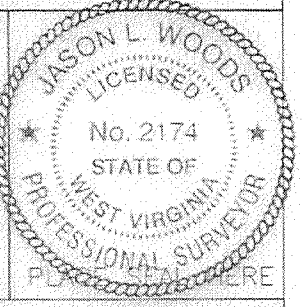


LATITUDE 38°25'00"
 LONGITUDE 81°25'00"
 4,115'
 7,450'

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS REVISED 6/5/13

FILE No. 13-100-010
 DRAWING No. 13-100-010
 SCALE 1"=500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION TRIMBLE PRO XH GPS UNIT

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.
 (SIGNED) JASON L. WOODS PS #2174



STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 NITRO, WV

DATE APRIL 19 20 13
 OPERATOR'S WELL No. 12079
 API WELL No. 47 039 -02816 R

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION ___ STORAGE DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1115' WATER SHED FALLING ROCK CREEK
 DISTRICT ELK COUNTY KANAWHA
 QUADRANGLE BLUE CREEK

SURFACE OWNER JOHNNY P. & THELMA R. JACKSON ACREAGE 10.19
 OIL & GAS ROYALTY OWNER J. H. PERRY, ET UX LEASE ACREAGE 162
 LEASE No. 11347

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) FRAC

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 5450
 WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT PAUL AMICK
 ADDRESS PD BOX 1273, CHARLESTON, WV ADDRESS P.O. BOX 1273, CHARLESTON W.V.
 25325-1273 25325-1273

FORM IV-6 (8-78)

