



1) Date: December 1, 19 82

2) Operator's Well No. Van Devender Heirs W2

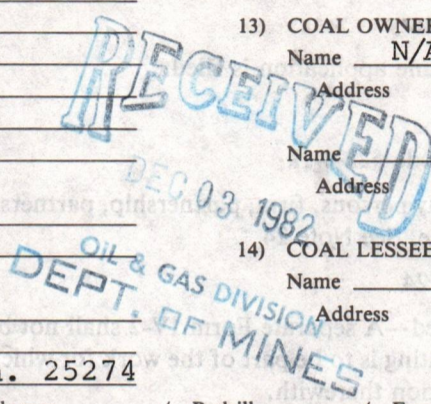
3) API Well No. 47 105 1033  
State County Permit

DRILLING CONTRACTOR:

S. W. Jack Drilling Company STATE OF WEST VIRGINIA DEPARTMENT OF MINES, OIL AND GAS DIVISION

P. O. Box 48 OIL AND GAS WELL PERMIT APPLICATION  
Buckhannon, W. Va. 26201

- 4) WELL TYPE: A Oil XX / Gas XX /  
B (If "Gas", Production XX / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow XX /)
- 5) LOCATION: Elevation: 1088.00' Watershed: Sergent Run  
District: Burning Springs County: Wirt Quadrangle: \_\_\_\_\_
- 6) WELL OPERATOR Panther Creek IV Limited 11) DESIGNATED AGENT Van Davis  
Address % Wyatt and Saltzstein Partnership Address General Delivery  
1725 DeSales St., N.W. Bradshaw, W. Va. 24823  
Washington, DC 20036
- 7) OIL & GAS ROYALTY OWNER C. E. Van Devender Heirs, et al 12) COAL OPERATOR N/A  
Address 120 Lake Shore Drive Address \_\_\_\_\_  
N. Palm Beach, FLA 33408
- 8) SURFACE OWNER Same as above 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name N/A  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 9) FIELD SALE (IF MADE) TO:  
Address \_\_\_\_\_
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Deo Mace  
Address Rt. #1, Box 5  
Sand Ridge, W. Va. 25274
- 14) COAL LESSEE WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 15) PROPOSED WORK: Drill XX / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Fracture or stimulate XX /  
Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
Other physical change in well (specify) \_\_\_\_\_
- 16) GEOLOGICAL TARGET FORMATION, Marcellus
- 17) Estimated depth of completed well, 5300 feet
- 18) Approximate water strata depths: Fresh, 85 feet; salt, \_\_\_\_\_ feet.
- 19) Approximate coal seam depths: N/A Is coal being mined in the area? Yes \_\_\_\_\_ / No XX /



20) 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			
Conductor	16"					30'		To surface	Kinds	
Fresh water	11-3/4"					250'		To surface		
Coal									Sizes	
Intermediate	8-5/8"					2000'		To surface		
Production	4-1/2"					5250'		260 sacks	Depths set	
Tubing										
Liners									Perforations:	
									Top	Bottom

- 21) EXTRACTION RIGHTS  
Check and provide one of the following:  
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1(c) (1) through (4). (See reverse side for specifics.)

- 22) ROYALTY PROVISIONS  
Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes  No

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

23) Required Copies (See reverse side.)

24) 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.

Notary: Monica C. Lebkicher

Signed: [Signature]

My Commission Expires October 31, 1985

Its: Designated Agent/Partner

OFFICE USE ONLY

Permit number <u>47-105-1033</u>	<b>DRILLING PERMIT</b>	Date <u>December 7 01/12/2024</u> 82
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This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector. (Refer to No. 10) Prior to the construction of roads, locations and pits for any permitted work.** In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

Permit expires August 7, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond: <u>[Signature]</u>	Agent: <u>[Signature]</u>	Plat: <u>[Signature]</u>	Casing: <u>[Signature]</u>	Fee: _____
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[Signature]  
Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.



Line Item Explanation

- 1) Date of Application
- 2) Your well name and number
- 3) To be filled out by office of oil & gas
- 4A) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs: "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil.
- 4B) "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group" or a depth less than six thousand feet, whichever is shallower.  
"Deep well" means any well drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whatever is shallower.
- 5) Where well is located
- 6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
- 7) Use separate sheet if necessary
- 8) Present surface owner at time application is filed.
- 9) Optional
- 11) See Reg. 7.01 relating to code §22-4-1k
- 12) "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
- 13 & 14) As per §22-4-20; See Note 24
- 15) Work that will be attempted—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.
- 16) Anticipated formation for which well will be completed
- 17) Self explanatory
- 18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
- 19) All coal seam depths
- 20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
- 21) Code 22-4-11(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:
  - (1) A brief description of the tract of land including the district and county wherein the tract is located;
  - (2) The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;
  - (3) The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;
  - (4) A brief description of the royalty provisions of each such lease or contract.
- 22) Code 22-4-11(d) and 22-4-11(e).
- 23) 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.
- 24) **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.**

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.

01/12/2024

Date: \_\_\_\_\_, 19\_\_\_\_

By \_\_\_\_\_

Its \_\_\_\_\_





IV-9  
(Rev 8-81)

DATE DEC. 2, 1982

WELL NO. W-2

State of West Virginia  
Department of Mines  
Oil and Gas Division

API NO. 47 - 105 - 1033

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME PANTHER CREEK LIMITED PARTNERSHIP IV  
Address 1725 DESALES STREET NW WASHINGTON DC 20036  
Telephone 202 - 638 - 4485

DESIGNATED AGENT VAN DAVIS  
Address GENERAL DELIVERY PAYNESVILLE WVA  
Telephone 304 - 967 - 7112

LANDOWNER C.E. VANDEVENDER, HEIRS, ETAL SOIL CONS. DISTRICT LITTLE KANAWHA  
Revegetation to be carried out by PANTHER CREEK LIMITED PARTNERSHIP IV (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan: 12-2-82

(Date)

Jarrett Newton  
(SCD Agent)

ACCESS ROAD

LOCATION

Structure DRAIN PIPE 12" MIN. (A)  
Spacing \_\_\_\_\_  
Page Ref. Manual 2-7

Structure NEARLY FLAT TOP (1)  
Material OF WIDE RIDGE  
Page Ref. Manual \_\_\_\_\_

Structure See Tapo (B)  
Spacing \_\_\_\_\_  
Page Ref. Manual \_\_\_\_\_

Structure \_\_\_\_\_ (2)  
Material \_\_\_\_\_  
Page Ref. Manual \_\_\_\_\_

Structure \_\_\_\_\_ (C)  
Spacing \_\_\_\_\_  
Page Ref. Manual \_\_\_\_\_

Structure \_\_\_\_\_ (3)  
Material \_\_\_\_\_  
Page Ref. Manual \_\_\_\_\_

RECEIVED  
DEC 10 1982  
OIL & GAS DIVISION  
DEPT. OF MINES

All structures should be inspected regularly and repaired if necessary. All commercial timber is to be cut and stacked and all brush and small timber to be cut and removed from the site before dirt work begins.

REVEGETATION

Treatment Area I

Treatment Area II

Lime 2 Tons/acre  
or correct to pH 6.5  
Fertilizer 600 lbs/acre  
(10-20-20 or equivalent)  
Mulch HAY 2 Tons/acre  
Seed\* KY 31 FESCUE 50 lbs/acre  
CLOVER 5 lbs/acre  
RYE 5 lbs/acre

Lime 2 Tons/acre  
or correct to pH 6.5  
Fertilizer 600 lbs/acre  
(10-20-20 or equivalent)  
Mulch HAY 2 Tons/acre  
Seed\* KY 31 FESCUE 50 lbs/acre  
CLOVER 5 lbs/acre  
RYE 5 lbs/acre

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

PLAN PREPARED BY C.T. TOLLEY JR 01/12/2024

ADDRESS 7911 SISSONVILLE DR  
SISSONVILLE WVA 25320

PHONE NO. 304 - 988 - 9432

NOTES: Please request landowner's cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.

