

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

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil ___ / Gas XXI
(If "Gas", Production XXI Underground storage ___ / Deep ___ / Shallow XXI)
LOCATION: Elevation: 2270' Watershed: Little Laurel Run
District: Caring Creek County: Randolph Quadrangle: Ellamore, W.Va.

WELL OPERATOR Century Hydro-Carbon, Corp. DESIGNATED AGENT _____
Address Suite 305, 7030 S. Yale Address _____
Tulsa, Oklahoma 74136

OIL & GAS ROYALTY OWNER Armand Ricottilli COAL OPERATOR _____
Address Box 25, Star Route Address _____
Coalton, W.Va. 26257

ACREAGE 110.8 COAL OWNER(S) WITH DECLARATION ON RECORD:
SURFACE OWNER Armand Ricottilli Name Armand Ricottilli
Address Box 25, Star Route Address Box 25 Star Route
Coalton, W.Va. 26257 Coalton, W.Va. 26257
ACREAGE 110.8 Name _____
Address _____

FIELD SALE (IF MADE) TO:
Name _____
Address _____

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Robert Stewart
Address P.O. Box 345, Jane Lew, W.Va. 26378
PH: 884-7782

RECEIVED
FEB - 6 1980
OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ___ / lease XXI other contract ___ / dated 14 Jan, 1972, to the undersigned well operator from Armand Ricottilli

[If said deed, lease, or other contract has been recorded:]
Recorded on Jan, 1972, in the office of the Clerk of the County Commission of Randolph County, West Virginia, in Deed Book 276 at page 31. A permit is requested as follows:

PROPOSED WORK: Drill XX / Drill deeper ___ / Redrill ___ / Fracture or stimulate ___ /
Plug off old formation ___ / Perforate new formation ___ /
Other physical change in well (specify) _____

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

Century Hydro-Carbon, Corp. 03/29/2024
Well Operator
By Alvin Louren
Its Petroleum Engr.

"Blanket Bond"

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Union Drilling
Address Buckhannon, W. Va.

GEOLOGICAL TARGET FORMATION, Benson

Estimated depth of completed well, 5000' feet Rotary XXI Cable tools /

Approximate water strata depths: Fresh, 2 feet; salt, feet.

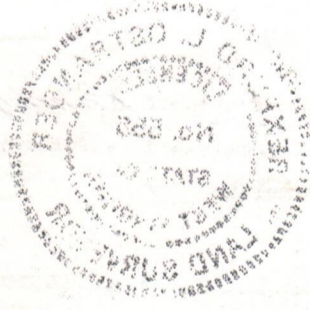
Approximate coal seam depths: 2 Is coal being mined in the area? Yes / No XXI

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	Kinds
Conductor	11 3/4"			X		20'	20'		
Fresh water									
Coal									
Intermediate	8 5/8"		20#	X		900'	900'	To Surface	
Production	4 1/2"		10 1/2#	X		5000'	5000'	325 SKS	Depths set
Tubing									
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 § 22-4-8a from the owner of any water well or dwelling 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. This permit shall expire if operations have not commenced by 10-15-80.

Robert T. [Signature]
Deputy Director - Oil & Gas Division

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 XXI 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 well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 1-11, 1980

Armand Picattelli
By
Its

03/29/2024

Locate and show (1) Well Location (2) Access Road (3) Well Site (4) Drilling Pit and (5) Necessary Drainage Features.