06/14/2013

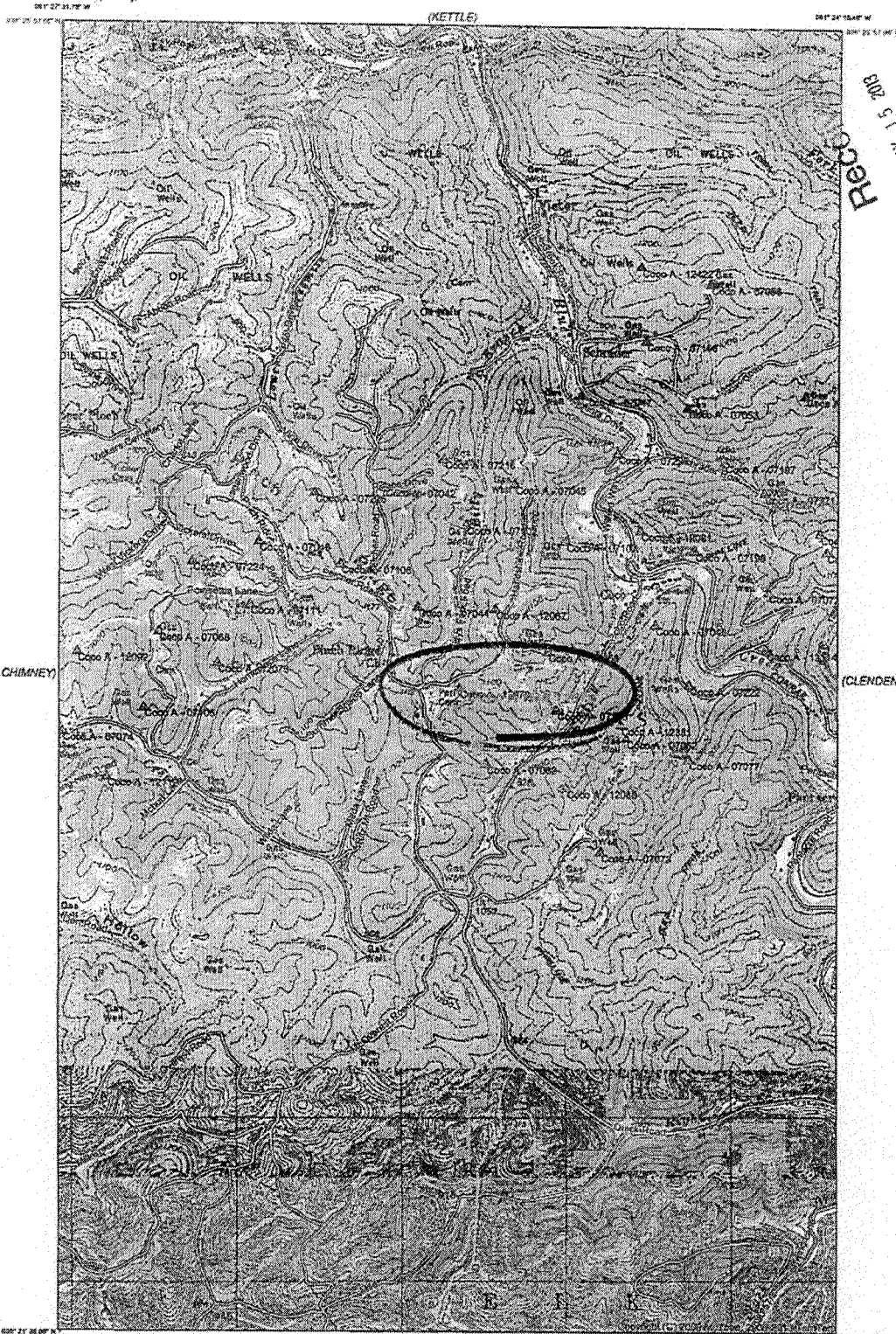
3902816R

(ROMANCE)



BLUE CREEK QUADRANGLE
WEST VIRGINIA
TOPOGRAPHIC SERIES

(CLIO)



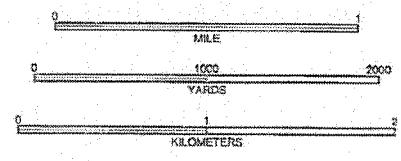
Recd
MAY 15 2012
Checked by: [illegible]
Checked by: [illegible]

(CHARLESTON EAST)

Produced by MyTopo Terrain Hivector
Topography based on USGS 1:24,000 Maps
North American 1983 Datum (NAD83)
Poyzeux Projection
To place on the predicated North American 1927 move the
projection lines 11M N and 14M E