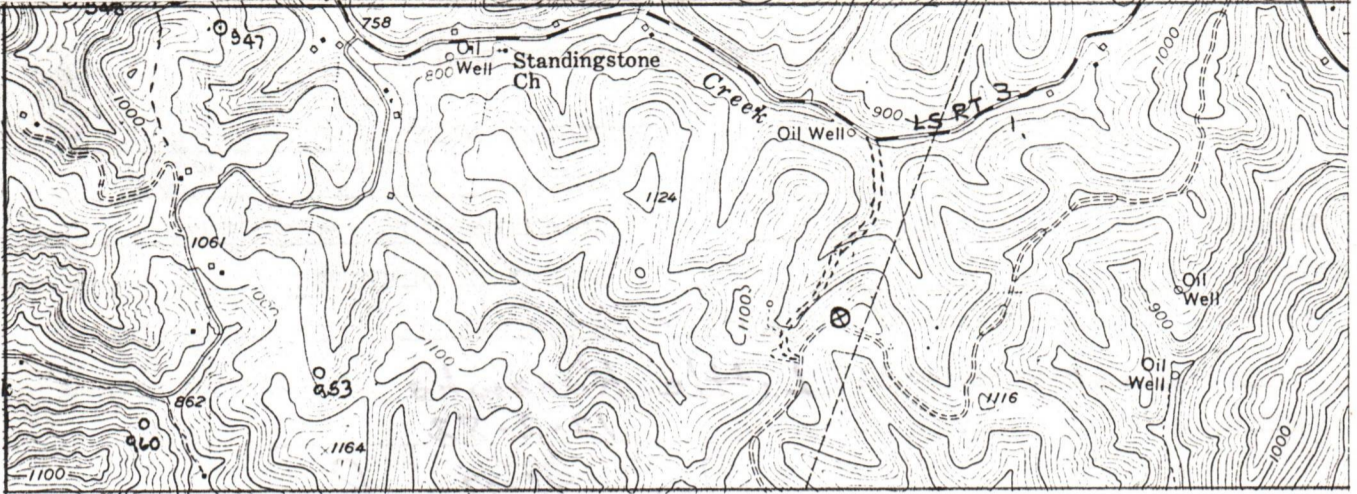


ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP. QUADRANGLE GIRTA 7.5'  
1"=2000'

LEGEND

Well Site ⊕

Access Road ———

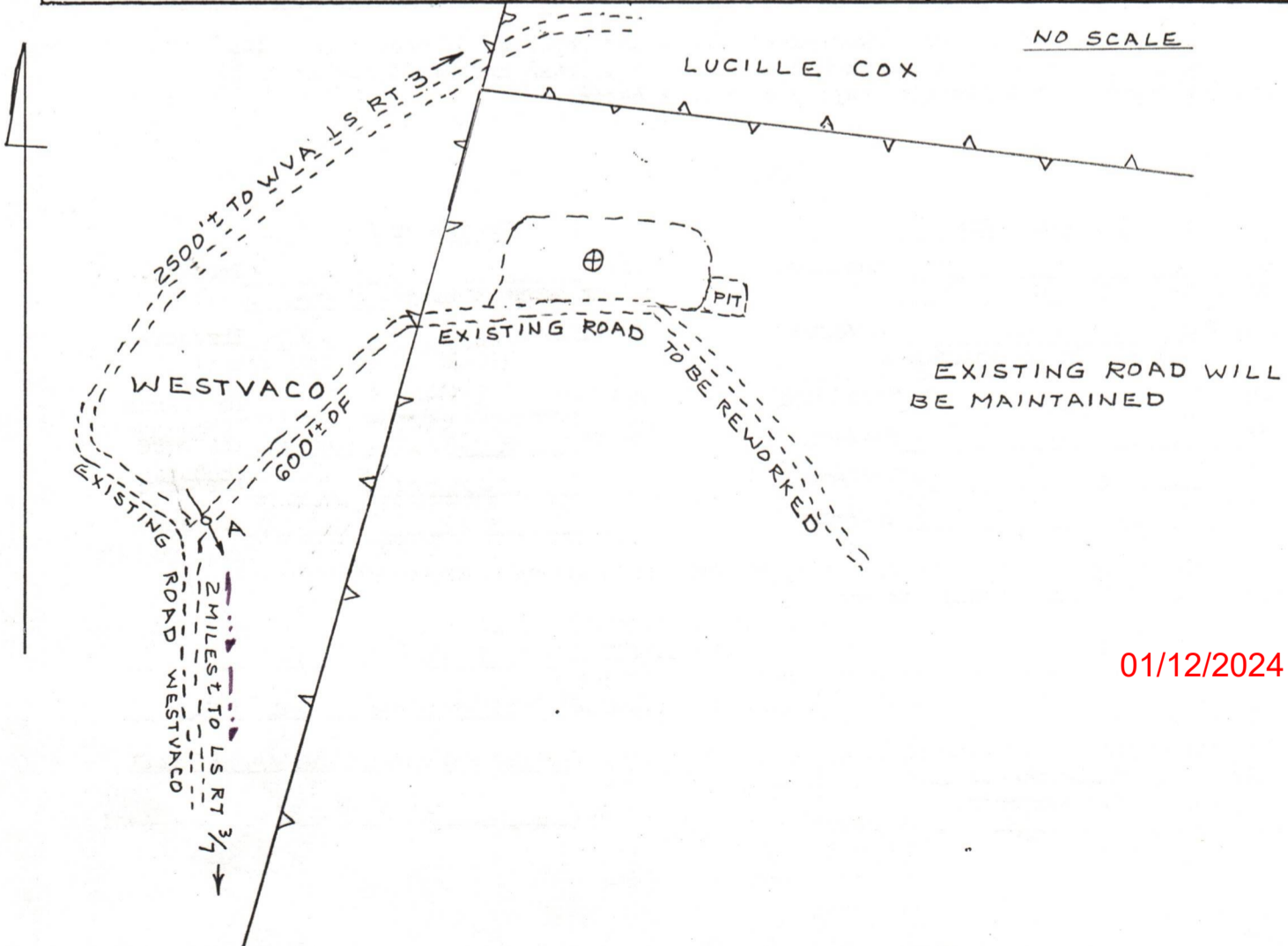


WELL SITE PLAN

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

LEGEND

Property boundary	——▲——▲——▲——▲——▲——	Diversion	//////
Road	====	Spring	○→
Existing fence	—X—X—X—X—	Wet spot	⊖
Planned fence	—/—/—/—/—/—/—/—/—/—	Building	■
Stream	~·~·~·~·~·~·~·~·~·~·~·~·~·~·~·	Drain pipe	○→○→○→
Open ditch	——·——·——·——·——·——·——·——·——	Waterway	←≡≡≡≡≡≡≡≡≡



01/12/2024



# OIL AND GAS LEASE

AGREEMENT, made and entered into this 18th day of March A. D. 19 81  
by and between Adrian Buckhannon Bank Trust Department, for J.S. Withers Heirs

of \_\_\_\_\_ party of the first part, hereinafter called Lessor (whether one or more),  
and Carl R. Morris party of the second part, hereinafter called Lessee;

1. WITNESSETH: That the Lessor, in consideration of the sum of One Dollar, the receipt of which is hereby acknowledged, and the covenants and agreements hereinafter contained, does hereby grant unto the Lessee all of the oil and gas and all of the constituents of either in and under the land hereinafter described, together with the exclusive right to drill for, produce and market oil and gas and their constituents and of storing gas of any kind in any formation underlying the land, and also the right to enter thereon at all times for the purpose of drilling and operating for oil, gas and water, laying pipe lines, erecting tanks, machinery, powers and structures, and to possess, use, and occupy so much of said premises as is necessary and convenient for said purposes and to convey

the above named products therefrom or thereto by pipe lines or otherwise; said land being situate in Burning Springs District,

County of Wirt State of West Virginia, and described as follows, to-wit: Bounded on the

NORTH by lands of Paula McCue et al

EAST by lands of Westvaco Corporation & Lester Parsons

SOUTH by lands of Westvaco Corporation

WEST by lands of Westvaco Corporation

Containing Two hundred Sixty-five (265) acres, more or less and being the same land conveyed to lessor by

Scott & Throckmorton by deed dated April 12, 1900 and

recorded in said county records in Book No. 38 Page 357

2. It is agreed that this lease shall remain in force for a primary term of Two (2) years from this date and as long thereafter as operations for oil or gas are being conducted on the premises, or oil or gas is found in paying quantities thereon, or any formation underlying the leased land is used for storage of gas as provided under paragraph 7 hereof.

3. The Lessee shall deliver to the credit of the Lessor free of cost, in the pipe line to which he may connect his wells, the equal one-eighth (1/8) part of all oil produced and saved from the leased premises, and shall pay Lessor

for all gas and casing head gas produced and sold from the premises, payable monthly; provided, Lessee shall pay Lessor a royalty at the rate of Fifty Dollars per year on each gas well while, through lack of market, gas therefrom is not sold or used off the premises, and while said royalty is so paid said well shall be held to be a paying well under paragraph 2 hereof.

