



BENCH MARK DESCRIPTION

U.S. GOVERNMENT U.E. SQUARE CUT ON EAST END OF CONCRETE HEAD WALL ON U.S. ROUTE 50 & 220 ELEVATION 1052'

"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

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

2-8-82

Signed Harold Foster
 LICENSED LAND SURVEYOR #152
 BOX 1273 CHARLESTON, W. VA.

Company COLUMBIA GAS TRANS. CORP.
 Address BOX 1273 CHARLESTON, W. VA.
 Farm LUCY PANCAKE, ET. AL.
 Lease 195468 Acres 222.52
 Well Farm No. 1 Ser. No. 20124
 Elevation - Spirit Level 1287.51' Elk Garden (5')
 Quadrangle ANTIOCH, W. VA.
 Township or District NEW CREEK
 County MINERAL
 Sec., Lot, Qr. _____ T _____ R _____
 Coordinates LAT. 39°21'35" LONG. 79°03'40"
 File No. _____ Dwg. No. _____
 Date JAN. 8, 1980 Scale 1" = 400'

FORM 1495 CE 4 CSO (REV. 11-78)

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

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

057-0037 - P

Scale 15' 7-1/2'

MAR 01 1982

1-0 nick... 265A'



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
MAR 31 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.

DATE March 31, 1980

Surface Owner Lucy Pancake, et al Company Columbia Gas Transmission Corp.
 Address P.O. Box 90, New Creek W. Va 26743 Address P. O. Box 1273, Chas., W. Va.
 Mineral Owner Same as above Farm Lucy Pancake et al Acres 222.5
 Address _____ Location (waters) Spring Run
 Coal Owner Same as above Well No. 20124 Elevation 1287.51
 Address _____ District New Creek County Mineral
 Coal Operator Unoperated Quadrangle Antioch
 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 12-3-80.

INSPECTOR
 TO BE NOTIFIED Robert Stewart
 ADDRESS P. O. Box 345, Jane Lew, W. Va.
 PHONE 884-7782

Robert Stewart

GENTLEMEN: Director - Oil & Gas Division

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 11-2 1979 by Lucy Pancake et al made to Columbia Gas Trans. and recorded on the _____ day of _____ 19____, in Mineral County, Book 218 Page 588

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) *Robert Stewart* Well Operator
P. O. 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

47-0057-0037 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 *Robert Stewart*
Director, Exploration & Development

G. Survey

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 _____
 ADDRESS _____ ADDRESS _____
 TELEPHONE _____ TELEPHONE _____
 ESTIMATED DEPTH OF COMPLETED WELL: 8650' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 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 - 1 1/4	90'		
13 - 1 1/8 3/8	500'		
9 - 5/8	2500'		
8 - 5/8			
7			
5 1/2	8650'		
4 1/2			
3			
2			Perf. Top
			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

IV-35
(Rev 8-81)

RECEIVED
FEB 24 1982



OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

Date February 17, 1982

Operator's
Well No. 20124-T
Farm Pancake
API No. 47 - 057 - 0037

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 ___ / Underground Storage ___ / Deep X / Shallow ___ /)

LOCATION: Elevation: 1250' Watershed Ash Spring Run
District: New Creek County Mineral Quadrangle Anitoch 7-1/2'

COMPANY COLUMBIA GAS TRANSMISSION CORPORATION

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

DESIGNATED AGENT

ADDRESS

SURFACE OWNER Lucy Pancake

ADDRESS

MINERAL RIGHTS OWNER Lucy Pancake

ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK Robert

Stewart ADDRESS Weston, WV

PERMIT ISSUED

DRILLING COMMENCED July 21, 1980

DRILLING COMPLETED September 30, 1980

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 20-18 Cond.	74	74	102
13-10X	483	483	372
9 5/8	2425	2425	1100
8 5/8			
7			
5 1/2		1688	312
4 1/2			
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Depth 7535 feet

Depth of completed well 9775 feet Rotary X / Cable Tools

Water strata depth: Fresh 100 feet; Salt feet

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

OPEN FLOW DATA

Producing formation Oriskany/Helderberg Pay zone depth 9210 feet

Gas: Initial open flow 688 Mcf/d Oil: Initial open flow Bbl/d

Final open flow 3 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 Keyser Helderberg Pay zone depth 9126 feet