(QUICK)
SCALE 1:24000



CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM 1929

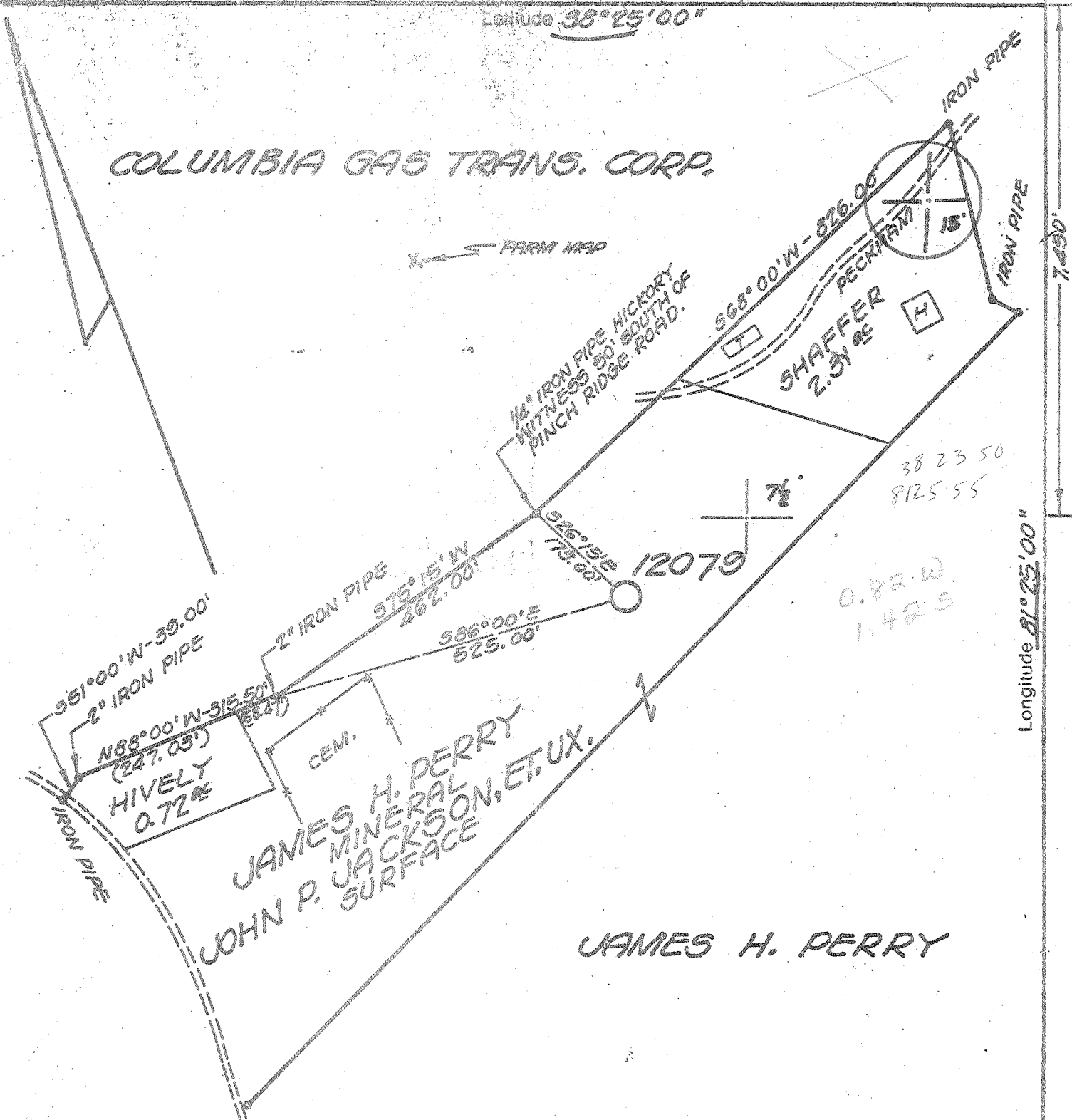
BLUE CREEK, WV
1957

(MAMMOTH)

Latitude 38°25'00"

COLUMBIA GAS TRANS. CORP.

FARM MAP



JAMES H. PERRY
MINERAL SURFACE
JOHN P. JACKSON, ET. UX.

JAMES H. PERRY

BENCH MARK DESCRIPTION

COPPER DISK IN TOP OF CONCRETE POST STAMPED 232 SKS 1956 ELEVATION 1052.142'

- 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
BOX 1273 CHARLESTON, W. VA.

Signed *[Signature]*

Company COLUMBIA GAS TRANS. CORP.
 Address BOX 1273 CHARLESTON, W. VA.
 Farm JAMES H. PERRY, John P. Jackson
 Lease 11347 Acres 162
 Well Farm No. _____ Ser. No. 12079
 Elevation - Spirit Level 1103.49' WC
 Quadrangle BLUE CREEK, Clendenin 15'
 Township or District ELK
 County KANAWHA
 Sec., Lot, Qr. _____ T _____ R _____
 Coordinates LAT. 38°23'46" LONG. 81°25'55"
 File No. 72-61 Dwg. No. _____
 Date 11-17-1977 Scale 1" = 200'

COLUMBIA GAS SYSTEM
COLUMBIA GAS TRANSMISSION CORPORATION
WELL LOCATION MAP

STATE OF WEST VIRGINIA

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

KAN - 2816

Scale 15' 7 1/2'

47-039

FEB 21 1978

Deep Well 5469 Oriskany 9-0 Blue Creek (217)

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FEB - 9 1979

Form OG-10



OIL & GAS DIVISION
DEPT. OF MINES

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary
Spudder
Cable Tools
Storage

Quadrangle Blue Creek

Permit No. Kan. 2816

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Columbia Gas Transmission Corp.
Address P.O. Box 1273 Charleston, W. Va.
Farm James H. Perry Acres 162
Location (waters) Blue Creek
Well No. 12079 Elev. 1103
District Elk County Kanawha
The surface of tract is owned in fee by John P. Jackson
Address Blue Creek, W. Va.
Mineral rights are owned by Joseph Perry
Address Elkview, W. Va.
Drilling commenced 3-3-78
Drilling completed 3-15-78
Date Shot From To
With

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13 3/8"	149'	149'	
10			Size of
9-5/8"	2083	2083	
7"	5343	5343	Depth set
5 3/16			
4 1/2			
3			Perf. top
2 3/8"	5359	5359	Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume Cu. Ft.
Rock Pressure lbs. hrs.
Oil bbls., 1st 24 hrs.
WELL ACIDIZED (DETAILS) 1000 gal.
MCA 15%
WELL FRACTURED (DETAILS) Water frac using 840 BBLs and 20,000# 20-40 mesh sand.