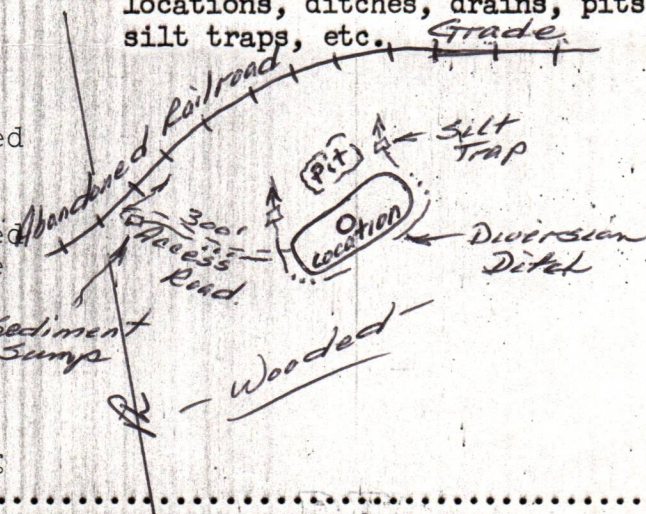


COMPANY NAME Century Hydro-Carbon, Corp. PERMIT NO. _____
 FARM Armand Ricottilli DISTRICT Loring Creek COUNTY Randolph

STATEMENT OF RECLAMATION PLAN:

The access road will leave an abandoned railroad bed and run for 300 ft. to the location. The location shall be constructed on gentle sloping terrain in the woods. The timber being of value will be removed by the land owner. The pit will be constructed northwest of the location being of adequate size to contain all drilling fluids. A diversion ditch will be constructed around the perimeter to divert runoff to silt traps. Upon completion all disturbed areas, location and pit shall be reclaimed by seeding, mulching and fertilized leaving only the necessary area for the operation and maintenance of the well.

Not to scale; drawing of all roads, locations, ditches, drains, pits, silt traps, etc. Grade



FEB - 6 1980

2 GAS DIVISION
MNES

This plan was observed and agreed upon between the well operator, contractor, and the district oil and gas inspector. 03/29/2024

Please indicate () "YES" if the district inspector was present.

"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."

Submitted By: Alvin Lucas Title Petroleum Eng. Date 2-3-80



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECORDED

APR 25 1980

**Oil and Gas Division
WELL RECORD**

OIL & GAS DIVISION
DEPT. OF MINES

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

Quadrangle Ellamore

Permit No. 0304

Company Century Hydrocarbon
Address 7030 S. Yale, Suite 305
Tulsa, OK 74177
Farm Armand #4 (M-2) Acres _____
Location (waters) _____
Well No. #4 Elev. _____
District Roaring Creek County Randolph
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling Commenced 2-27-80
Drilling Completed 3-5-80
Initial open flow _____ cu. ft. _____ bbls.
Final production 650 MCF cu. ft. per day _____ bbls.
Well open _____ hrs. before test _____ RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8	936		300 sk
7			
5 1/2			
4 1/2	5100'		600 sk
3			
2			
Liners Used			

Well treatment details: 1st stage:

Attach copy of cementing record.

Broke 1600 psi, average pressure 2500, Rate 34 BPM, instantaneous shut in 2000
After 5 min. 1600, Total fluid 550 Bbls. Perforate 4909-35 14 holes
Haverty formation

Second Stage: Perforate 3565-3623 10 holes, Benson sand, Broke 1500 psi,
Average pressure 2300, psi 2000, after 5 min. 1600, Rate 32 BPM, Ran 507
Bbls. fluid, 30,000 of 80/100, 20/40 each stage

Coal was encountered at _____ Feet _____ Inches
Fresh water _____ Feet Salt Water _____ Feet
Producing Sand Elk and Riley Depth _____

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Coal			0	3		
Clay			3	16		
Coal			16	20		
Clay			20	30		
Sand			30	172		
Sand and Shale			172	194		
Coal			194	197		
Sand			197	264		
Sand			197	264		
Sand and Shale			164	322		
Sand and Shale			322	520		
Sand and Shale			520	645		
Sand			645	662		
Shale			662	671		
Coal			672	678		
Sand, Shale & RR			678			
Sand, Shale & RR			1188	1205		
Big Lime			1205	1331		
B. Injun			1331	1430		
Shale			1430	1474		
Sand			1474	1506		
Shale and Sand			1506	1862		

03/29/2024

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand			1862	1914		
Sand and Shale			1914	2118		
Sand			2118	2142		
Shale			2142	2270		
Sand			2270	2292		
Shale			2292	3518		
Sandy Shale	<i>Riley</i>		3518	3615		← <i>perfs 356.5 - 362.3</i>
Shale			3615	4361		
Benson			4361	4384		
Shale			4384	4922		
Elk Sand			4922	4966		<i>perfs 490.9 - 493.5</i>
Shale			4966	5375		