4. The Lessee shall commence operations for a well on the premises on or before October 18, 1981, unless Lessee pays thereafter a rental of \$441.67 for each 3 months that operations are delayed from the time above mentioned. The consideration first recited herein, the down payment, shall cover not only the privilege granted to the date when first said rental is payable as aforesaid, but also the Lessee's option of extending that period as aforesaid, and any and all other rights conferred. The drilling of a non-productive well shall be accepted by the Lessor in lieu of delay rental for a period of one year after its completion, and following the exhaustion or abandonment of all wells the Lessee shall have the right for a period of one year to resume the payment of delay rental or commence operations for another well. Upon the resumption of payment of rentals the provisions hereof governing such payment and the effect thereof shall continue in force as though they had not been interrupted.

5. All moneys coming due hereunder shall be paid or tendered to Adrian Buckhannon Bank Trust Department direct, or by check payable to his (or her) order mailed to \_\_\_\_\_ and no default shall be declared against the Lessee by the Lessor for failure of the Lessee to make any payment or perform any conditions provided for herein unless the Lessee shall refuse or neglect to pay or perform the same for ten days after having received written notice by registered mail from the Lessor of his intention to declare such default.

6. Lessor reserves 200,000 cubic feet of gas per annum for domestic use, to be taken through his own appliances at any producing gas well, and agrees to pay Lessee a fair domestic rate for any gas used in excess thereof. Lessor further covenants and agrees that his taking and use of gas shall be wholly at his own risk, the Lessee not to be held liable for any accident or damage caused thereby, nor shall Lessee be liable for any shortage or failure in the supply of gas for said domestic use.

~~7. Lessee shall have the right to use any formation underlying the leased premises for the storage of gas and shall have all rights and rights of way necessary to store and produce such stored gas. In full payment for such storage rights, the Lessee shall pay to the Lessor a rental of the sum of \_\_\_\_\_ per acre per year, while the premises are so used, and so long as the storage payment is made, all provisions of this lease shall remain in full effect.~~

8. Lessor further grants to the Lessee, his heirs and assigns, the right to unitize this lease with other leases to form a drilling unit or units according to the rules and regulations which may be adopted for the proper development and conservation of the field. In the event this lease is so unitized, the Lessor agrees to accept, in lieu of the royalty hereinbefore recited, such proportion of the royalty above provided, as the acreage covered by this lease bears to the total acreage comprising the unit.

9. If said Lessor owns a less interest in the above described land than the undivided fee simple estate therein, then the royalties and rentals herein provided shall be paid the Lessor only in the proportion which his interest bears to the whole and undivided fee.

10. No well may be drilled nearer than 200 feet to the house or barn now on said premises without the written consent of Lessor. Lessee shall have and enjoy all rights and privileges necessary and convenient for the proper use and development of this lease, and shall have the right to use, free of cost, gas, oil and water produced on said land for its operations thereon, except water from wells of Lessor. Lessee shall also have the right at any time to remove all or any part of the machinery, fixtures or structures placed on said premises, including the right to draw and remove casing. Lessee shall pay for damage caused by its operations to growing crops on said lands, and, when requested by Lessor, shall bury its pipe lines below plow depth.

11. The interest or estate of either party hereto may be assigned, the privilege of assigning in whole or in part being expressly allowed. In event this lease shall be assigned as to any part or parts of the above described land and the assignee or assignees of such part or parts shall fail or make default in the payment of the proportionate part of the rents due from him or them, such default shall not operate to defeat or affect this lease insofar as it covers a part or parts of said land upon which the said Lessee or any assignee thereof shall make due payment of said rental. No change of ownership in the land or in the rentals or royalties shall be binding on the Lessee until after notice to the Lessee and it has been furnished with a written transfer or assignment or a certified copy thereof.

12. At any time, Lessee, its successors or assigns, shall have the right to surrender this lease or any part thereof for cancellation, after which all payments and liabilities hereunder thereafter shall cease and determine, and if the whole is surrendered by the Lessee, this lease shall become absolutely null and void. This surrender may be made to the Lessor, or if more than one Lessor, then to any one of them, or to the heirs or assigns of any one of them by delivery of a duly executed surrender thereof in person or by mail addressed to the post office address of such person, or by recording a duly executed surrender thereof in the Recorder's office of the County in which the land is located.

4571



... shall not operate to defeat or affect this lease insofar as it covers a part or parts of said land upon which the said Lessee or any assignee thereof shall make due payment of said rental. No change of ownership in the land or in the rentals or royalties shall be binding on the Lessee until after notice to the Lessee and it has been furnished with a written transfer or assignment or a certified copy thereof.

12. At any time, Lessee, its successors or assigns, shall have the right to surrender this lease or any part thereof for cancellation, after which all payments and liabilities hereunder thereafter shall cease and determine, and if the whole is surrendered, then this lease shall become absolutely null and void. This surrender may be made to the Lessor, or if more than one Lessor, then to any one of them, or to the heirs or assigns of any one of them by delivery of a duly executed surrender thereof in person or by mail addressed to the post office address of such person, or by recording a duly executed surrender thereof in the Recorder's office of the County in which the land is located.

13. Lessor hereby warrants and agrees to defend the title to the land herein described and agree that the Lessee at its option may pay, discharge or redeem any taxes, mortgages, or other liens existing, levied, or assessed on or against the above described lands, and in event it exercises such option, it shall be subrogated to the rights of any holder or holders thereof and may reimburse itself by applying any royalty or rentals accruing hereunder to the discharge of any such taxes, mortgages or other liens.

14. It is expressly agreed that if the Lessee shall commence drilling operations at any time while this lease is in force, it shall remain in force and its terms continue so long as such operations are prosecuted, and if production results therefrom, then as long as production continues. If after the expiration of the term of this lease production from the leased premises shall cease from any cause, this lease shall not terminate provided Lessee resumes operations within sixty days from such cessation, and this lease shall remain in force during the prosecution of such operations, and, if production results therefrom, then as long as oil or gas is produced in paying quantities.

Kol-58

BOOK 161 PAGE 59

15. This lease embodies the entire contract and agreement between Lessor and Lessee, and no warranties, representations, promises or inducements not herein expressed have been made or relied upon by either party. The terms, conditions and stipulations hereof shall extend to the respective heirs, executors, administrators, successors and assigns of the parties hereto.

Witness the hands and seals of the parties hereto the day and year first above written.

WITNESS:  
Mary Sue Toth  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Adrian Buckhannon Bank Agent (SEAL)  
for the J. S. Withers heirs (SEAL)  
by Carl J. Morris (SEAL)  
Vice President and (SEAL)  
Trust Officer (SEAL)  
\_\_\_\_\_  
\_\_\_\_\_ (SEAL)

Mail to - DeLore Smith  
Box 11 - Elizabethtown, W. Va.

WEST VIRGINIA ACKNOWLEDGMENT

STATE OF WEST VIRGINIA } To-wit: THIS INSTRUMENT Prepared by  
COUNTY OF UPSHUR } CARL MORRIS  
I, Gloria R. Hammer a Notary Public of said County, do hereby certify that  
William F. Robinson  
whose name signed to the within writing bearing date the 18th day of March, 1981  
has this day acknowledged the same before me in my said County.  
Given under my hand this 8th day of April, 1981  
Gloria R. Hammer  
Notary Public  
My Commission expires August 8, 1990

WEST VIRGINIA ACKNOWLEDGMENT

STATE OF WEST VIRGINIA } To-wit:  
COUNTY OF \_\_\_\_\_ }  
I, \_\_\_\_\_ a Notary Public of said County, do hereby certify that  
\_\_\_\_\_  
whose name signed to the within writing bearing date the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_  
has this day acknowledged the same before me in my said County.  
Given under my hand this \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_  
\_\_\_\_\_  
Notary Public  
My Commission expires \_\_\_\_\_

OHIO ACKNOWLEDGMENT

STATE OF OHIO, }  
COUNTY OF \_\_\_\_\_ } SS.