Attach copy of cementing record.
CASING CEMENTED 13-3/8 SIZE 150 No. Ft. 3-5-78 Date
Amount of cement used (bags) 150 sacks - Neat Cement
Name of Service Co. Halliburton Services
COAL WAS ENCOUNTERED AT FEET INCHES
FEET INCHES FEET INCHES
FEET INCHES FEET INCHES

RESULT AFTER TREATMENT (Initial open Flow or bbls.) 11.6 million MCF
ROCK PRESSURE AFTER TREATMENT 1470 HOURS 24
Fresh Water Feet Salt Water Salt Sand Feet 1040'
Producing Sand Oriskany Depth 5369-5417'

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand&Shale			0	105			
Coal			105	109			
Sand&Shale			109	890			
Salt Sand			890	1490	Water	1040	
RedRock&Shale			1490	1610			
Big Lime			1610	1825			
Injun Sand			1825	1870			
Weir Sand			1870	2065			
Shale			2065	5226			
Lime			5226	5369			
Oriskany			5369	5417			

FEB 20 1979



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FEB - 9 1978

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner John P. Jackson, et. ux.
Address Blue Creek, W. Va. 25026
Mineral Owner Joseph Perry, et. al.
Address Rt. 3, Box 347, Elkview, W. Va. 25071
Coal Owner Beulah M. Sawyers Farr, et. al.
Address 2102 Beverly St., Parkersburg, W. Va.
Coal Operator Not Operated
Address _____

DATE February 7, 1978
Company Columbia Gas Transmission Corporation
Address P. O. Box 1273, Charleston, W. Va. 25325
Farm James H. Perry Acres 162
Location (waters) Elklick Creek
Well No. 12079 Elevation 1103.49
District Elk County Kanawha
Quadrangle Blue Creek

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 6-9-78

INSPECTOR
TO BE NOTIFIED Mr. Martin Nichols
ADDRESS Box 554, Clendenin, W. Va. 25045
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 April 1 1948 by J. H. Perry made to United Fuel Gas Company and recorded on the _____ day of _____ 19____ in Kanawha County, Book 116 Page 419
 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)
Director, Well Operator
Exploration and Development
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.

PRINTED

KAN-2816 PERMIT NUMBER

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

Signed by
Director, Exploration and Development

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 _____ NAME Larry Friend
 ADDRESS _____ ADDRESS P.O. Box 610, Clendenin, W. Va.
 TELEPHONE _____ TELEPHONE 304/965-3317
 ESTIMATED DEPTH OF COMPLETED WELL: 5469' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 TYPE OF WELL: OIL _____ GAS _____ COMB. _____ STORAGE X 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 - 1 1/2"	30'		To Surface
13 - 1 1/2" / 3/8"	200'		To Surface
9 - 5/8"	2100'		To Surface
8 - 5/8"			
7"	5360'		
5 1/2"			
4 1/2"			
3"			Perf. Top
2 3/8"	5,370'		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

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work



API 47-039-02816 County Kanawha District Elk
Quad Blue Creek Pad Name _____ Field/Pool Name Coco A Storage
Farm name Perry, James H. Well Number 12079
Operator (as registered with the OOG) Columbia Gas Transmission, LLC
Address 1700 MacCorkle Ave SE City Charleston State WV Zip 25325-1273

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing _____ Easting _____
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) 1115 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine

Mud Type(s) and Additive(s)
N/A - existing well and not deepened

Date permit issued 6/11/13 Date drilling commenced _____ Date drilling ceased _____
Date completion activities began _____ Date completion activities ceased 11/21/13 (re-work complete)
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft _____ Open mine(s) (Y/N) depths _____
Salt water depth(s) ft _____ Void(s) encountered (Y/N) depths _____
Coal depth(s) ft _____ Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) _____

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Office of Oil & Gas

Reviewed by: _____

JAN 02 2014

WV Department of
Environmental Protection

01/10/2014

Blue CK (Falling RK) (217) 9-0

API 47-039 - 02816 Farm name Perry, James H. Well number 12079

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details No existing casing was altered and no additional casing installed during permitted well work. Tubing was pulled and left out of well.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) _____ Loggers TD (ft) _____
 Deepest formation penetrated _____ Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) _____

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

API 47- 039 - 02816 Farm name Perry, James H. Well number 12116

PRODUCING FORMATION(S)	DEPTHS	
Oriskany (storage)	TVD	5447 MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP		BOTTOM		DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		

Please insert additional pages as applicable.

Drilling Contractor _____
Address _____ City _____ State _____ Zip _____

Logging Company _____
Address _____ City _____ State _____ Zip _____

Cementing Company _____
Address _____ City _____ State _____ Zip _____

Stimulating Company _____
Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by Jim Amos Telephone 304-483-0073
Signature *Jim Amos* Title Senior Engineer Date 12/11/13

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

Coco A 12079

Existing storage well drilled in 1978.

Note that 6/11/13 permit proposed included fracture stimulation as part of scope of work, but frac never performed.

Work Performed: Tubing pulled, new wellhead installed, and well cleaned with coil tubing.

Jim Amos

Jan E Amos

12/11/13