03/29/2024

Date 4/25/28 19__

APPROVED *J. [Signature]* (Owner)

By *[Signature]* (Title)

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

RECEIVED

MAR - 3 1980

INSPECTOR'S WELL REPORT

OIL & GAS DIVISION
DEPT. OF MINES

Permit No. 083-0304

Oil or Gas Well GAS
(KIND)

Company	CASING AND TUBING	USED IN DRILLING	Left in Well	PACKERS
<u>CENTURY HYDRO-CARBON CORP.</u>				
Address <u>TULSA, OKLA</u>	Size			
Farm <u>ARNAND RICOTTI/II'</u>	16			Kind of Packer
Well No. <u>M-2 # 4</u>	13			
District <u>ROARING CREEK</u> County <u>RAUDOLPH</u>	10			Size of
Drilling commenced <u>2-28-80</u>	8 1/4			
Drilling completed _____ Total depth _____	6 3/4			Depth set
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom
Volume _____ Cu. Ft.	Liners Used			Perf. top
Rock pressure _____ lbs. _____ hrs.				Perf. bottom
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names UNION DRIG RIG = 6

Remarks:
Move Rig SPUD

2-28-80
DATE

Robert Stewart 03/29/2024 511
DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT

Permit No. _____ Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner	Location	Amount	Packer	Location			
PLUGS USED AND DEPTH PLACED			BRIDGES		CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION		RECOVERED	SIZE	LOST

Drillers' Names _____

Remarks: _____

_____ I hereby certify I visited the above well on this date.
DATE

03/29/2024
DISTRICT WELL INSPECTOR

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

RECEIVED

MAR - 4 1980

INSPECTOR'S WELL REPORT OIL & GAS DIVISION

DEPT. OF MINES

Oil or Gas Well COAL
(KIND)

Permit No. 083-0304

Company	CASING AND TUBING	USED IN DRILLING	Left in Well	PACKERS
<u>CENTURY HYDRO CARBON</u>				
Address <u>TULSA OKLA</u>	Size			
Farm <u>ARMAND Ricottilli</u>	16			Kind of Packer
Well No. <u>M-2 #4</u>	13			
District <u>REARING Creek</u> County <u>RANDOLPH</u>	10			Size of
Drilling commenced <u>2-28-80</u>	<u>8 7/8</u>	<u>908</u>	<u>240</u>	<u>SKS</u>
Drilling completed _____ Total depth _____	6 3/4			Depth set
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom
Volume _____ Cu. Ft.	Liners Used			Perf. top
Rock pressure _____ lbs. _____ hrs.				Perf. bottom
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED <u>8 7/8</u> SIZE <u>908</u> No. FT. <u>3-1-80</u> Date			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY <u>HALLIBURTON</u>			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names UNION DRIB Rig-6

Remarks:

Cement to SURFACE

3-1-80
DATE

Robert Schmitt 03/29/2024 511
DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT

Permit No. _____

Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner	Location	Amount	Packer	Location			
PLUGS USED AND DEPTH PLACED			BRIDGES		CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION		RECOVERED	SIZE	LOST