01/12/2024



# OIL AND GAS LEASE

RECEIVED  
OIL & GAS DIVISION  
DEPT. OF MINES  
MAY 03 1981

AGREEMENT, made and entered into this 5th day of May  
by and between Richard Bingham, Agent & Attorney-in-fact for the Vandevender Heirs  
Richard C. Bingham & Elizabeth E. Bingham, his wife,

Florida 33408  
of 120 Lakeshore Dr., North Palm Beach, parties  
and Carl R. Morris party of the first part, hereinafter called Lessor (whether one or more),  
and Carl R. Morris party of the second part, hereinafter called Lessee;

1. WITNESSETH: That the Lessor, in consideration of the sum of One Dollar, the receipt of which is hereby acknowledged, and the covenants and agreements hereinafter contained, does hereby grant unto the Lessee all of the oil and gas and all of the constituents of either in and under the land hereinafter described, together with the exclusive right to drill for, produce and market oil and gas and their constituents and of storing gas of any kind in any formation underlying the land, and also the right to enter thereon at all times for the purpose of drilling and operating for oil, gas and water, laying pipe lines, erecting tanks, machinery, powers and structures, and to possess, use, and occupy so much of said premises as is necessary and convenient for said purposes and to convey the above named products therefrom or thereto by pipe lines or otherwise; said land being situate in Burning Springs District,  
County of Wirt, State of West Virginia, and described as follows, to-wit: Bounded on the

NORTH by lands of Paula McCue et al  
EAST by lands of Westvaco Corporation & Lester Parsons  
SOUTH by lands of Westvaco Corporation  
WEST by lands of Westvaco Corporation  
Containing Two Hundred Sixty-five (265) acres, more or less and being the same land conveyed to lessor by Scott & Throckmorton by deed dated April 12, 1900 and recorded in said county records in Book No. 38 Page 357

2. It is agreed that this lease shall remain in force for a primary term of Two (2) years from this date and as long thereafter as operations for oil or gas are being conducted on the premises, or oil or gas is found in paying quantities thereon, or any other operations for oil or gas are being conducted on the premises.

3. The Lessee shall deliver to the credit of the Lessor free of cost, in the pipe line to which he may connect his wells, the equal one-eighth (1/8) part of all oil produced and saved from the leased premises, and shall pay Lessor in cash or check the equal one-eighth (1/8)

for all gas and casing head gas produced and sold from the premises, payable monthly; provided, Lessee shall pay Lessor a royalty at the rate of fifty Dollars per year on each gas well while, through lack of market, gas therefrom is not sold or used off the premises, and while said royalty is so paid said well shall be held to be a paying well under paragraph 2 hereof.

4. The Lessee shall commence operations for a well on the premises on or before October 18, 1981 and shall pay Lessor their proportionate share of \$31.25 for each 3 months rental of each well from the time above mentioned. The consideration first recited herein, the down payment, shall cover not only the privilege granted to the date when first said rental is payable as aforesaid, but also the Lessee's option of extending that period as aforesaid, and any and all other rights conferred. The Lessee shall have the right to suspend operations for a period of one year to resume the payment of delay rental. Upon the resumption of payment of rentals the provisions hereof governing such payment and the effect thereof shall continue in force as though they had not been interrupted.

5. All moneys coming due hereunder shall be paid or tendered to Richard Bingham, Agent 120 Lakeshore Dr., Apt. 237, N. Palm Beach, Fla. direct, or by check payable to his (or her) order mailed to 120 Lakeshore Dr., Apt. 237, N. Palm Beach, Fla.

6. Lessor reserves 200,000 cubic feet of gas per annum to be taken through the lease for domestic use and agrees that the Lessee shall have the right to use such gas for domestic use and agrees that the Lessee shall have the right to use such gas for domestic use.

7. Lessor further grants to the Lessee, his heirs and assigns, the right to unitize this lease with other leases to form a drilling unit or units according to the rules and regulations which may be adopted for the proper development and conservation of the field. In the event this lease is so unitized, the Lessor agrees to accept, in lieu of the royalty hereinafore recited, such proportion of the royalty above provided, as the acreage covered by this lease bears to the total acreage comprising the unit.

8. If said Lessor owns a less interest in the above described land than the undivided fee simple estate therein, then the royalties and rentals herein provided shall be paid the Lessor only in the proportion which his interest bears to the whole and undivided fee.

9. No well may be drilled nearer than 200 feet to the house or barn now on said premises without the written consent of Lessor. Lessee shall have and enjoy all rights and privileges necessary and convenient for the proper use and development of this lease, and shall have the right to use, free of cost, gas, oil and water produced on said land for its operations thereon, except water from wells of Lessor. Lessee shall also have the right at any time to remove all or any part of the machinery, fixtures or structures placed on said premises, including the right to draw and remove casing. Lessee shall pay for damages caused by its operations to growing crops on said lands, and, when requested by Lessor, shall bury its pipe lines below plow depth.

10. The interest or estate of either party hereto may be assigned, the privilege of assigning in whole or in part being expressly allowed. In event this lease shall be assigned as to any part or parts of the above described land and the assignee or assignees of such part or parts shall fail or make default in the payment of the proportionate part of the rents due from him or them, such default shall not operate to defeat or affect this lease insofar as it covers a part or parts of said land upon which the said Lessee or any assignee thereof shall make due payment of said rental. No change of ownership in the land or in the rentals or royalties shall be binding on the Lessee until after notice to the Lessee and it has been furnished with a written transfer or assignment or a certified copy thereof.

11. At any time, Lessee, its successors or assigns shall have the right to surrender this lease or any part thereof for cancellation, after which all payments and liabilities hereunder thereafter shall cease and determine, and if the whole is surrendered, then this lease shall become absolutely null and void. This surrender may be made to the Lessor, or if more than one Lessor, then to any one of them, or to the heirs or assigns of any one of them by delivery of a duly executed surrender thereof in person or by mail addressed to the post office address of such person, or by recording a duly executed surrender thereof in the Recorder's office of the County in which the land is located.

12. Lessor hereby warrants the title to the land herein described and agrees that the Lessee shall have the right to use such gas for domestic use and agrees that the Lessee shall have the right to use such gas for domestic use.

RUB  
E.E.B.

RUB  
E.E.B.

RUB  
E.E.B.  
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E.E.B.

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E.E.B.  
RUB  
E.E.B.  
RUB  
E.E.B.

RUB  
E.E.B.

01/12/2024



...to the post office address of such person, by recording a duly executed surrender thereof in the records of the County in which the land is located.

13. Lessor hereby warrants and agrees to defend the title to the land herein described and agrees that the Lessee at its option may pay, discharge or redeem any taxes, mortgages, or other liens existing, levied, or assessed on or against the above described lands, and in event it exercises such option, it shall be subrogated to the rights of any holder or holders thereof and may reimburse itself by applying any royalty or rentals accruing hereunder to the discharge of any such taxes, mortgages or other liens.

14. It is expressly agreed that if the Lessee shall commence drilling operations at any time while this lease is in force, it shall remain in force and its terms continue so long as such operations are prosecuted, and if production results therefrom, then as long as production continues. If after the expiration of the term of this lease production from the leased premises shall cease from any cause, this lease shall terminate provided Lessee resumes operations within sixty days from such cessation, and this lease shall remain in force during the prosecution of such operations, and, if production results therefrom, then as long as oil or gas is produced in paying quantities.

1001-3251

BOOK 1001 PAGE 325

15. This lease embodies the entire contract and agreement between Lessor and Lessee, and no warranties, representations, promises or inducements not herein expressed have been made or relied upon by either party. The terms, conditions and stipulations hereof shall extend to the respective heirs, executors, administrators, successors and assigns of the parties hereto.

Witness the hands and seals of the parties hereto the day and year first above written.

WITNESS:  
Eizabeth Swartz  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Richard C. Bingham (SEAL)  
Agent & Attorney In Fact for (SEAL)  
The Van Devender Heirs (SEAL)  
Richard C. Bingham (SEAL)  
Eizabeth B. Bingham (SEAL)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ (SEAL)

WEST VIRGINIA ACKNOWLEDGMENT

STATE OF WEST VIRGINIA

COUNTY OF \_\_\_\_\_

To-wit:

I, \_\_\_\_\_ a Notary Public of said County, do hereby certify that \_\_\_\_\_

whose name \_\_\_\_\_ signed to the within writing bearing date the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

he \_\_\_\_\_ this day acknowledged the same before me in my said County.

Given under my hand this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

My Commission expires \_\_\_\_\_

Notary Public

WEST VIRGINIA ACKNOWLEDGMENT

STATE OF WEST VIRGINIA

COUNTY OF \_\_\_\_\_

To-wit:

I, \_\_\_\_\_ a Notary Public of said County, do hereby certify that \_\_\_\_\_

whose name \_\_\_\_\_ signed to the within writing bearing date the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

he \_\_\_\_\_ this day acknowledged the same before me in my said County.

Given under my hand this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_

My Commission expires \_\_\_\_\_

Notary Public

Proposed by  
CARL R. MORRIS

Florida ACKNOWLEDGMENT

STATE OF FLORIDA

COUNTY OF PALM BEACH

SS.

