

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, INC.

Address P. O. Drawer 40
Buckhannon, WV 26201

GEOLOGICAL TARGET FORMATION, Elk

Estimated depth of completed well, 5300 feet Rotary x / Cable tools _____ /

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

Approximate coal seam depths: ? Is coal being mined in the area? Yes _____ / No x /

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		
Conductor	11 3/4"			x		20'	20'	Kinds
Fresh Water								
Coal								Sizes
Intermediate	8 5/8"		20#	x		900'	900'	to surface
Production	4 1/2"		10 1/2#	x			5200'	400 sks. or as needed to
Tubing								Conform to rule 15.01
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 9-23-81.

J. G. Hargrett
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.

WAIVER

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

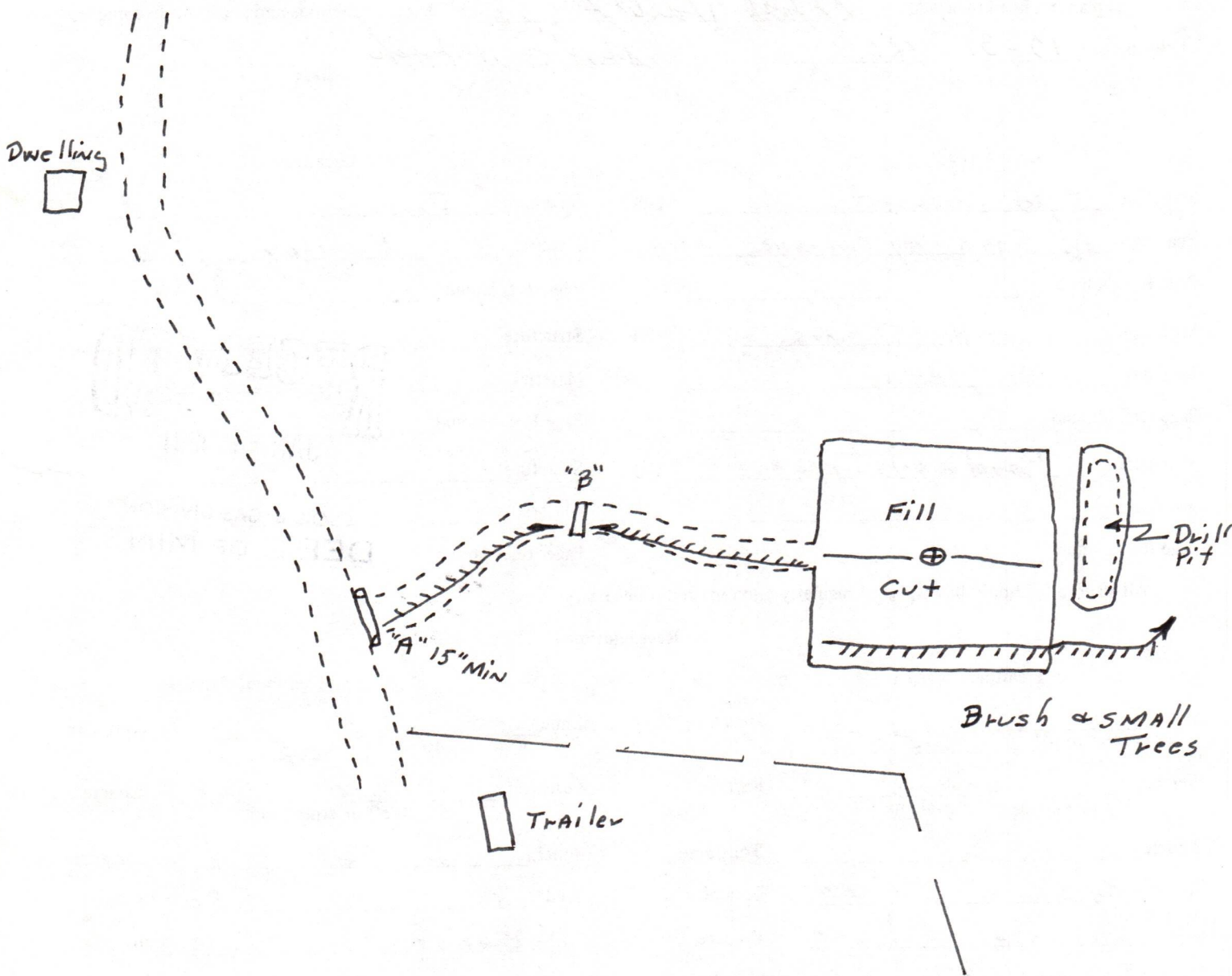
Date: _____, 19 _____

By _____
Its _____

Well Site Plan

Legend:	Property Boundary		Diversion	
	Road		Spring	
	Existing Fence		Wet Spot	
	Planned Fence		Building	
	Stream		Drain Pipe	
	Open Ditch		Waterway	

Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with first part of this plan. Include all natural drainage.