Drillers' Names _____

Remarks: _____

_____ I hereby certify I visited the above well on this date.
DATE 03/29/2024
DISTRICT WELL INSPECTOR

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

RECEIVED

JUN 12 1981 INSPECTOR'S WELL REPORT

Permit No. 083-0304
OIL & GAS DIVISION

Oil or Gas Well GAS

DEPT. OF MINES		CASING AND TUBING	USED IN DRILLING	Left in Well	PACKERS
Company	<u>CENTURY HYDRO CARBON</u>				
Address	<u>BUCK HANNON</u>	Size			
Farm	<u>ARMAND RICOTTI 'III'</u>	16			Kind of Packer
Well No.	<u>M-2 #4</u>	13			
District	<u>REARING CREEK</u> County <u>RANDOLPH</u>	10			Size of
Drilling commenced	<u>2-28-80</u>	8 1/4			Depth set
Drilling completed	Total depth	6 3/4			
Date shot	Depth of shot	5 3/16			Perf. top
Initial open flow	/10ths Water in	3			Perf. bottom
Open flow after tubing	/10ths Merc. in	2			Perf. top
Volume	Cu. Ft.	Liners Used			Perf. bottom
Rock pressure	lbs. hrs.	CASING CEMENTED	SIZE	No. FT	Date
Oil	bbls., 1st 24 hrs.	NAME OF SERVICE COMPANY			
Fresh water	feet	COAL WAS ENCOUNTERED AT			
Salt water	feet	FEET	INCHES	FEET	INCHES

Drillers' Names

Remarks: O.K. To Release

6-10-81
DATE

Robert Stewart 511
DIRECTOR

03/29/2024

STATE OF TEXAS
 DEPARTMENT OF MINES
 OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT

Permit No. _____ Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner _____ Location _____ Amount _____ Packer _____ Location _____

PLUGS USED AND DEPTH PLACED			BRIDGES	CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION LOCATION	RECOVERED	SIZE	LOST

Drillers' Names _____

Remarks: _____

_____ hereby certify I visited the _____ well on this date
 DATE _____

DISTRICT WELL INSPECTOR
03/29/2024



State of West Virginia
 Department of Mines
 Oil and Gas Division
 Charleston 25305

WALTER N. MILLER
 DIRECTOR

June 26, 1981

Century Hydro-Carbon Corp.
 Suite 305, 7030 S. Yale
 Tulsa, OK 74136

In Re: PERMIT NO 083-0304
 FARM Armand Ricottilli
 WELL NO M-2-#4
 DISTRICT Roaring Creek
 COUNTY Randolph

Gentlemen:

The Final Inspection Report for the above described well has been received in this office. Only the column checked below applies.

The well designated by the above permit number has been released under your Blanket Bond.

Please return the enclosed cancelled Single Bond which covered the well designated by the above permit number to the Surety Company who executed said bond in your behalf, in order that they may give you credit on their records.

XXXXXX Your well record was received and reclamation requirements approved. In accordance with Chapter 22, Article 4, Section 2, the above captioned well will remain under bond coverage for life of the well.

Very truly yours,

Fred Burdette

RLD/chm

03/29/2024

M-2

RECEIVED

DEC 15 1980

OIL & GAS DIVISION
DEPT. OF MINES

FERC 121

1.0 API well number (If not available, leave blank - 14 digits)	47-083-0304			
2.0 Type of determination being sought (Use the codes found on the front of this form)	107 Section of NGPA		T Category Code	
3.0 Depth of the deepest completion location (Only needed if sections 101 or 107 in 2.0 above)	5375 feet			
4.0 Name, address and code number of applicant (35 letters per line maximum. If code number not available, leave blank)	FMP Oil & Gas Properties 537 Springvale Road Great Falls, Va. 22066 State Zip Code			
5.0 Location of this well (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name):	Roaring Creek District, Devil's Run Randolph Co., West Va. State			
(b) For OCS wells	Date of Lease Mo Day Yr. Block Number OCS Lease Number			
(c) Name and identification number of this well (35 letters and digits maximum)	M-2, Armand #4			
(d) If code 4 or 5 in 2.0 above, name of the reservoir (35 letters maximum)				
6.0 (a) Name and code number of the purchaser (35 letters and digits maximum. If code number not available, leave blank)	Columbia Gas Transmission Corp.			004030 Buyer Code
(b) Date of the contract	11 80 Mo Day Yr.			
(c) Estimated annual production	63 MMcf			
	(a) Base Price (\$/MMBTU)	(b) Tax	(c) All Other Prices (Indicate (+) or (-))	(d) Total of (a), (b) and (c)
7.0 Contract price: (As of filing date. Complete to 3 decimal places)	NOT IN PRODUCTION			
8.0 Maximum lawful rate (As of filing date. Complete to 3 decimal places.)				03/29/2024
9.0 Person responsible for the application	Frank M. Foley President Title 12/12/80 Date of Completion 703-759-4545 Phone Number			

Agency Use Only
 Date Received by Juris. Agency
DEC 15 1980
 Date Received by FERC

MAY 18 1981 -

PARTICIPANTS: 3

DATE: _____

BUYER-SELLER CODE

WELL OPERATOR: FMF Oil & Gas Properties

NA

FIRST PURCHASER: Columbia Gas Trans. Corp.

