

**BENCH MARK DESCRIPTION**

U.S. GOVERNMENT STANDARD DISK 82-JEA-1963  
 NEAR FORKS OF ROAD NEAR OYAMA.  
 ELEVATION 864'

- New Location
- Storage
- Drill Deeper
- Abandonment
- Re-Drill/Fracture

"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. Minimum degree of accuracy is one part in 200

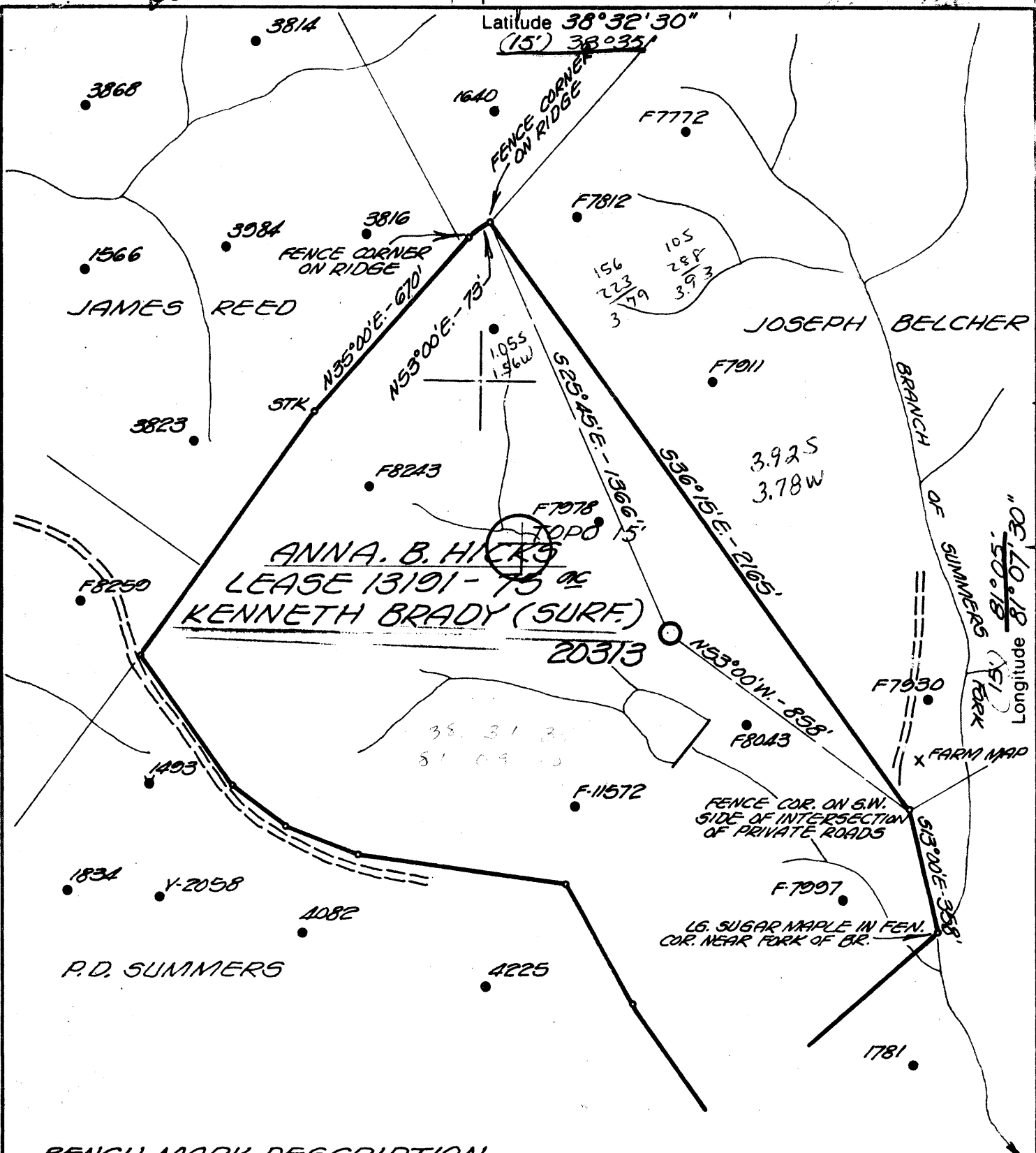
ENGR. REG. NO 2330 Signed *Adrian E. Chapman*  
 BOX 1273 CHARLESTON, W.VA.

