



AMHERST COAL CO.

IRON RAIL ON HILLSIDE
WEST SIDE POWER LINE
RIGHT-OF-WAY

SET STONE ON HILLSIDE
POPLAR & BEECH
POINTER

ANGLE IRON, BUM &
HICKORY STUMP
POINTERS, RED PAINT

30" WHITE OAK, CALL
OF SET STONE

KANAWHA & HOCKING
COAL & COKE CO.
(FEE)

BENCH MARK DESCRIPTION
U.S. GOVERNMENT BENCH MARK - STANDARD
DISK IN CONCRETE FOUNDATION OF OLD
BUILDING 35' SOUTH OF MINE ENTRANCE,
LEFT FORK OF WITCHER CREEK
ELEVATION 902.00'

COAL NOTE
OPERATED BY VALLEY CAMP
COAL COMPANY, BUT NOT IN
VICINITY OF WELL LOCATION

REVISED
4-3-80
6-10-80

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

"I, the undersigned, hereby certify that this map is correct to the best of my knowl-
edge 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 2000

Signed [Signature]

LIC. LAND SURVEYOR #102
BOX 1273 CHARLESTON, W.VA.

Company COLUMBIA GAS TRANS. CORP.
 Address BOX 1273 CHARLESTON, W.VA.
 Farm KANAWHA & HOCKING COAL & COKE CO.
 Lease 9279 Acres 14,128⁰⁵
 Well Farm No. _____ Ser. No. 20651
 Elevation - Spirit Level 1166.70'
 Quadrangle QUICK, W.VA. CLENDENIN 15'
 Township or District CABIN CREEK
 County KANAWHA
 Sec., Lot, Qr. _____ T _____ R _____
 Coordinates LAT. 38° 17' 25" LONG. 81° 26' 39"
 File No. 72-55 Dwg. No. _____
 Date 1-16-80 Scale 1" = 2000'

FORM 1495, FEB 4 CSD (REV. 11-74)

COLUMBIA GAS SYSTEM
COLUMBIA GAS TRANSMISSION CORPORATION

WELL LOCATION MAP
STATE OF WEST VIRGINIA

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

039-3635-REN.-P

Scale 15' 7-1/2' FEB 07 1983

DEEPWELL 7825 TUSCARORA



38° 17' 30"
81° 26' 30" (15)

AMHERST COAL CO.

SET STONE ON HILLSIDE
POPULAR & BEECH
POINTERS

BLOCK 101
640 AC

IRON PILE ON HILLSIDE
WEST SIDE POWER LINE
RIGHT OF WAY



20651

ANGLE IRON, OAK &
WICKORY STUMP
POINTERS, RED PAINT

5490

30" WHITE OAK CALL
OF SET STONE

N43°30'35"E
872.75'

FORK VALLEY CAMP CO. OLD VALUES
N = 34384.00
E = 35151.74

KANAWHA & HOCKING
COAL & COKE CO.
(FEE)

1/2 BOLT & NUT, & BEECH
POINTERS APPROX. 300'
NORTH OF BRANCH

BENCH MARK DESCRIPTION
U.S. GOVERNMENT BENCH MARK - STANDARD
DISK IN CONCRETE FOUNDATION OF OLD
BUILDING 35' SOUTH OF MINE ENTRANCE,
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Farm KANAWHA & HOCKING COAL & COKE CO.
Lease 9279 Acres 14.128 AC
Well Farm No. _____ Ser. No. 20651
Elevation - Spirit Level 1166.70'
Quadrangle QUICK, W. VA. 014 DENNIN 15'SW
Township or District CABIN CREEK
County KANAWHA
Sec., Lot, Qr. _____ T _____ R _____
Coordinates LAT. 38°17'25" LONG. 81°26'30"
File No. 72-55 Dwg. No. _____
Date 1-16-80 Scale 1" 2000'

FORM 1495 EE & EAD
(REV. 11-74)

COLUMBIA GAS SYSTEM
COLUMBIA GAS TRANSMISSION CORPORATION
WELL LOCATION MAP
STATE OF WEST VIRGINIA

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

039-3635
Scale 15' 7-1/2"

7825 TUSCARORA

RECEIVED



JAN 26 1983

IV-35 (Rev 8-81)

OIL AND GAS DIVISION WV DEPARTMENT OF MINES

Date January 25, 1983

Operator's Well No. 20651

State of West Virginia Department of Mines Oil and Gas Division

Farm Kanawha & Hocking Coal & Coke API No. 47 - 039 - 3635

FEB 07 1983

WELL OPERATOR'S REPORT OF DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 1166.7 Watershed Left Fork of Witcher Creek District: Cabin Creek County Kanawha Quadrangle Quick