004030

OTHER: _____

*needs proper affidavit
marked for the
entire Acronia Interval Section
from 1746 thru 5315*

Qualifies J. H. Huggins

3.4%

W. Va. Department of Mines, Oil & Gas Division

WELL DETERMINATION FILE NUMBER

80-12-15 - 107-083-0304

Use Above File Number on all Communications
Relating to Determination of this Well

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

1. FERC -121 Items not completed - Line No. 7.0+8.0 All

2. IV-1 Agent Paul Bowles

3. IV-2 Well Permit

4. IV-6 Well Plat

5. IV-35 Well Record Drilling Deepening

6. IV-36 Gas-Oil Test: Gas Only Was Oil Produced? Ratio

7. IV-39 Annual Production years

8. IV-40 90 day Production Days off line:

9. IV-48 Application for certification. Complete?

10-17. IV Form 51 - 52 - 53 - 54 - (55) - 56 - 57 - 58 Complete? Affidavit Signed

18-28. Other: Survey _____ Logs _____ Geological Charts _____

Structure Map _____ 1: 4000 Map _____ Well Tabulations _____
Gas Analyses _____

(5) Date commenced: 2-27-80 Date completed 3-5-80 Deepened

(5) Production Depth: 4909-35, 3565-3623

(5) Production Formation: Elk, Riley

(5) Final Open Flow: 650mcf

(5) After Frac. R. P. NA

(6) Other Gas Test: _____

(7) Avg. Daily Gas from Annual Production: _____

(8) Avg. Daily Gas from 90-day ending w/1-120 days _____

(8) Line Pressure: _____ PSIG from Daily Report

(5) Oil Production: _____ From Completion Report _____

10-17. Does lease inventory indicate enhanced recovery being done NO

10-17. Is affidavit signed? Notarized?

Does official well record with the Department confirm the submitted information? yes

Additional information _____ Does computer program confirm? _____

Was Determination Objected to _____ By Whom? _____

TJ

03/29/2024

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES OIL AND GAS DIVISION

Operator's Well No. M-2 Armand #4

API Well No. 47 083 0304
State _____

WELL CLASSIFICATION FORM
HIGH COST GAS WELL - DEVONIAN SHALE

NGPA Section 107

DESIGNATED AGENT
Paul Bowles, Esq.
ADDRESS Bowles, McDavid, Graff & Love
P.O. Box 1386
Charleston, West Va. 25325

WELL OPERATOR FMF Oil & Gas Properties LOCATION Elevation 2270'
ADDRESS 537 Springvale Road Watershed Little Laurel Run
Great Falls, VA. 22066 Dist. Roaring Creek, Randolph Ellamore

GAS PURCHASER Columbia Gas Transmission Corporation Gas Purchase Contract No. AP 25 128WV
ADDRESS Box 1273 Meter Chart Code 6 R 20611
Charleston, West Va. 25314 Date of Contract Nov 1980

Date surface drilling began: 2/27/80

Indicate the bottom hole pressure of the well and explain how this was calculated.

1,800 psi; after 30 days shut in

AFFIDAVIT

I, Stewart J. Rhoades, having been first sworn according to law, state that, I have calculated the percentage of footage of the producing interval which is not Devonian shale as indicated by a Gamma Ray index of less than 0.7 if a Gamma Ray log described subparagraph (3)(i) or (3)(ii)(A) has been filed, or as indicated by the report described in subparagraph (3)(ii)(B); I have demonstrated that the percentage of potentially disqualifying non-shale footage is equal to or less than five (5) percent of the gross Devonian age interval; and I have no knowledge of any information not described in the application which is inconsistent with a conclusion that the well qualifies as a high cost natural gas well.