Comments: All Commercial Timber to be cut & stacked, All Brush & small trees to be cut & disposed of before dirt work begins. All slopes to be 2:1 except in Rock. Average Roadway grade \pm 3%

Signature: Arville P. Witt, P.O. Drawer 10, Buckhannon, W.Va. 472-4610

Agent

Address

Phone Number

03/15/2024

Please request landowners cooperation to protect new seeding for one growing season.



Date December 30 19 80
Well No. 1653
API No. 47 - 083 - 0412
State County Permit

Form IV-9 (01-80)

STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS

Company Name Union Drilling Inc Designated Agent Union Drilling Inc
Address P.O. Drawer 40, Buckhannon, W.Va. Address P.O. Drawer 40, Buckhannon, W.Va.
Telephone 472-4610 Telephone 472-4610
Landowner Floyd D Wilson Soil Cons. District Tygart's Valley
Revegetation to be carried out by Union Drilling Inc. (Agent)
This plan has been reviewed by Tygart Valley SCD. All corrections and additions become a part
of this plan. 12-31-80 (Date) Julius Hefuip (SCD Agent)

Access Road	Location
Structure <u>Pipe Culvert</u> (A) Spacing <u>At Roadway Entrance</u> Page Ref. Manual _____	Structure <u>Diversion</u> (1) Material <u>Earthen</u> Page Ref. Manual _____
Structure <u>Cross Drains</u> (B) Spacing <u>As Needed</u> Page Ref. Manual _____	Structure _____ (2) Material _____ Page Ref. Manual _____
Structure <u>Roadway Ditch</u> (C) Spacing _____ Page Ref. Manual _____	Structure _____ (3) Material <u>OIL & GAS DIVISION</u> Page Ref. Manual <u>DEPT. OF MINES</u>

All structures should be inspected regularly and repaired if necessary.

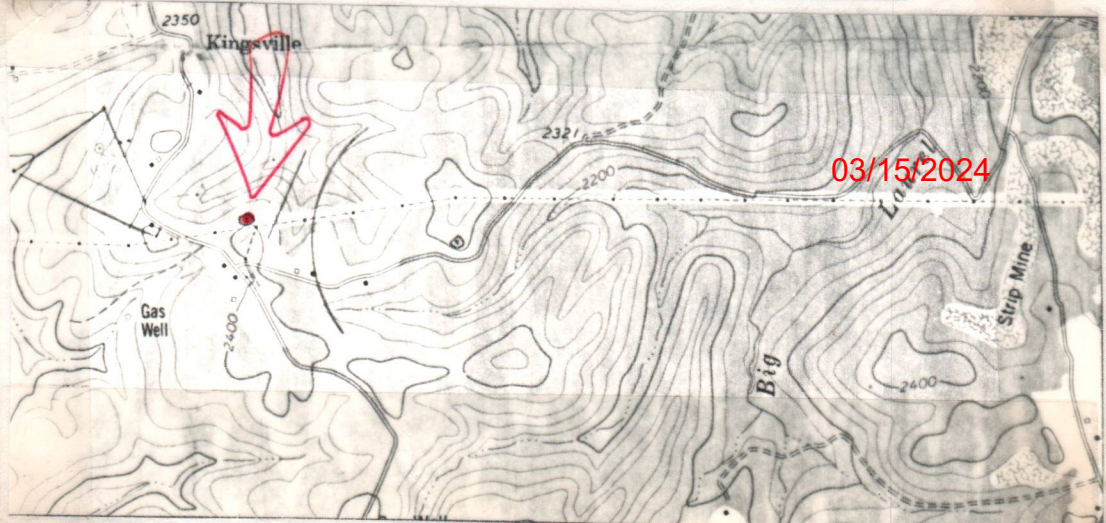
Revegetation

Treatment Area I		Treatment Area II	
Lime <u>3</u> or correct to pH <u>6.5</u>	Tons/acre	Lime <u>3</u> or correct to pH <u>6.5</u>	Tons/acre
Fertilizer <u>600</u> (10-20-20 or equivalent)	lbs/acre	Fertilizer <u>600</u> (10-20-20 or equivalent)	lbs/acre
Mulch <u>2</u>	Tons/acre	Mulch <u>2</u>	Tons/acre
Seed* <u>Ky 31</u> <u>30</u>	lbs/acre	Seed* <u>Ky 31</u> <u>30</u>	lbs/acre
<u>Birdsfoot</u> <u>10</u>	lbs/acre	<u>Birdsfoot</u> <u>10</u>	lbs/acre
<u>Domestic Rye</u> <u>10</u>	lbs/acre	<u>Domestic Rye</u> <u>10</u>	lbs/acre

*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

Attach or photocopy section of involved Topographic map. Quadrangle ELLAMORE 7.5'

Legend: Well Site
 Access Road



AMAX **COAL COMPANY**
A DIVISION OF AMAX INC.