Gas: Initial open flow 300 Mcf/d Oil: Initial open flow Bbl/d

Final open flow 0 Mcf/d Oil: Final open flow Bbl/d

Time of open flow between initial and final tests hours

Static rock pressure 400 psig (surface measurement) after 66 hours shut in

MAR 9 1982
(Continue on reverse side)

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

Perforated 9210 - 9391' 12 Shots

Treated w/1500 gals MCA 11/9/80
Treated w/10,000 gals MOD-202 11/10/80
Set Halliburton EZ Drill plug @ 9170' 11/12/80

Perforated 9126-9130' 9 Shots

Treated w/500 gals MCA and 9500 gals MOD-202 11/14/80

Acid Fractured w/1300 bbls Gel-Acid; 43,000# 80/100 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
Brallier			Surface	1984	Faulted several times Tully ls. @ 2073-76'
Harrell			1984	2125	
Mahantango			2125	2254	Tiogo Bentonite 2620'
Upper Marcellus			2254	2342	
Purcell ls			2342	2450	
Lower Marcellus			2450	2637	
Needmore Shale			2637	2777	
Oriskany SS			2777	2945	
Helderberg Grp.			2945	3634	
Tonoloway Ls			3634	7188	
Helderberg			7188	8000	
Oriskany SS			8000	8230	
Needmore Shale			8230	8430	7188 is Tonoloway Top upside down 8000' Helderberg top upside down 8230' Oriskany top upside down 8430 Needmore upside down
Fault			8500		
Needmore			8558	8694	
Oriskany			8694	8850	
Helderberg ls			8850	9350	9350' Helderberg top upside down
Oriskany			9350	9534	9534' Oriskany top upside down
Needmore			9534		
Fault			9602		
Needmore			9618	9775	
<u>Oriskany</u>			9775	T.D.	T.D. @ 9927' in Oriskany Sand

(Attach separate sheets as necessary)

COLUMBIA GAS TRANSMISSION CORPORATION

Well Operator

J. L. Weekley, Director, Drilling & Operations

By: *J. L. Weekley*

Date: February 17, 1982

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."

FEB 24 1982

FORM 06-8

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. 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.

N/A	Columbia Gas Transmission Corporation
COAL OPERATOR OR OWNER	NAME OF WELL OPERATOR
ADDRESS	P.O. Box 1273, Charleston, WV 25325
N/A	COMPLETE ADDRESS
COAL OPERATOR OR OWNER	February 18 19 82
ADDRESS	WELL AND LOCATION
Lucy Pancake	New Creek District
LEASE OR PROPERTY OWNER	Mineral County
ADDRESS	Well No. 20124-T
	Pancake Farm
STATE INSPECTOR SUPERVISING PLUGGING	Robert Stewart

AFFIDAVIT

STATE OF WEST VIRGINIA,

County of Mineral } ss:

Michael J. Akers, Jr. and Charles D. Fordyce

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 Columbia Gas Transmission Corp, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 29th day of January, 19 82, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL	PLUGS USED SIZE & KIND	CASING	
			CSG PULLED	CSG LEFT IN
Keyser Helderberg	Set @ 9170'	Hall. EZ Drill		
Keyser Helderberg	Set @ 9110'	Hall. EZ Drill		
9126'- 9130'		EZ Drill Squeeze Packer		
	Pit Water			
5-1/2" Casing Cut	56 sks Common Cement	200 ft. cement Plug	7920'	1688'
7980'-7780'				
Open Hole	Pit Water			
Bottom of 9-5/8"				2425'
2880'-2380'	177 sks Common Cement	500 ft. Cement		
13-3/8" Casing				483'
Surface Plug	38 sks Common cement	100 ft. cement		
100'-0'				
20" Casing				74'
COAL SEAMS				
(NAME)		DESCRIPTION OF MONUMENT		
(NAME)		As prescribed by law		
(NAME)				
(NAME)				

and that the work of plugging and filling said well was completed on the 11th day of February, 19 82.

And further deponents saith not.

Sworn to and subscribed before me this 18 day of February, 19 82.

My commission expires:

August 13, 1989

Michael J. Akers Jr.
Charles D. Fordyce
Larry L. Bredetto
Notary Public.

Permit No. 47-057-0037