Stewart J. Rhoades

STATE OF WEST VIRGINIA,
COUNTY OF Upshur, TO WIT:

I, Louis A. Ferrari, a Notary Public in and for the state and county aforesaid, do certify that Stewart J. Rhoades, whose name is signed to the writing above, bearing date the 21st day of August, 1981, has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 21st day of August, 1981.
My term of office expires on the 19 day of Dec., 1990.

Louis A. Ferrari
Notary Public

[NOTARIAL SEAL]

MAR 11 1981
 OIL & GAS DIVISION
 DEPT. OF MINES

1.0 API well number (If not available, leave blank. 14 digits.)	17 083 0304			
2.0 Type of determination being sought (Use the codes found on the front of this form.)	102 Section of NGPA		Category Code	
3.0 Depth of the deepest completion location. (Only needed if sections 1.0 or 1.07 in 2.0 above.)	5375 feet			
4.0 Name, address and code number of applicant. (35 letters per line maximum. If code number not available, leave blank.)	THE Oil & Gas Properties		Seller Code	
	537 Springvale Road			
	Great Falls, VA 22056		State Zip Code	
5.0 Location of this well. (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name.)	Burrington Creek District		State	
	Randolph Co., West Va.		State	
(b) For OCS wells	Area Name		Block Number	
	Date of Lease		OCS Lease Number	
	Mo. Day Yr.			
(c) Name and identification number of this well. (35 letters and digits maximum.)	Armand #4, M-2			
(d) If code 4 or 5 in 2.0 above, name of the reservoir. (35 letters maximum.)				
6.0 (a) Name and code number of the purchaser. (35 letters and digits maximum. If code number not available, leave blank.)	Columbia Gas Transmission Corp.		4030 Buyer Code	
(b) Date of the contract	11/7/80 Mo. Day Yr.			
(c) Estimated annual production	63 MMcf			
	(a) Base Price (\$/MMBTU)	(b) Tax	(c) All Other Prices (Indicate (+) or (-).)	(d) Total of (a), (b) and (c)
7.0 Contract price. (As of filing date. Complete to 3 decimal places.)	---	---	---	---
8.0 Maximum lawful rate. (As of filing date. Complete to 3 decimal places.)	---	---	---	---
9.0 Person responsible for this application	Frank H. Foley		President	
Agency Use Only	Date Received by Juris. Agency		Date Received by FERC	
	MAR 11 1981			
	3/9/81		703-759-4545	
	Application is Completed		Phone Number	

03/29/2024

JUN 11 1981

PARTICIPANTS:

DATE: _____

BUYER-SELLER CODE

WELL OPERATOR: EMF Oil & Gas Properties

NA

FIRST PURCHASER: Columbia Gas Trans. Corp

004030

OTHER: _____

W. Va. Department of Mines, Oil & Gas Division
WELL DETERMINATION FILE NUMBER

91-3-11 -102-083-0304

Use Above File Number on all Communications
Relating to Determination of this Well

*Records show no Riley & Elk marker wells
Do we have gas analysis?*

Qualifies J. H. Huggins

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121 Items not completed - Line No. All 7.0 + 8.0
- 2. IV-1 Agent Paul Bowles, Bowles McDavid, Graft & Love
- 3. IV-2 Well Permit
- 4. IV-6 Well Plat
- 5. IV-35 Well Record Drilling Deepening
- 6. IV-36 Gas-Oil Test: Gas Only Was Oil Produced? Ratio
- 7. IV-39 Annual Production years
- 8. IV-40 90 day Production Days off line:
- 9. IV-48 Application for certification. Complete?
- 10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? Affidavit Signed
- 18-28. Other: Survey Logs Geological Charts
 Structure Map 1: 4000 Map Well Tabulations
 Gas Analyses Isopach
- (5) Date commenced: 2-27-80 Date completed 3-5-80 Deepened
- (5) Production Depth: 4909-35; 3365-3623
- (5) Production Formation: Elk; Riley
- (5) Final Open Flow: 650 MCF
- (5) After Frac. R. P. 1600 #
- (6) Other Gas Test: _____
- (7) Avg. Daily Gas from Annual Production: _____
- (8) Avg. Daily Gas from 90-day ending w/1-120 days _____
- (8) Line Pressure: _____ PSIG from Daily Report: _____
- (5) Oil Production: _____ From Completion Report _____
- 10-17. Does lease inventory indicate enhanced recovery being done NO
- 10-17. Is affidavit signed? Notarized?
- Does official well record with the Department confirm the submitted information? yes
- Additional information _____ Does computer program confirm? 03/29/2024
- Was Determination Objected to _____ By Whom? _____

