

(15') 38° 20'

Latitude 38° 17' 30"

5400'

Stake. Locust, Saurwood and Poplar Pointers, West side of Power Line R/W

Angle Iron, Gum and Hickory Stump pnts. Red Paint 75' South of drain.

VALLEY CAMP CO-ORDINATES
N-33726.98
E-30704.92

CAMPBELLS CREEK COAL CO.

X FARM MAP

Connected 15' Locust

543° 30' 35" W
8774.73'

535° 02' 51" W
6959.56'

KANAWHA & HOCKING COAL & COKE CO. SURFACE & MINERAL

VALLEY CAMP CO-ORDINATES
20345-T N-27996.69
E-26685.44

Set Stone. 30" White Oak.

VALLEY CAMP CO-ORDINATES

N-27798.20
E-25076.80

8" Sewer Pipe Filled with Concrete.

N62° 57' 57" E
1620.84'

574° 49' 26" E
2015.08'

VALLEY CAMP CO-ORDINATES
N-27468.91
E-28631.22

BENCH MARK

Upper Witcher School, at N.E. Corner of Schoolyard. 2.6 Mile N.E. of Junction of Witcher Creek Road & U.S. Route 60 at Junction left and right Parks Witcher Cr. 7' South of School Fence Corner. Standard Tablet Stamped 8 J.J.S 1956-700 Elev. 700.44'

"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 W.VA. Minimum degree of accuracy is one part in 200

LICENSED LAND SURVEYOR No 102 Signed *E. Hough Foster*
BOX 1273 CHARLESTON, W.VA.

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

Company COLUMBIA GAS TRANSMISSION CORP.
Address BOX 1273 CHARLESTON W.VA.
Farm KANAWHA & HOCKING COAL & COKE CO.
Lease 9279 Acres 14.128
Well Farm No. 104 Ser. No. 20345-7
Elevation - Spirit Level 848.19' SW
Quadrangle 7 1/2 QUICK; Clendenin 15'
Township or District CABIN CREEK
County KANAWHA
Sec., Lot, Qr. _____ T _____ R _____
Coordinates LONG- 81° 28' 38" LAT- 38° 16' 20"
File No. 70-53 Dwg. No. _____
Date 4-5-76 Scale 1" = 1000'

WELL LOCATION MAP
STATE OF WEST VIRGINIA

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

KAN - 2743

Scale 15' 7 1/2'

5-5 INDIAN CREEK (358)

(Deep Well)

47-039

JUN 6 1976



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

RECEIVED
JAN 18 1977
OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD⁴

Quadrangle Quick
Permit No. KAN-2743

Rotary Oil _____
Cable _____ Gas
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind) _____

Company	Address	Farm	Location (waters)	Well No.	District	County	Elev.	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Columbia Gas Transmission Corp.	P.O. Box 1273, Charleston, WV 25325	Kanawha & Hocking Coal & Coke 14,128	Left Fork Witcher Creek	20345-T	Cabin Creek	Kanawha	848.19	20-1/2"	30'	30'	25 sacks
The surface of tract is owned in fee by								13-1/2" 3/8"	265'	265'	275 sacks
Kanawha & Hocking Coal & Coke Co.								9 5/8"	2060'		800 sacks
Address 700 Westgate Towers, Cleveland, OH								8 5/8"			
Mineral rights are owned by Same								7"	5160'	5160'	100 sacks
Address _____								5 1/2"			
Drilling Commenced May 30, 1976								4 1/2"	6581'	6581'	150 sacks
Drilling Completed June 28, 1976								3"			
Initial open flow 500 mcf cu. ft. _____ bbls.								2"			
Final production _____ cu. ft. per day _____ bbls.								Liners Used			
Well open _____ hrs. before test _____ RP.											

Well treatment details:
Open flow after acidizing was 4.5 MMCF Attach copy of cementing record.

Massive Hydraulic Fracture with 314,000 gallons of fluid and 500,000 pounds of sand.

Open flow after fracturing was 8.5 MMCF in 24 hours.

Coal was encountered at 180' - 183' Feet _____ Inches
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Clinton Depth 5780 6581

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Shale			0	60		
Shale			60	78		Wet at 73 ft.
Sand			78	97		
Sand & Shale			97	122		
Shale			122	142		
Sand			142	180		
Coal			180	183		
Sand			183	257		
Red Rock			257	265		
Shale			265	320		
Sand			320	400		
Sand-Shale			400	430		
Shale			430	742		
Sand			742	931		
Shale			931	1030		
Sand-Shale			1030	1083		
Shale			1083	1122		
Sand			1122	1205		
Sand-Shale			1205	1256		
Lime			1256	1317		
Pencil Cave			1317	1325		

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Big Lime			1325	1481		
Injun			1481	1533		
Shale			1533	1596		
Shale & Red Rock			1596	1657		
Shale			1657	1760		
Shale-Sand			1760	1794		
Shale			1794	3010		
Sand Shale			3010	4974		
Sand Oriskany			4974	5008		
Lime			5008	5765		
Newburg			5765	5780		
Clinton			5780	6581		
T.D.				6581		

Top Juniata at 6526
log (FC)

6581
5008
1573 expl. ft.

5765
862
1903

Date January 12, 19 77

APPROVED JRH, Owner

By Dir. Exploration & Development

(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

MAY 21 1976

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 May 18, 1976

Surface Owner Kanawha & Hocking Coal & Coke Co.

Company Columbia Gas Transmission Corporation

Address 700 Westgate Tower, Cleveland, Ohio

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

Mineral Owner Same as above

Farm Kanawha & Hocking C & C #104 Acres 14,128

Address _____

Location (waters) Left Fork Witcher Creek

Coal Owner Same as above

Well No. 104-20345-T Elevation 848.19

Address _____

District Cabin Creek County Kanawha

Coal Lessee Valley Camp Coal Company

Quadrangle Quick

Address 700 Westgate Tower, Cleveland, Ohio

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 9-27-76.

Robert Hood
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Martin Nichols
PH: 548-6993 ADDRESS Cleander, 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 24 19 12 by Sunday Creek Coal Co. made to United Fuel Gas Company and recorded on the 17th day of June 19 12, in Kanawha County, Book 20 Page 311

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

Address
of
Well Operator

Very truly yours, COLUMBIA GAS TRANSMISSION CORPORATION

(Sign Name) Maure T. Cable

Manager, Development Drilling

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

Kan-2743 PERMIT NUMBER

47-039

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 Rock Castle Gas Company NAME John M. Foster
 ADDRESS 504 Commerce Square, Charleston, WV ADDRESS P.O. Box 1273, Charleston, WV 25325
 TELEPHONE (304) 344-2534 TELEPHONE (304) 346-0951
 ESTIMATED DEPTH OF COMPLETED WELL: 6550' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Clinton
 TYPE OF WELL: OIL _____ GAS X 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 - XX	30'		
13 - XX 3/8	510'		
9 - 5/8	2130'		
8 - 5/8			
7	5050'		
5 1/2			
4 1/2	6550'		
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? Yes BY WHOM? Valley Camp Coal Company

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