surface of tract is owned in fee by \_\_\_\_\_  
Secondo Dalporto  
 Address \_\_\_\_\_  
 Mineral rights are owned by Georges Creek Land  
 & Mining Address Guilford, Conn.  
 Drilling Commenced 9-27-80  
 Drilling Completed 10-20-80  
 Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
 Final production 2860 M cu. ft. per day 0 bbls.  
 Well open 6 hrs. before test \_\_\_\_\_ RP.  
 Well treatment details:

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16 20"	20'	20'	10 sks.
Cond. 13x3/8	684'	684' ✓	520 sks. Class-A
9 5/8	2370'	2370' ✓	600 sks. 50/50 po
8 5/8			150 sks. Class-A
7	5265'	3106' ✓	100 sks. Posmix
5 1/2			100 sks. Class-A
4 1/2	6720'	6720' ✓	155 sks. Class-A
3			
2			
Lines Used			

Attach copy of cementing record.

Matrix Acid consisting of 500 gals. 15% HCl, 2000 gals. 15% HF acid.  
 H<sub>2</sub>O Frac; 760 BBLS Total Fluid.

Coal was encountered at 10-18; 502-589; 632-644 Feet \_\_\_\_\_ Inches \_\_\_\_\_  
 Fresh water Sand \_\_\_\_\_ Feet 200 Salt Water Salt Sand \_\_\_\_\_ Feet 1050  
 Producing Sand Clinton Depth 6613 - 6687

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand			0	10		
Coal			10	18		
Sand			18	582		
Coal			582	589		
Shale			589	632		
Coal			632	644		
Shale			644	955		
Salt Sand			955	1141	Water	
Shale			1141	1184		
Salt Sand			1184	1534		
Shale			1534	1585		
Red Rock			1585	1589		
Shale			1589	1621		
Maxon Sand			1621	1674		
Little Line			1674	1722		
Big Line			1722	1920		
Injun Sand			1920	1935		
Shale			1935	5112		
Onondaga			5112	5210		
Oriskany			5210	5237		
Lime			5237	6204		
Roschill			6204	6613		
Clinton			6613	6687	Gas 06662	

(over)

\* Indicates Electric Log tops in the remarks section

MAY 17 1982



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED  
JUN 30 1980

Oil and Gas Division  
OIL & GAS DIVISION  
DEPT. OF MINES  
**OIL AND GAS WELL PERMIT APPLICATION**

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

Surface Owner Secondo Dalporto-Tony Gentile  
Address P.O. Box 149, Montgomery, WV 25136  
Mineral Owner Georges Creek Land & Mining  
Address c/o J.R. Shrewsbury, P.O. Box 217  
Coal Owner Guilford, Connecticut 06437  
Address Same as Mineral Owner  
Coal Operator Unoperated  
Address \_\_\_\_\_

DATE June 12, 1980  
Company Columbia Gas Transmission Corp.  
Address P.O. Box 1273, Charleston, WV 25325  
Farm Georges Crk. Land & Min. Acres 640  
Location (waters) Georges Creek  
Well No. 20520 Elevation 1326.62  
District Malden County Kanawha  
Quadrangle Charleston East

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 3-2-81.

[Signature]  
Deputy Director - Oil & Gas Division

INSPECTOR  
TO BE NOTIFIED Martin Nichols  
ADDRESS P. O. Box 554, Clendenin, WV  
PHONE 548-6993

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 March 13 1926 by Georges Creek Land Co. made to \_\_\_\_\_ and recorded on the \_\_\_\_ day of \_\_\_\_ 19\_\_\_\_, in Kanawha County, Book 50 Page 120  
X 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:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address of Well Operator

Very truly yours,  
(Sign Name) [Signature] Well Operator  
Post Office 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.

47-039-3638 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by [Signature]  
Director, Exploration & Development

EXPLORE BOND

[Signature]

THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO X DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME \_\_\_\_\_ NAME Larry Friend  
 ADDRESS \_\_\_\_\_ ADDRESS P.O.Box 610, Clendenin, WV  
 TELEPHONE \_\_\_\_\_ TELEPHONE 965-3317  
 ESTIMATED DEPTH OF COMPLETED WELL: 6715 ROTARY X CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Tuscarora  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS X COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16	60'		To surface
13 - <del>X</del> 3/8	250'		To surface
9 - 5/8	2200'		To surface
8 - 5/8			
7	5150'		
5 1/2			
4 1/2	6715'		
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS \_\_\_\_\_  
 IS COAL BEING MINED IN THE AREA? No BY WHOM? \_\_\_\_\_

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929. A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.  
 We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
 For Coal Company  
 \_\_\_\_\_  
 Official Title

**R**  
 JUN 1 1990  
 OIL & GAS  
 DEPT. OF

**PERMIT BOND**