Are there any records not reasonably available to you which may contain information relevant to a determination of eligibility? Yes ___ No X. If yes, identify such records and indicate their location, if known:

Are you aware of any other information which would tend to be inconsistent with the information specified above? Yes ___ No X. If yes, indicate the type and source of the information.

- 1) Was natural gas produced from the reservoir in commercial quantities prior to April 20, 1977? Yes ___ No X.
- 2) Was the reservoir penetrated by an old well from which oil or gas was produced in commercial quantities from any other reservoir? Yes ___ No X.
- 3) If the answer to 2) is "yes", could natural gas have been produced in commercial quantities prior to April 20, 1977 from any old well so indicated? Yes ___ No ___.
- 4) If the gas is to be produced through an old well, were suitable production and gathering facilities available on April 20, 1977? Yes ___ No ___.
- 5) If the answer to 3) or 4) is "yes", attach a separate sheet explaining why you believe the well, for which a determination is sought, can be qualified as a new onshore reservoir well and include any information which would support your conclusion.

BOTTOM HOLE PRESSURE DATA

Indicate the bottom hole pressure of the well and explain how this was calculated.

1,800 psi after 30 days shut in

AFFIDAVIT

I, Frank M. Foley, having been first sworn according to law, state that I have caused to be made a diligent search of those records hereinbefore indicated in the manner herein described, that the information contained in this document is true and accurate and that on the basis of the records and examinations hereinbefore described, and to the best of my information, knowledge and belief, the well for which this determination is sought is a well producing from a new onshore reservoir.

4 Frank M. Foley
President

STATE OF ~~WEST~~ VIRGINIA, at large
COUNTY OF _____, TO WIT:

I, Sharon Parrott, a Notary Public in and for the state and county aforesaid, do certify that Frank M. Foley, whose name is signed to the writing above, bearing date the ___ day of _____, 19___, has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 3 day of March, 1981.

My term of office expires on the 14 day of March, 1983.

[NOTARIAL SEAL]

Sharon Parrott
Notary Public
Sharon Parrott

03/29/2024

DATE 3/9/81, 19__

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

Operator's Well No. Armand #4, M-42

API Well No. 47 - 083 - 0304
State County Permit

WELL CLASSIFICATION FORM
NEW ONSHORE RESERVOIR WELL

NGPA Section 102(c)(1)(C) Category 4

Paul Bowles, Bowles McDavid, Graff & Love
DESIGNATED AGENT

ADDRESS Box 1386
Charleston, West VA 25325

WELL OPERATOR FMF Oil & Gas Properties
ADDRESS 537 Springvale Road
Great Falls, VA 22066

LOCATION: Elevation 2270
Watershed Little Laurel Run
Roaring Creek District, RAN SAGO 7 1/2"
Dist. County Quad

GAS PURCHASER Columbia Gas Trans Corp
ADDRESS 1700 MacCorkle Ave SE
Charleston, West VA 25314

Gas Purchase Contract No. AP 25128 WV
Meter Chart Code _____
Date of Contract 11/7/80

List all records reasonably available to you which contain information relevant to a determination of eligibility (including production records, B&O Tax Records and royalty payment records) and indicate the location of such records

Well Records
State computer analysis

Describe the search made of any records listed above

Search of said records for depth of productive wells, to compare to our Elk series production.