Before me, a Notary Public in and for said county, personally appeared the above named Richard C. Bingham, Agent & Attorney In Fact for the VanDevender Heirs and Richard C. Bingham and Elizabeth B. Bingham, his wife,

that they did sign the foregoing instrument, and that the same is their free act and deed. In testimony whereof I have hereunto subscribed my name at North Palm Beach, this 5th day of May, 19 27

01/12/2024



RECEIVED  
DEC 03 1982

OIL & GAS DIVISION  
DEPT. OF MINES

A S S I G N M E N T

For good and valuable cash consideration, and other consideration set forth below, the undersigned, H. DELANO SMITH, hereby assigns all of his right, title and interest in and to the two oil and gas leases described below to PANTHER CREEK IV LIMITED PARTNERSHIP, a \_\_\_\_\_ limited partnership:

1. Lease made by Adrian Buckhannon Bank Trust Company, for the J. S. Withers heirs, to Carl R. Morris, dated March 18, 1981, recorded in the office of the Clerk of the County Commission of Wirt County, West Virginia, in Deed Book 161, at page 58; and
2. Lease from Richard Bingham, agent and attorney-in-fact for the Vandevender heirs, et al, to Carl R. Morris, dated May 5, 1981, and recorded in said Clerk's office in Deed Book 161, at page 324.

Carl R. Morris assigned his interest in both of these leases to H. Delano Smith by two instruments, the first dated July 11, 1981, recorded in said Clerk's office in Deed Book 162, at page 42, and the second dated July 6, 1982, and recorded in said Clerk's office in Deed Book 165, at page 333.

H. Delano Smith hereby reserves an overriding royalty of (1/32nd) of (8/8ths) of all oil and gas and/or their related products produced from the premises described in said leases.

In consideration of this assignment, Panther Creek IV Limited Partnership, by accepting this assignment, hereby covenants that it will commence drilling one well on or before December 31, 1982, and, if the first well is successful, to drill and complete a second well on or before December 31, 1983.

H. Delano Smith grants this assignment with covenants of special warranty and agrees that Panther Creek IV Limited Partnership may, at its option, pay and discharge any liens or encumbrances in his name which are charged against the above described leases and, in the event such option is exercised, said partnership shall be subrogated to the rights of any holder or holders thereof and may be reimbursed by applying all or part of

01/12/2024



the overriding royalty reserved herein to the discharge of any such lien or encumbrance. H. Delano Smith also covenants that Appalachian Petroleum, of Reno, Ohio, has not drilled any wells on the above described leases since July 11, 1981, the date of an assignment of these leases to it, recorded in said Clerk's office in Deed Book 161, at page 818. H. Delano Smith also covenants that the aforesaid leases are still in full force and effect.

All terms, conditions and covenants between the parties hereto shall extend to their respective heirs, successors, personal representatives and assigns.

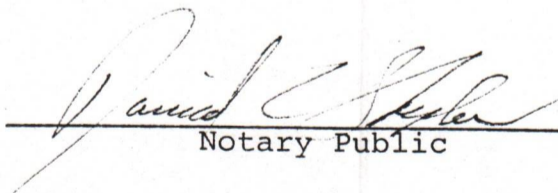
WITNESS the following signature this 3<sup>rd</sup> day of December, 1982.

  
\_\_\_\_\_  
H. Delano Smith

STATE OF WEST VIRGINIA,  
COUNTY OF KANAWHA, to-wit:

The foregoing instrument was acknowledged before the undersigned authority this 3rd day of December, 1982, by H. DELANO SMITH, single.

My commission expires December 4, 1984.

  
\_\_\_\_\_  
Notary Public

This instrument was prepared by David C. Shepler, Attorney at Law, 1616 Charleston National Plaza, Charleston, West Virginia.

01/12/2024



B-1



IV-35  
(Rev 8-81)

Date December 28, 1982

Operator's

Well No. W-2

State of West Virginia

Department of Mines

Oil and Gas Division

Farm C. E. Vandevender Hrs.

API No. 47 - 105 - 1033

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

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

LOCATION: Elevation: 1088 Watershed Sergent Run

District: Burning Spring County Wirt Quadrangle Girta 7.5'

COMPANY Panther Creek Ltd. Partnership #4

ADDRESS 1725 Desales St., NW, Washington, DC

DESIGNATED AGENT Van Davis

ADDRESS \_\_\_\_\_

SURFACE OWNER C. E. Vandevender Hrs., et al

ADDRESS N. Palm Beach, Florida

MINERAL RIGHTS OWNER C. E. Vandevender Hrs.

ADDRESS N. Palm Beach, Florida

OIL AND GAS INSPECTOR FOR THIS WORK \_\_\_\_\_

Deo Mace ADDRESS Rt. 1, Box 5 Sand Ridge, WV 25274

PERMIT ISSUED December 7, 1982

DRILLING COMMENCED 12-11-82

DRILLING COMPLETED 12-17-82

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 20-16 Cord.			
11 3/4" <del>12 1/2"</del>	258	258	135 Sks.
9 5/8			
8 5/8	2164	2164	390 Sks.
7			
5 1/2			
4 1/2	—	5105	428 Sks.
3			
2		5050 Est.	
Liners used			

GEOLOGICAL TARGET FORMATION Marcellus Shale Depth 5300 feet

Depth of completed well 5140 feet Rotary X / Cable Tools \_\_\_\_\_

Water strata depth: Fresh 36 feet; Salt 1250' / 1850 feet

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

OPEN FLOW DATA

Producing formation Hampshire, Chemung, Brallier Pay zone depth 2651 - 5028 feet

Gas: Initial open flow N.E.G. Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow Est. 500 Mcf/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests \_\_\_\_\_ hours

Static rock pressure Est. 800# psig (surface measurement) after 01/12/2024 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

Virt 1033



B-2

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

1st Stage - 4168 - 5028'; 30 Holes - Frac wi. 825 M N<sub>2</sub>  
 2nd Stage - 3640 - 4110'; 30 Holes - Frac wi. 825 M N<sub>2</sub>  
 3rd Stage - 2651 - 3240'; 30 Holes - Frac wi. 825 M N<sub>2</sub>

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Formation Depths Taken From Driller's Log Book —					
Clay			0	3	
Shale			3	10	
Red Rock			10	15	
Sandy Shale			15	30	
Shale			30	40	Hole Damp @ 36'
Sand			40	85	
Shale and Sand			85	104	
Red Rock			104	120	
Red Rock and Shale			120	150	
Sand			150	175	
Red Rock and Shale			175	210	
Sand and Shale			210	230	
Sand			230	270	
Sandy Shale			270	289	
Red Rock			289	335	
Shale			335	392	
Sandy Shale			392	435	
Shale			435	470	
Red Rock and Shale			470	1250	
Sand			1250	1290	Hole Damp @ 1250'
Sandy Shale			1290	1350	
Shale			1350	1380	
Sandy Shale			1380	1490	
Shale			1490	1505	
Sandy Shale			1505	1623	
Shale			1623	1654	
Sand			1654	1680	
Little Lime			1680	1715	
Dark Sand			1715	1869	Hole damp @ 1850'
Sand			1869	1930	
Sand and Shale			1930	1940	
Big Lime			1940	2000	
Injun			2000	2070	
Sandy Shale			2070	-	

(Continued)

(Attach separate sheets as necessary)

Panther Creek Ltd. Partnership #4 01/12/2024

Well Operator

By:

Date: December 28, 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



B-3

WELL LOG

FORMATION	TOP FEET	BOTTOM FEET	REMARKS
Formation Depths Taken From Gamma Ray Log — EKB 1097' —			
Sandy Shale	-	2518	
Coffee Shale	2518	2528	
Berea	2528	2530	
Sand and Shale - Hampshire	2530	3008	
Shale and Siltstone - Chemung	3008	4650	
Shale and Siltstone - Brallier	4650	-	
TOTAL DEPTH	-	5140	
Well Logged By Gearhart Owen			
Initial Open Flow - Not Enough to Gauge			

01/12/2024

5140



B-4

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

RECEIVED

DEC 21 1982

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

INSPECTOR'S WELL REPORT

Permit No. 105-1033

Oil or Gas Well

Company Panther Creek IV

Address \_\_\_\_\_

Farm Van Dwendel

Well No. 2

District Burnig Springs County Wirt

Drilling commenced \_\_\_\_\_

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	LEFT IN	LEFT IN	PACKERS
Size			
16			
13			
10			
8 1/4			
6 3/4			
5 3/16			
4			
2			
Liners Used _____			
CASING CEMENT USED _____			
NAME OF CEMENT COMPANY _____			
COAL WAS ENCOUNTERED AT _____ INCHES			
FEET	INCHES	FEET	INCHES
FEET	INCHES	FEET	INCHES

Drillers' Names SW Jack 21

Remarks: 258' of 11 3/4" Dowell 135,5KS cement 12-12-82  
2164' of 8 5/8" Dowell 390 SKS " 12-14-82  
damp at 36 feet.