105 SOUTH MERIDIAN STREET, INDIANAPOLIS, INDIANA 46225 • (317) 266-2626

RECEIVED
JAN 29 1981

January 13, 1981

OIL & GAS DIVISION
DEPT. OF MINES

Department of Mines
Oil and Gas Division
1615 Washington Street, East
Charleston, West Virginia 25311

Re: Union Drilling, Inc.
#1-1653 Floyd Wilson
Roaring Creek District
Randolph County, West Virginia

Rev-412

Dear Sirs:

The AMAX Coal Company has received notification that a permit application is being filed to drill the above-mentioned well. The AMAX Coal Company will offer no objection to the drilling of this proposed well provided the applicant intends to drill the proposed well subject to the following conditions:

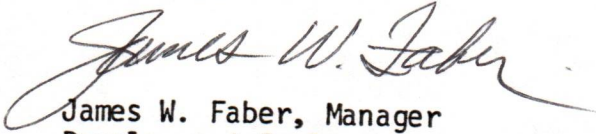
1. All drilling and casing of the well shall be done in compliance with the laws and regulations of the State of West Virginia for wells drilled through workable coal beds.
2. All workable coal seams regardless of depth shall be plugged in accordance with the rules and regulations of the State of West Virginia, specifically as outlined in Article 4, Chapter 22 of the West Virginia Code.
3. Union Drilling, Inc. - - will provide AMAX with a density and natural gamma ray log at a 5"=100' scale covering the interval from total depth to ground surface. In addition, one copy of any other geophysical log shall be sent to AMAX. However, AMAX Coal Company retains the option to run their own logs or have this service contracted out. Please contact Mr. David Darko (317/266-2633) for questions on this procedure.

03/15/2024

Department of Mines
Page Two
January 13, 1981

4. Copies of the completion report, OG-10, and plugging affidavit, OG-8, if applicable, shall be sent to AMAX Coal Company, Attention: James W. Faber.

Sincerely,



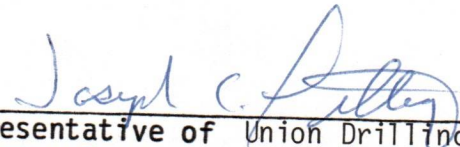
James W. Faber, Manager
Development Geology

JWF/mdt

Enclosures

cc; Union Drilling, Inc.
David A. Darko

The above stipulations are agreed to as a condition for obtaining a drilling permit.



Representative of Union Drilling, Inc.

Jan 28 1981

(Date)

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Sand			0	110		
Sand & Shale			110	148		
Coal			148	152		
Sand & Shale			152	1284		
Big Lime			1284	1466		
Big Injun			1466	1630		
Sand & Shale			1630	1862		
Gordon			1862	1918		
Sand & Shale			1918	1956		
4th Sand			1956	1998		
Sand & Shale			1998	2012		
5th Sand			2012	2048		
Sand & Shale			2048	2088		
5th Sand			2088	2118		
Sand & Shale			2118	2142		
Lower Bayard			2142	2162		
Sand & Shale			2162	2236		
Elizabeth			2236	2268		
Sand & Shale			2268	2346		
1st Warren			2346	2360		
Sand & Shale			2360	2386		
2nd Warren			2386	2414		
Sand & Shale			2414	2684		
Balltown			2684	2754		
Sand & Shale			2754	3674		
Riley			3674	3730		
Sand & Shale			3730	3820		
Benson			3820	3870		
Sand & Shale			3870	4450		
Alexander			4450	4504		
Sand & Shale			4504	5014		
Elk			5014	5070		
Sand & Shale			5070	5210 TD		

Date June 2 03/15/2024
 19 81

APPROVED UNION DRILLING, INC. Owner
 By Joseph C. Pettey
 Joseph C. Pettey, Production Mgr.