COMPANY Columbia Gas Transmission Corporation

ADDRESS P. O. Box 1273, Charleston, WV

DESIGNATED AGENT J. L. Weekley

ADDRESS P. O. Box 1273, Charleston, WV

SURFACE OWNER Kanawha & Hocking Coal & Coke

ADDRESS 700 Westgate Tower, Cleveland, Ohio

MINERAL RIGHTS OWNER Kanawha & Hocking Coal & Coke

ADDRESS 700 Westgate Tower, Cleveland, Ohio

OIL AND GAS INSPECTOR FOR THIS WORK Homer H. Daugherty

ADDRESS Looneyville, WV

PERMIT ISSUED 12/18/81

DRILLING COMMENCED June 3, 1982

DRILLING COMPLETED June 23, 1982

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

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-1 1/2, 13-3/8, 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2-3/8, and Liners used.

GEOLOGICAL TARGET FORMATION Tuscarora Depth 7325 feet

Depth of completed well 7025 feet Rotary X / Cable Tools

Water strata depth: Fresh 20 feet; Salt 1160 feet

Coal seam depths: Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Water Well Pay zone depth feet

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

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

Time of open flow between initial and final tests hours

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

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

Acid Job (open hole completion)

250 gal. HCL, 1000 gal. HF, 250 gal. HCl, 1000 gal. HF, 250 gal. HCl,
100 gal. HF & 250 gal. HCl

Average Treating Pressure 2300 psig @ 4 BPM

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Soil			0	8	
Sand & Shale			8	54	Fresh water @ 20'
Shale			54	200	
Sand & Shale			200	946	
Salt Sand			946	1306	Salt water @ 1160'
Sand & Shale			1306	1402	
Little Lime			1402	1446	
Shale			1446	1460	
Big Lime			1460	1667	
Injun Sand			1667	1680	
Sand & Shale			1680	1792	
Weir Sand			1792	1870	
Sand & Shale			1870	2155	
Shale			2155	5282	
Lime			5282	5360	
Shale			5360	5381	
Oriskany			5381	5411	
Lime & Chert			5411	6156	
Newburg			6156	6188	
McKenzie			6188	6467	
Rose Hill Shale			6467	6810	
Hematite Bed			6810	6821	
Clinton Shale			6821	6926	
Clinton Sand			6926	6986	
Juaniata Shale		T.D.	6986	7025	

6926
1167
575.9

(Attach separate sheets as necessary)

Columbia Gas Transmission Corporation

Well Operator

By:

Date:

January 25, 1983

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 drill of a well."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE June 12, 1980

Surface Owner Kanawha & Hocking Coal & Coke
Address 700 Westgate Tower, Cleveland, Ohio

Company Columbia Gas Transmission Corp.
Address P.O. Box 1273, Charleston, WV 25325

Mineral Owner Same as above
Address _____

Farm Kanawha & Hocking Coal & Coke Acres 14,128
Location (waters) Left Fork of Witchers Creek

Coal Owner Same as above
Address _____

Well No. 20651 Elevation 1166.70
District Cabin Creek County Kanawha

Coal Operator Valley Camp Coal Co.
Address 2971 Dupont Avenue, East Shrewsbury, West Virginia

Quadrangle Quick

PERMIT MUST BE POSTED AT THE WELL SITE

provisions being in accordance with Chapter 22, the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 3-2-81.

INSPECTOR TO BE NOTIFIED Martin Nichols

ADDRESS P. O. Box 554, Clendenin, WV

PHONE 548-6993

Deputy Director - Oil & Gas Division
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 January 1 1943 by -- made to -- and recorded on the -- day of -- 19--, in Kanawha County, Book 95 Page 65

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:

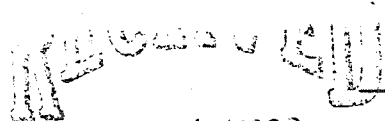
WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address of Well Operator

Very truly yours, [Signature]
(Sign Name) _____
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.



47-039-3635 PERMIT NUMBER

I have read and understand the reclamation requirements as set forth in Chapter 22, Article 6, Section 12-b and will carry out the specified requirements.