12-15-82

DATE

Wes Wallace 01/12/2024

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: \_\_\_\_\_

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

01/12/2024

DISTRICT WELL INSPECTOR



B-12



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

RECEIVED  
OCT 16 1984  
OIL & GAS DIVISION  
DEPT. OF MINES

FINAL INSPECTION REPORT  
INSPECTORS COMPLIANCE REPORT

COMPANY Panther Creek Ltd. Part. #4  
1725 DeSales Street, N. W.  
Washington, D. C. 20036

PERMIT NO 105-1033  
C. E. Vanderender Heirs  
FARM & WELL NO #W-2  
DIST. & COUNTY Burning Springs - Wirt

RULE	DESCRIPTION	IN COMPLIANCE	
		YES	NO
23.06	Notification Prior to Starting Work		
25.04	Prepared before Drilling to Prevent Waste		
25.03	High-Pressure Drilling		
16.01	Required Permits at Wellsite		
15.03	Adequate Fresh Water Casing		
15.02	Adequate Coal Casing		
15.01	Adequate Production Casing		
15.04	Adequate Cement Strenght		
15.05	Cement Type		
23.02	Maintained Access Roads	✓	
25.01	Necessary Equipment to Prevent Waste	✓	
23.04	Reclaimed Drilling Pits	✓	
23.05	No Surface or Underground Pollution	✓	
23.07	Requirements for Production & Gathering Pipelines	✓	
16.01	Well Records on Site		
16.02	Well Records Filed		
7.05	Identification Markings	✓	

I HAVE INSPECTED THE ABOVE CAPTIONED WELL AND RECOMMEND THAT IT BE RELEASED:

SIGNED Homer H. Dougherty  
DATE 10/9/84

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

T. H. ...  
Administrator-Oil & Gas Division  
January 4, 1985

DATE



**APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL  
PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA)**

**FILED**  
**DEC 28 1982**

**OIL & GAS DIVISION  
DEPT. OF MINES**

1.0 API well number: (If not assigned, leave blank. 14 digits.)	- 47 - 105 - 1033										
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	Section of NGPA: <u>107</u> Category Code: <u>3</u>										
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	<u>5028</u> feet										
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Name: <u>Panther Creek Ltd. Partnership #4</u> Street: <u>c/o Wyatt &amp; Saltzstein, 1725 Desales St., NW</u> City: <u>Washington,</u> State: <u>D.C.</u> Zip Code: <u>20036</u>										
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.) (b) For OCS wells:	Field Name: <u>Burning Springs North</u> County: <u>Wirt</u> State: <u>WV</u> 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.)	<u>C. E. Vandevender, et al, W-2</u>										
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	<u>Devonian Hampshire, Chemung, Brallier</u>										
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.) (b) Date of the contract:	Name: <u>Columbia Gas Transmission Corporation</u> Buyer Code: _____ Being Negotiated Mo.   Day   Yr.										
(c) Estimated total annual production from the well:	_____ Million Cubic Feet										
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:15%;"></th> <th style="width:25%;">(a) Base Price</th> <th style="width:25%;">(b) Tax</th> <th style="width:25%;">(c) All Other Prices [Indicate (+) or (-).]</th> <th style="width:10%;">(d) Total of (a), (b) and (c)</th> </tr> </thead> <tbody> <tr> <td>S/MMBTU</td> <td align="center"><u>6.369</u></td> <td align="center">-----</td> <td align="center">-----</td> <td align="center">-----</td> </tr> </tbody> </table>		(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)	S/MMBTU	<u>6.369</u>	-----	-----	-----
	(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)							
S/MMBTU	<u>6.369</u>	-----	-----	-----							
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	<table border="1" style="width:100%; border-collapse: collapse;"> <tbody> <tr> <td>S/MMBTU</td> <td align="center"><u>6.369</u></td> <td align="center">-----</td> <td align="center">-----</td> <td align="center">-----</td> </tr> </tbody> </table>	S/MMBTU	<u>6.369</u>	-----	-----	-----					
S/MMBTU	<u>6.369</u>	-----	-----	-----							
9.0 Person responsible for this application:	Name: <u>Robert A. Saltzstein</u> Title: <u>General Partner</u> Signature: _____ Date Application is Completed: <u>December 28, 1982</u> Phone Number: <u>202 - 638-4485</u>										

Agency Use Only
Date Received by Juris. Agency: <b>DEC 28 1982</b>
Date Received by FERC

FERC-121 (8-82)

01/12/2024



APR 4 - 1983

PARTICIPANTS:

DATE:

BUYER-SELLER CODE

WELL OPERATOR: Panther Creek Ltd. Partnership #4 % Wyatt & Saltzstein

FIRST PURCHASER: Columbia Gas Trans Corp.

OTHER:

004030

W. Va. Department of Mines, Oil & Gas Division  
 WELL DETERMINATION FILE NUMBER  
821228-107-105-1033  
 Use Above File Number on all Communications  
 Relating to Determination of this Well

QUALIFIED

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121  Items not completed - Line No. 7.04 8.0 b,c,d
- 2. IV-1 Agent Van Davis
- 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: 12-11-82 Date completed 12-17-82 Deepened
- (5) Production Depth: 2651 - 5028
- (5) Production Formation: Hampshire, Chemung, Brallier
- (5) Final Open Flow: Est. 500 MCF
- (5) After Frac. R. P. Est. 800 #
- (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 \_\_\_\_\_
- 17. Does lease inventory indicate enhanced recovery being done No
- 17. Is affidavit signed?  Notarized?
- Does official well record with the Department confirm the submitted information? yes
- Additional information \_\_\_\_\_ Does computer program confirm? \_\_\_\_\_
- Determination Objected to \_\_\_\_\_ By Whom? \_\_\_\_\_

01/12/2024



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

Date December 28, 19

Operator's Well No. W-2

API Well No. 47 - 105 - 103  
State County Perm

STATE APPLICATION FOR WELL CLASSIFICATION

Previous File No. \_\_\_\_\_  
(If Applicable)

WELL OPERATOR Panther Creek Ltd. Partnership #4 DESIGNATED AGENT Van Davis  
c/o Wyatt & Stalzman  
ADDRESS 1725 Desales St., NW ADDRESS General Delivery  
Washington, D C 20036 Paynesville, West Virginia

Gas Purchase Contract No. Being Negotiated and Date \_\_\_\_\_  
(Month, day and year)

Meter Chart Code \_\_\_\_\_  
Name of First Purchaser: Columbia Gas Transmission Corporation  
P. O. Box 1273  
(Street or P. O. Box)  
Charleston, West Virginia 25325  
(City) (State) (Zip Code)

FERC Seller Code \_\_\_\_\_ FERC Buyer Code \_\_\_\_\_

TYPE OF DETERMINATION BEING SOUGHT:

- (1) Initial determination (See FERC Form 121.) Section of NGPA 107 Category Code 3
- (2) Determination that increased production is the result of enhanced recovery technology.
- (3) Determination of a seasonally affected well.

Robert H. Saltzstein General Partner  
Name (Print) Title

[Signature]  
Signature

1725 Desales St., NW  
Street or P. O. Box

Washington, D.C. 20036  
City State (Zip Code)

(202) 638-4485  
Area Code Phone Number

(Certificate of Proof of Service to Purchaser)

Delivered to Columbia Gas 12-28-82

(All of the above to be completed by the Operator/Applicant)

(To be completed by Jurisdictional Agency. Executed copy to be returned to Operator/Applicant and purchaser, if known).

The Department of Mines has received a request  for certification of the above described well as meeting the requirements of Section \_\_\_\_\_ under the Natural Gas Policy Act of 1976. (NGPA);  or for determination that increased production is the result of enhanced recovery technology under Section 108 of (NGPA);  or for determination of a seasonally affected well under Section 108 of (NGPA).

All interested parties are hereby notified that on the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_, at the office of the Oil and Gas Division in Charleston, West Virginia, or as soon thereafter as it may be heard, there will be a public hearing, if requested, or if objection is filed.

This Application is assigned File No. \_\_\_\_\_

Initial review of information submitted indicates the well  is.  is not entitled to certification as claimed under the Natural Gas Policy Act (NGPA). A review of this evidence and any additional evidence will be made at the time appointed for a public hearing or as soon thereafter as the matter may be heard.

Unless objections are timely filed or a request for a hearing is made within fifteen (15) days, a hearing will not be held except on ex parte motion of the department and the matter will go to determination.