Company COLUMBIA GAS TRANS. CORP.  
 Address BOX 1273 CHARLESTON, W.VA.  
 Farm ANNA B. HICKS, K. BRADY (surf.)  
 Lease 13191 Acres 75  
 Well Farm No. 10 Ser. No. 20313  
 Elevation - Spirit Level 982.95'  
 Quadrangle NEWTON, W.VA.  
 Township or District HENRY  
 County CLAY  
 Sec., Lot, Qr. \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_  
 Coordinates LAT. 38°31'35" LONG. 81°09'14"  
 File No. 86-71 Dwg. No. \_\_\_\_\_  
 Date SEPT. 8, 1975 Scale 1" = 400'

**WELL LOCATION MAP**  
**STATE OF WEST VIRGINIA**  
 (+) Denotes Values Of Well On United States Topographic Maps  
**CLA - 1130-FRAC.**  
 Scale 15'  7 1/2'

47-015

1970' ELEVATION 6-6 Granny Creek - Stockly (200)



**BENCH MARK DESCRIPTION**  
 U.S. GOVERNMENT STANDARD DISK 82-JEA-1963  
 NEAR FORKS OF ROAD NEAR OVAPA.  
 ELEVATION 864'

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>WEST VIRGINIA</u> . Minimum degree of accuracy is one part in <u>200</u> .
Storage	<input type="checkbox"/>	
Drill Deeper	<input type="checkbox"/>	
Abandonment	<input type="checkbox"/>	
Re-Drill/Fracture	<input type="checkbox"/>	

ENGR. REG. NO 2330 Signed *William E. ...*  
 BOX 1273 CHARLESTON, W.VA.

Company COLUMBIA GAS TRANS. CORP.  
 Address BOX 1273 CHARLESTON, W.VA.  
 Farm ANNA B. HICKS, K. BRADY (surf.)  
 Lease 13191 Acres 75  
 Well Farm No. 10 Ser. No. 20313  
 Elevation - Spirit Level 982.95' SC  
 Quadrangle NEWTON, W.VA.; OTHER 15'  
 Township or District HENRY  
 County CLAY  
 Sec., Lot, Qr. \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_  
 Coordinates LAT. 38°31'35" LONG. 81°09'14"  
 File No. 86-71 Dwg. No. \_\_\_\_\_  
 Date SEPT. 8, 1975 Scale 1" = 400'

**WELL LOCATION MAP**  
 STATE OF WEST VIRGINIA  
 (+) Denotes Values Of Well On United States Topographic Maps  
 CLA - 1130  
 Scale 15'  7 1/2'

47-015



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Newton  
Permit No. CLA-1130

Rotary X Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ Evaluation  
(Kind)

Company COLUMBIA GAS TRANS. CORP.  
Address Box 1273, Chas., WV 25325  
Farm Anna B. Hicks 10 Acres 75  
Location (waters) Summers Fork  
Well No. 20313 Elev. 982.95  
District Henry County Clay  
The surface of tract is owned in fee by Kenneth Brady

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			Cemented to surf.  70 sacks
Cond. 13-10"			
9 5/8			
8 5/8		261	
7			
5 1/2			
4 1/2		1966	
3			
2			
Liners Used			

Address Ovapa, WV 25150  
Mineral rights are owned by J. C. Hicks et ux  
Address 109 Costello St., Chas. WV  
Drilling Commenced 11/25/75  
Drilling Completed 12/4/75  
Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
Final production \_\_\_\_\_ cu. ft. per day \_\_\_\_\_ bbls.  
Well open \_\_\_\_\_ hrs. before test \_\_\_\_\_ RP.

Attach copy of cementing record.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet  
Producing Sand \_\_\_\_\_ Depth \_\_\_\_\_

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Big Lime			1753	1861		
Injun			1861	1904		
Squaw			1934	1944		
Weir Silt			1944			
TOTAL DEPTH			1980			

\* Indicates Electric Log tops in the remarks section.

(over)



IV-35  
(Rev 8-81)

Date December 3, 1986  
Operator's  
Well No. 20313  
Farm A. B. Hicks  
API No. 47 - 015 - 1130  
Frac

**RECEIVED**  
DEC 11 1986

**State of West Virginia**  
Department of Mines  
Oil and Gas Division

WELL OPERATOR'S REPORT  
OF

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY, MINING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 982.95 Watershed Summers Fork

District: Henry County Clay Quadrangle Newton

COMPANY Columbia Gas Transmission Corporation

ADDRESS P. O. Box 1273, Charleston, WV 25325

DESIGNATED AGENT R. C. Weidner

ADDRESS P. O. Box 1273, Charleston, WV 25325

SURFACE OWNER Kenneth Brady

ADDRESS   

MINERAL RIGHTS OWNER James C. Hicks

ADDRESS   

OIL AND GAS INSPECTOR FOR THIS WORK   

ADDRESS   

PERMIT ISSUED 10-17-83

DRILLING COMMENCED 10-18-83

DRILLING COMPLETED 10-18-83 ✓

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

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8			
7			
5 1/2			
4 1/2			
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Injun Depth 1970 feet

Depth of completed well 1980 feet Rotary    / Cable Tools   

Water strata depth: Fresh    feet; Salt    feet

Coal seam depths:    Is coal being mined in the area?   