Signed by [Signature]
Director, Exploration & Development, OIL AND GAS DIVISION
DEPT. OF MINES

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: 7325 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 LIFT UP OR SACKS - CUBIC FT.
20 - 16	60'		To surface
13 - 10/ 3/8	250'		To surface
9 - 5/8	2600'		To surface
8 - 5/8			
7	5500'		
5 1/2			
4 1/2	7325'		
3			
2			Perf. Top
Liners			Perf. Bottom
			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? _____

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.

RECEIVED
JUN 18 1960

For Coal Company

Official Title

OIL & GAS DIVISION
DEPT. OF MINES

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY: ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) _____

Address _____

GEOLOGICAL TARGET FORMATION Tuscarora

Estimated depth of completed well 7325 feet. Rotary X / Cable tools /
Approximate water strata depths: Fresh, feet; salt, feet.
Approximate coal seam depths:
Is coal being mined in this area: Yes X / No /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL UP OR SACKS Cubic ft.	PACKERS
	Size	Grade	Weight per ft	New	Used	For Drill-ling		
Conductor	20"				X	60'		Kinds
Fresh water	13-3/8"	H-40	48	X		250'	To surface	
Coal	9-5/8"	K-55	32	X		2600'	To surface	Sizes
Intermed.	7"	N-80	23	X		5500'	To surface	
Production Tubing	4-1/2"	C-75	13.5	X		7325'	<u>into 9"</u>	Depths set
Liners								Perforations: Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22-4-2, (iii) Form IV-9, "Reclamation Plan" applicable to the reclamation required by Code §22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code §22-4-12a, and (v) if applicable, the consent required by Code §22-4-9a from the owner of any water well or drilling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 Renewed. This permit shall expire if operations have not commenced by 8-16-82.

J. H. Murray
Deputy Director - Oil & Gas Division

RECEIVED

NOV 30 1981

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code §22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided the coal operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: , 19 .

Handwritten initials

By: _____

Its: _____

RECEIVED

FORM OG-8

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

FEB 14 1983

AFFIDAVIT OF PLUGGING AND FILLING WELL OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

AFFIDAVIT SHOULD BE MADE IN TRIPPLICATE. ONE COPY MAILED TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THIRD COPY (AND EXTRA COPIES IF REQUIRED) SHOULD BE MAILED TO EACH COAL OPERATOR AT THEIR RESPECTIVE ADDRESSES.

Kanawha & Hocking Coal & Coke
COAL OPERATOR OR OWNER
700 Westgate Tower, Cleveland, Ohio 44100
ADDRESS

Columbia Gas Transmission Corp.
NAME OF WELL OPERATOR
Box 1273, Charleston, W. Va.
COMPLETE ADDRESS

February 8 1983
WELL AND LOCATION

Cabin Creek District

Same
COAL OPERATOR OR OWNER
ADDRESS

Kanawha County

LEASE OR PROPERTY OWNER
ADDRESS

Well No. 20651

Kanawha & Hocking Coal & Coke Farm

STATE INSPECTOR SUPERVISING PLUGGING Homer Daugherty

AFFIDAVIT

STATE OF WEST VIRGINIA,

County of _____ } ss:

and
being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by _____ well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the _____ day of _____, 19 _____, and that the well was plugged and filled in the following manner:

BAND OR ZONE RECORD FORMATION	FILLING MATERIAL	PLUGS USED SIZE & KIND	CASING	
			CSG PULLED	CSG LEFT IN
Clinton	Cement (6923-7023)	100' Neat	4900'	2043' (4-1/2)
Shale & Lime	Gel (5000-6913)	6% Bentonite	5120'	1900' (2-3/8)
Shale	Cement (4800-5000)	200' Neat		
Brown Shale	Gel (2600-4800)	6% Bentonite		
Brown Shale	Cement (2500-2600)	100' Neat	2400'	3045' (7"
air, Shale, Injun, Lime, Shale	Gel (950-2500)	6% Bentonite	-	2562' (9-5/8")
Sand & Shale	Cemtnt (850-950)	100' Neat		
Sand & Shale	Gel (100-850)	6% Bentonite	-	271' (13-3/8")
Sand, Shale & Soi	Cement (0-100)	100' Neat	-	20' (20")
COAL SEAMS				
(NAME)			DESCRIPTION OF MONUMENT	
(NAME)			36" of 7" Casing	
(NAME)				
(NAME)				

and that the work of plugging and filling said well was completed on the 14 day of February, 19 83.

And further deponents saith not.

Sworn to and subscribed before me this 21TH day of FEBRUARY, 19 83

My commission expires:

Rob Schuster
Notary Public.
039-3635-P
Permit No. _____

My Commission Expires April 9, 1986

KAN. - 3635-P