WEST VIRGINIA DEPARTMENT OF MINES

DEC 28 1982

Date received by \_\_\_\_\_  
Jurisdictional Agency

By [Signature] 01/12/2024  
Title \_\_\_\_\_



WELL CLASSIFICATION FORM  
HIGH COST GAS WELL - DEVONIAN SHALE  
NGPA Section 107

DESIGNATED AGENT VAN DAVIS

ADDRESS GENERAL DELIVERY  
PAYNESVILLE, W. VA.

WELL OPERATOR PANTHER CREEK LTD  
PARTNERSHIP # 4

LOCATION Elevation 1088'

ADDRESS 1725 DE SALES ST. N.W.  
WASH. D.C. 20036

Watershed SERGEANT RUN

GAS PURCHASER COLUMBIA GAS TRANS. CORP

Dist. SPRINGS County WIRT Quad. GIRTA 7.5'

ADDRESS P.O. BOX 1273  
CHARLESTON, W. VA. 25325

Gas Purchase  
Contract No. BEING NEGOTIATED

Meter Chart Code \_\_\_\_\_

Date of Contract \_\_\_\_\_

\* \* \* \* \*

Date surface drilling began: 12-11-82

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

BHP = 903.14

G = .68  
L = 4598  
T = 109  
P<sub>i</sub> = 800 psi

$$BHP \left[ \left( \frac{G \times L}{53.34 \times T} \right) - 1 \right] P_i + P_i$$

AFFIDAVIT

I, D. GENE HANEY, 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 in 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.

D. Gene Haney

STATE OF WEST VIRGINIA

COUNTY OF KANAWHA, TO-WIT:

I, Lois J. Simpkins, a Notary Public in and for the state and county aforesaid, do certify that D. GENE HANEY, whose name is signed to the writing above, bearing date the 25th day of DECEMBER, 19 82, has acknowledged the same before me, in my county aforesaid.

01/12/2024

Given under my hand and official seal this 25th day of DECEMBER, 19 82.  
My term of office expires on the 9th day of March, 19 92.

(NOTARIAL SEAL)

Lois J. Simpkins  
Notary Public



DEVONIAN SHALE GAMMA RAY LOG ANALYSIS  
APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL  
PRICE UNDER THE NATURAL GAS POLICY ACT

Operator: Panther Creek Ltd. Partnership #4 Agent: Van Davis

Type Determination being sought - 107 (Devonian Shale)

API Well No.: 47-105-1033 Well Name: C. E. Vandevender

West Virginia Office of Oil and Gas County: Wirt

References: SJA File No.

Vol.      Page      Line     

I. NOTE: A Gamma Ray Log has been marked with the (a) Shale Base Line, (b) a line representing 0.7 x (Shale Base Line), (c) intervals with Gamma Ray units less than 0.7 x (Shale Base Line) and that log is included with this analysis.

II. Gamma Ray elevation indices:

A. Shale Base Line (API Units)

1. GR Value at Base Line = 160 \* API Units
2. Remarks:

B. Gamma Ray Log Value at 0.7 x Value at Base Line

1. GR Value = 160 \* API Units
2. Calculation:  $\frac{0.7 \text{ (GR Value at Base Line)}}{0.7 \text{ (} \underline{160} \text{ *)} = \underline{112} \text{ API Units}$

III. Intervals with GR index less than 0.7 x (Value at Base Line):

Interval		Thickness of Interval Feet	Feet of less than* 0.7 (Shale Base Line) Feet
From**	To***		
2530	5140	2610	52'

Total Devonian Interval 2610

Total Less Than 0.7 (Shale Base) 52'

% Less Than 0.7 (Shale Base Line) =  $\frac{.0199}{1} \times 100 = \underline{1.99} \%$

01/12/2024

\*Marked on log included with analysis.  
 \*\*Top of Devonian Section Recorded on First Interval in this Column.  
 \*\*\*Lesser of TD or Bottom of Devonian Section Recorded as last Interval in this Column.



E-3

IV-27  
11/23/81



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Date: August 29, 1983  
Well No: VAN DEVENOR W2  
API NO: 47 - 105 1033  
State County Permit

### Oil and Gas Division NOTICE OF VIOLATION

WELL TYPE: Oil \_\_\_ / Gas \_\_\_ Liquid Injection \_\_\_ / Waste Disposal \_\_\_ /  
Of "Gas" - Production \_\_\_ / Storage \_\_\_ / Deep \_\_\_ / Shallow \_\_\_ /  
LOCATION: Elevation: 1088 Watershed: Sergents Run  
District: BURNING SP. County: WIRT Quadrangle: \_\_\_\_\_  
WELL OPERATOR PANTHER CREEK IV DESIGNATED AGENT Van Davis  
Address \_\_\_\_\_ Address General Delivery  
Brookshaw WV 24823

The above well is being posted this 29 day of Aug, 1983, for a violation of Code 22-4-12B and/or Regulation \_\_\_\_\_, set forth in detail as follows:  
(USE REVERSE SIDE OF THIS NOTICE IF NECESSARY)

*Location has not been mulched or seeded and is starting to erode.*

A copy of this notice has been posted at the well site and sent by certified or registered mail to the indicated well operator or his designated agent.

You are hereby granted until Sept. 5, 1983, to abate this violation.

Failure to abate the violation may result in action by the Department under Code 22-4-17 or Code 22-4-18.

Orlando Mace  
Oil and Gas Inspector  
Address RT 1 BOX 5  
Sand Ridge WV 25274  
Telephone: 655 - 7085 **01/12/2024**





11/23/81 14-27

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

# Oil and Gas Division NOTICE OF VIOLATION

Date: August 27, 1983  
Well No: VAN DEWEER W2  
API NO: 47-105-1033  
State County Permit

WELL TYPE: Oil  Gas  Liquid Injection  Waste Disposal   
Of "Gas" - Production  Storage  Deep  Shallow   
LOCATION: Elevation: 1088 Watershed: Appomattox  
District: Burnside County: Wirt Quadrangle: \_\_\_\_\_  
WELL OPERATOR: Patrick Kelly DESIGNATED AGENT: John Brown  
Address: \_\_\_\_\_ Address: Mountain View  
Branchburg, W. Va 24823

The above well is being posted this 27 day of Aug, 1983, for a violation of Code 22-4-12B and/or Regulation \_\_\_\_\_, set forth in detail as follows:  
(USE REVERSE SIDE OF THIS NOTICE IF NECESSARY)

*I continue to have your interest as usual and is starting to work.*

A copy of this notice has been posted at the well site and sent by certified or registered mail to the indicated well operator or his designated agent. You are hereby granted until Sept 5, 1983, to abate this violation. Failure to abate this violation may result in action by the Department under Code 22-4-17 or Code 22-4-18.

Oil and Gas Inspector: John Brown  
Address: RT 1 Box 3  
Branchburg, W. Va 24823  
Telephone: 682-7082

01/12/2024



IV-27  
11/23/81



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Date: August 29, 1983  
Well No: VAN DEVENDER WV  
API NO: 47 - 105 1033  
State County Permit

**Oil and Gas Division  
NOTICE OF VIOLATION**

WELL TYPE: Oil \_\_\_ / Gas \_\_\_ Liquid Injection \_\_\_ / Waste Disposal \_\_\_ /  
Of "Gas" - Production \_\_\_ / Storage \_\_\_ / Deep \_\_\_ / Shallow \_\_\_ /

LOCATION: Elevation: 1088 Watershed: Sugent's Run  
District: BURNING SP. County: WIRT Quadrangle: \_\_\_\_\_

WELL OPERATOR PANTHER CREEK IV DESIGNATED AGENT Van Davis  
Address \_\_\_\_\_ Address General Delivery  
Bradshaw wv 24823

The above well is being posted this 29 day of aug, 1983, for a violation of Code 22-4-12B and/or Regulation \_\_\_\_\_, set forth in detail as follows:  
(USE REVERSE SIDE OF THIS NOTICE IF NECESSARY)

*Location has not been mulched or seeded and is starting to erode.*

RECEIVED

SEP 1 - 1983

OIL & GAS DIVISION  
DEPT. OF MINES

A copy of this notice has been posted at the well site and sent by certified or registered mail to the indicated well operator or his designated agent.

You are hereby granted until Sept. 5, 1983, to abate this violation.

Failure to abate the violation may result in action by the Department under Code 22-4-17 or Code 22-4-18.