Date: June 2, 1981
Operator's
Well No. 1-1653

API Well No. 47- 083 - 0412

Floyd Wilson #1-1653

State of West Virginia
Department of Mines
Oil and Gas Division

WELL RECORD

Well Type: Oil / Gas XX / Liquid Injection / Waste Disposal /
(If "Gas", Production XX / Underground storage / Deep / Shallow XX /

Location: Elevation: 2390' Watershed Little Laurel Run

District: Roaring Creek County: Randolph Quadrangle: Ellamore

Well Operator Union Drilling, Inc. Designated Agent Union Drilling, Inc.

Address P.O. Drawer 40 Address P.O. Drawer 40

Buckhammon, WV 26201 Buckhammon, WV 26201

Permitted Work: Drill XX / Covert / Drill deeper / Redrill /

Fracture or stimulate XX / Plug off old formation /

Preforate new formation / Other physical change in well (specify)

Permit Issued on January 8, 1981

Oil & Gas Inspector for This Work:

Name: Robert Stewart

Address: P.O. Box 345

Jane Lew, WV 26378

Geological Target Formation: Elk Depth 5300 feet

Depth of completed well, 5210 feet Rotary XX / Cable Tools /

Water strata depth: Fresh feet; Salt; feet.

Coal seam depths: 148-152' Is coal being mined in the area? No

Work was commenced 02/06/81, and completed 02/13/81

Casing and Tubing Program

Casing or Tubing Type	Specifications				Footage Intervals		Cement Fill-Up Or Sacks (cubic feet)	
	Size	Grade	Weight per ft	New	Used	For drilling		Left in well
Conductor	11 3/4"			X		22'	22'	
Fresh Water								
Coal								
Intermediate	8 5/8"		23#	X		758.20'	758.20'	200 sks.
Production	4 1/2"		10 1/2#	X		5135.45'	5135.45'	760 sks
Tubing								
Runners								

Well Treatment details:

Halliburton Water Fracture (Riley, Benson, Elk) 3/02/81, Fractured (Big Injun) 3/09/81

Big Injun - 1556/60 - 45,000# Sand, 430 bbls water

Riley - 3658/60, 3670, 3674/76' - 45,000# sand, 385 bbls water

Benson - 3810/15, 3838/40' - 45,000# Sand, 366 Bbls water

Elk - 4998, 5012/15, 5022/25' - 90,000# Sand, 633 bbls water

03/15/2024

Initial open flow, Show Mcf/d Oil: Initial open flow, Bbl/d

Final open flow, 133 Mcf/d Final open flow, Bbl/d

Static Rock Pressure, 290 psig (surface measurement) after 24 hours shut in.

(Well log on reverse side)

OCT 21 1981

OG-11

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

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

INSPECTOR'S WELL REPORT

Permit No. 083-0412

Oil or Gas Well GAS
(KIND)

Company UNION DRILLING
 Address BUCKHANNON
 Farm FLOYD WILSON
 Well No. 1-1653-U
 District BEARING CREEK County RANDOLPH
 Drilling commenced 2-6-81
 Drilling completed _____ Total depth _____
 Date shot _____ Depth of shot _____
 Initial open flow _____ /10ths Water in _____ Inch
 Open flow after tubing _____ /10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock pressure _____ lbs _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			Kind of Packer
16			
13			
10			Size of
8 1/4			
6 5/8			Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____
 NAME OF SERVICE COMPANY _____
 COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

Drillers' Names _____

Remarks:
O.K. TO RELEASE

10-19-81
DATE

Robert Stewart 511
03/15/2024
DISTRICT WELL INSPECTOR



State of West Virginia

Department of Mines
Oil and Gas Division

Charleston 25305

WALTER N. MILLER
DIRECTOR

January 29, 1982

Union Drilling, Inc.
P. O. Drawer 40
Buckhannon, W. Va. 26201

Dear Sir:

The required records and reports have been received in this office and the District Inspectors have submitted Final Inspections for the following wells listed below:

<u>PERMIT NO.</u>	<u>FARM AND WELL NO.</u>	<u>DISTRICT</u>
RAN-0388	Harry McMullan, Jr. Estate #16-1516-UC	Middle Fork
RAN-0389	Harry McMullan, Jr. Estate #17-1522-UC	Middle Fork
RAN-0412	Della B. Wilson et al #1-1653-U	Roaring Creek
RAN-0419	Harry McMullan, Jr. Estate #1658	Middle Fork
RAN-0420	Harry McMullan, Jr. Estate #1659	Middle Fork

In accordance with Chapter 22, Article 4, Section 2, the bond coverage for above captioned wells will stay in force for life of well. Reclamation requirements have been approved..... ..