OPEN FLOW DATA

Producing formation    Pay zone depth    feet

Gas: Initial open flow    Mcf/d Oil: Initial open flow    Bbl/d

Final open flow    Mcf/d Final open flow 3 Bbl/d

Time of open flow between initial and final tests    hours

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

(If applicable due to multiple completion--)

Second producing formation    Pay zone depth    feet

Gas: Initial open flow    Mcf/d Oil: Initial open flow    Bbl/d

Final open flow    Mcf/d Oil: Final open flow   

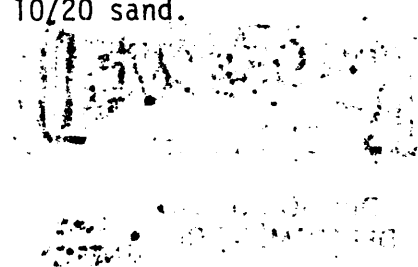
Time of open flow between initial and final tests    hours

Static rock pressure    psig (surface measurement) after    hours

DEC 15 1986  
(Continue on reverse)

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

Treated with 500 gal. HCl acid, 1000# 20/40 sand and 200# 10/20 sand.



WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas

(Attach separate sheets as necessary)

Columbia Gas Transmission Corporation  
Well Operator

By: *R. [Signature]*

Date: December 3, 1986

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 coal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

NOV 20 1975

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 November 19, 1975

Surface Owner Kenneth Brady

Company Columbia Gas Transmission Corporation

Address Ovapa, West Va. 25150

Address P. O. Box 1273, Charleston, WV 25325

Mineral Owner James C. Hicks, etux

Farm Anna B. Hicks Acres 75

Address 109 Costello St., Charleston, WV 25302

Location (waters) Summers Fork

Coal Owner Same as above

Well No. S-20313 Elevation 982.95'

Address \_\_\_\_\_

District Henry County Clay

Coal Operator Not Operated

Quadrangle Newton

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 3-21-76

Robert H. [Signature]

Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Martin Nichols  
PH: 548-6993 ADDRESS Cleanderin, W.Va.

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 April 23 1915 by Anna B. Hicks, et con made to United Fuel Gas Company and recorded on the 4th day of June 1915 in Clay County, Book 8 Page 169

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, W. Va. 26505  
AC 304-296-4461

Address  
of  
Well Operator

Very truly yours, COLUMBIA GAS TRANSMISSION CORP.

(Sign Name) [Signature]  
Well Operator  
Director, Exploration & Development  
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.

BLANKET BOND

Cl-1130 PERMIT NUMBER  
47-015

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 Mr. Floyd Stotts  
 ADDRESS \_\_\_\_\_ ADDRESS P.O.Box 1273, Charleston, WV 25325  
 TELEPHONE \_\_\_\_\_ TELEPHONE (304) 346-0951  
 ESTIMATED DEPTH OF COMPLETED WELL: 1970' ROTARY X CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Injun  
 TYPE OF WELL: OIL X GAS \_\_\_\_\_ COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8	250'	250'	
7			
5 1/2			
4 1/2	1970'	1970'	
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS \_\_\_\_\_ FEET \_\_\_\_\_  
 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



1) Date: September 14, 19 83  
 2) Operator's Well No. 20313  
 3) API Well No. 47 - 015 - 1130-FRAC  
 State County Permit

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

- 4) WELL TYPE: A Oil  / Gas \_\_\_\_\_  
 B (If "Gas", Production \_\_\_\_\_ / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow )  
 5) LOCATION: Elevation: 982.95 Watershed: Summers Fork  
 District: Henry County: Clay Quadrangle: Newton  
 6) WELL OPERATOR Columbia Gas Transmission Corp. 7) DESIGNATED AGENT J. L. Weekley  
 Address P. O. Box 1273 Address P. O. Box 1273  
Charleston, WV 25325 Charleston, WV 25325  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name \_\_\_\_\_ Address \_\_\_\_\_  
 9) DRILLING CONTRACTOR: Name \_\_\_\_\_ Address \_\_\_\_\_  
 10) PROPOSED WELL WORK: Drill \_\_\_\_\_ / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate   
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_  
 11) GEOLOGICAL TARGET FORMATION, Injun  
 12) Estimated depth of completed well, 1970 feet  
 13) Approximate trata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.  
 14) Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes \_\_\_\_\_ No

RECEIVED  
 SEP 15 1983  
 OIL & GAS DIVISION  
 DEPT. OF MINES

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water									
Coal									Sizes
Intermediate									
Production									Depths set
Tubing									
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-015-1130-FRAC Date October 17, 1983

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 October 17, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <b>MARKET BOND</b>	Agent: <u>[Signature]</u>	Plat: <u>[Signature]</u>	Casing: <u>[Signature]</u>	Fee: <u>580</u> <u>381</u>
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[Signature]  
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.