Very truly yours,

Fred Burdette

RECEIVED
JUL 8 - 1981

1.0 API well number: (If not available, leave blank. 14 digits.)	47-083-0412			
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	103 Section of NGPA		OIL & GAS DIVISION DEPT. OF MINES Category Code	
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	5025 feet			
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Union Drilling, Inc. Name		019434 Seller Code	
	P.O. Drawer 40 Street			
	Buckhannon,	WV	26201	
	City	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 Field Name			
	Randolph	WV	State	
(b) For OCS wells:	Area Name Block Number			
	Date of Lease: Mo. Day Yr. OCS Lease Number			
(c) Name and identification number of this well: (35 letters and digits maximum.)	Floyd Wilson #1 - 1653			
(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 Corporation Name		004030 Buyer Code	
(b) Date of the contract:	Mo. Day Yr.			
(c) Estimated annual production:	Not in production yet 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.)	2.476	---	---	2.476
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	2.476	---	---	2.476
9.0 Person responsible for this application:	Joseph C. Pettey Name Production Mgr. Title			
Agency Use Only	Signature Joseph C. Pettey			
Date Received by Juris. Agency	Date Application is Completed 7/07/81			
JUL 8 1981	Date Received by FERC			
Date Received by FERC	(304) 472-4610 Phone Number			

PARTICIPANTS:

DATE: AUG 12 1981

BUYER-SELLER CODE

WELL OPERATOR: Union Drilling, Inc.

019434

FIRST PURCHASER: Columbia Gas Trans. Corp.

004030

OTHER: _____

W. Va. Department of Mines, Oil & Gas Division
 WELL DETERMINATION FILE NUMBER
81-0708-103-083-0412
 Use Above File Number on all Communications
 Relating to Determination of this Well

ck map 1500'

Qualified J. E. Huzzey

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121 Items not completed - Line No. 70480 b,c
- 2. IV-1 Agent R. R. Ramson
- 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: 2-6-81 Date completed 2-13-81 Deepened _____
- (5) Production Depth: 1556-60, 3658-76, 3810-40, 4998-5025
- (5) Production Formation: Big Injun, Riley, Benson, Elk
- (5) Final Open Flow: 133 MCF
- (5) After Frac. R. P. 290# 24 hrs.
- (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 03/15/2024
- Additional information _____ Does computer program confirm? _____
- Was Determination Objected to _____ By Whom? _____

F

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES,
OIL AND GAS DIVISION
WELL CLASSIFICATION FORM
NEW ONSHORE PRODUCTION WELL

Date June 4, 19 81
Operator's Well No. 1-1653
API Well No. 47 - 083 - 0412
State County Permit

NGPA Section 103

DESIGNATED AGENT Union Drilling, Inc.
ADDRESS P.O. Drawer 40
Buckhamnon, WV 26201

WELL OPERATOR Union Drilling, Inc.
ADDRESS P.O. Drawer 40
Buckhamnon, WV 26201

LOCATION: Elevation 2390'
Watershed Little Laurel Run
Dist. Roaring Creek County Randolph Quad. Ellamore

GAS PURCHASER Columbia Gas Trans. Corp.
Attn: Bill Gallagher
ADDRESS P.O. Box 498
Washington, PA 15301

Gas Purchase Contract No. _____
Meter Chart Code _____
Date of Contract _____

Date surface drilling was begun 2/06/81

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

$P_w = 290 \quad L = 5210 \quad G = 0.70$
 $Avg \ T = .007 \quad L + 520 = 556.47$
 $BHP = P_w \ e \ GL.53.34 \ T = 327.9 \ psig$

AFFIDAVIT

I, Joseph C. Pettey, having been first sworn according to law state that surface drilling of the well for which this determination is sought was begun on or after February 19, 1977; the well satisfies applicable state or federal well spacing requirements and the well is not within a proration unit, in existence at the time surface drilling began, which was applicable to the reservoir from which gas is or will be produced and which applied to any other well producing gas in commercial quantities or on which surface drilling began on or after February 19, 1977, and which was capable of producing gas in commercial quantities. I state, further, that I have concluded, to the best of my information, knowledge and belief, that the well for which this determination is sought is a new onshore production well and that I am not aware of any information not described in the application which is inconsistent with this conclusion.

Joseph C. Pettey

STATE OF WEST VIRGINIA,

COUNTY OF Upshur, TO WIT

James Bibby, III, a Notary Public in and for the state and county aforesaid, do certify that Joseph C. Pettey, whose name is signed to the writing above, bearing date the 4th day of June, 19 81, has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 17th day of July, 19 81.

My term of office expires on the 19th day of March, 19 91. 03/15/2024

(NOTARIAL SEAL)

James Bibby, III
Notary Public