Dis More  
Oil and Gas Inspector

Address RT 1 BOX 5  
Sand Ridge wv 23274

Telephone: 655 - 01/12/2024



Date: Sept 9, 19 83

Operator's Well No. Van Darnold W 2

API Well No. 47-105-1033  
State County Permit

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

NOTICE OF ABATEMENT

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

LOCATION: Elevation: \_\_\_\_\_ Watershed: \_\_\_\_\_  
District: Bruny Sp. County: Wirt Quadrangle: \_\_\_\_\_

WELL OPERATOR Cartho Creek IV  
Address \_\_\_\_\_

DESIGNATED AGENT Van Davis  
Address Gen. Delany Bradshaw, W V 24823

Notice is hereby given that the undersigned authorized oil and gas inspector made a special inspection of the above named well on Sept 9, 1983.

- Upon the expiration of a period of time originally fixed for abatement.
- Upon the order of the Deputy Director for Oil and Gas at the request of the well operator.
- Upon the request of the Deputy Director for Oil and Gas.

The violation of Code 22-4-12B heretofore found to exist on Aug 29, 1983, by Form IV-27, "Notice of Violation"  / Form IV-28, "Imminent Danger Order" \_\_\_/ of that date has been totally abated. If the abated violation was found by an Imminent Danger Order requiring operations to cease, such requirement is hereby rescinded, and the well operator is hereby notified that he may resume operations.

COMMENTS

RECEIVED

SEP 14 1983

OIL & GAS DIVISION  
DEPT. OF MINES

A copy of this notice has been posted at the well site and sent by certified or registered mail to the indicated well operator or his designated agent.

W. S. M... 01/12/2024  
Oil and Gas Inspector

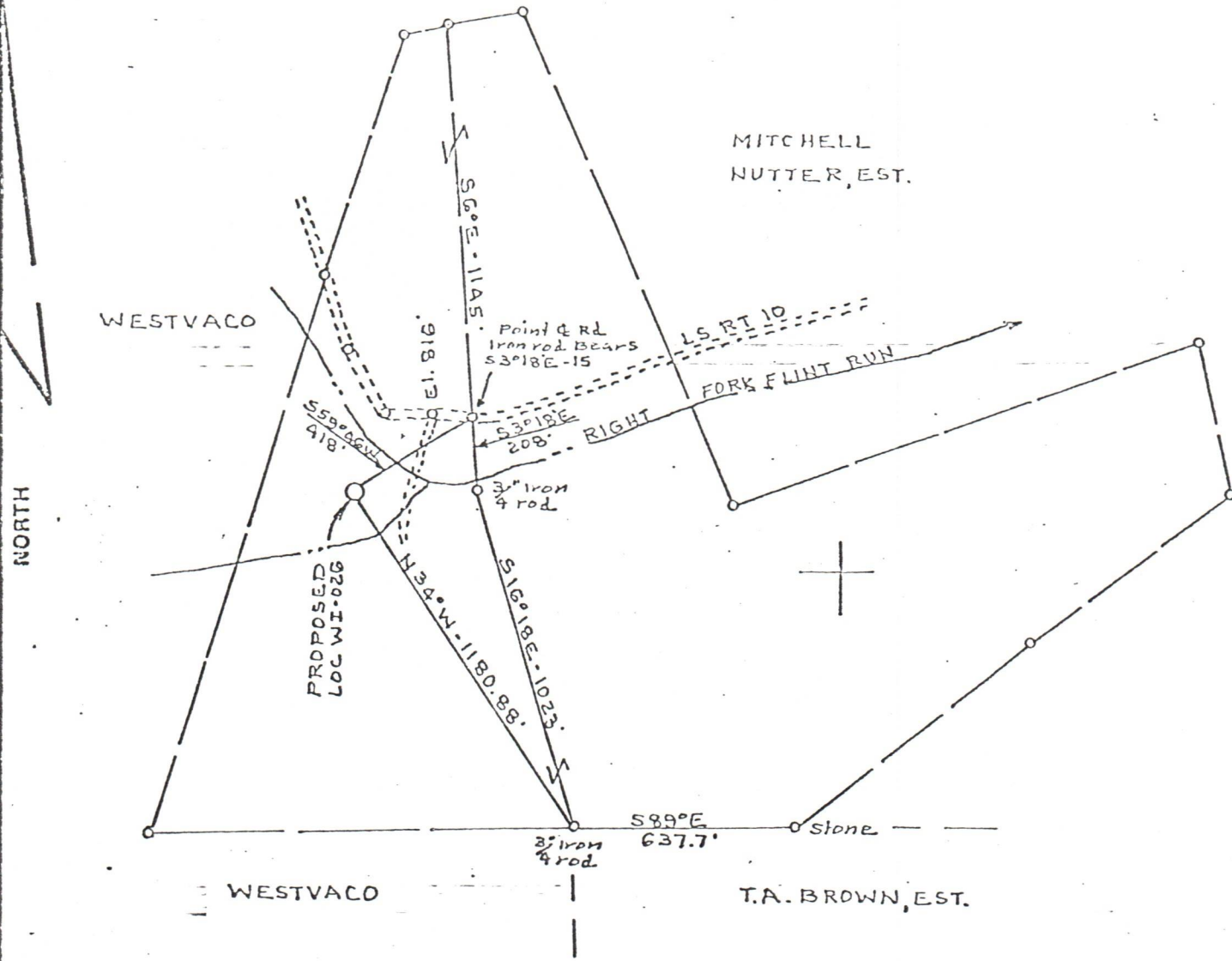
Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_



1-026

LATITUDE 39°07'30"

LONGITUDE 91°17'30"



FILE NO. Bk 73 PG 101  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1-200'  
 PROVEN SOURCE OF ELEVATION USGS BM  
Road Forks 300' NE  
Loc. E1 816.00'

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 DEPARTMENT OF MINES.  
 (SIGNED) C. Y. Valley Jr.  
 R.P.E. \_\_\_\_\_ C.L.S. 92

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE NOV 27, 1982  
 OPERATOR'S WELL NO. WI-026  
 API WELL NO. \_\_\_\_\_  
47-105-1033  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 818.67 WATER SHED RIGHT FORK OF FLINT RUN  
 DISTRICT CLAY COUNTY WIRT  
 QUADRANGLE GIRTA 7.5'  
 SURFACE OWNER WESTVACO ACREAGE 20  
 OIL & GAS ROYALTY OWNER GLEN W. ROBERTS ESTATE LEASE ACREAGE 85  
 LEASE NO. 1862  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 4800'  
 WELL OPERATOR RDW VALLEY PETRO. INC. DESIGNATED AGENT W.E. STOVER  
 ADDRESS 600 COMMERCE SQUARE ADDRESS Box 235

01/12/2024





IV-35  
(Rev 8-81)

Date December 30, 1982  
Operator's  
Well No. WI-026  
Farm Gillespie  
API No. 47 - 105 - 1032

State of West Virginia  
Department of Mines  
Oil and Gas Division

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 \_\_\_ / Shallow x /)

LOCATION: Elevation: 818.67 Watershed Right fork of Flint Run  
District: Clay County Wirt Quadrangle Girta

COMPANY Bow Valley Petroleum Inc  
ADDRESS 600 Commerce Sq. Charleston, WV 25301  
DESIGNATED AGENT W. E. Stover  
ADDRESS Culloden, WV  
SURFACE OWNER Glen W. Roberts Estate  
ADDRESS Elizabeth, WV  
MINERAL RIGHTS OWNER Westvaco  
ADDRESS Parkersburg, WV  
OIL AND GAS INSPECTOR FOR THIS WORK Deo  
Mace ADDRESS Sandridge, WV  
PERMIT ISSUED 12-7-82  
DRILLING COMMENCED 12-13-82  
DRILLING COMPLETED 12-21-82

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	24	24	15 sks
9 5/8	290.75	290.75	125 sks
8 5/8			
7	1513.60	1513.60	160 sks
5 1/2			
4 1/2		4650.90	280 sks
3			
2			
Liners used			

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

GEOLOGICAL TARGET FORMATION Devonian Shale - Marcellus Depth 1446'-4676' feet  
Depth of completed well 4676 feet Rotary x / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 116 feet; Salt \_\_\_\_\_ feet  
Coal seam depths: N/A Is coal being mined in the area? No

OPEN FLOW DATA  
Producing formation Devonian Shale Pay zone depth 1446'-4676' feet  
Gas: Initial open flow show Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 400 Mcf/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ hours  
Static rock pressure testing 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

(Continue on reverse side)



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

Well fraced in two stages; each stage consisting of 1,000,000 sft<sup>3</sup> of N<sub>2</sub> with 500 gallons of acid for initial breakdown.

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	3	
Sand			3	40	
Shale			40	2225	
Sand & Shale			2225	3311	
Shale			3311	4676 TD	
					Electric log tops
					Sunbury Shale 1400'-1446'
					Dev. Shale 1448'

(Attach separate sheets as necessary)

Bow Valley Petroleum Inc.

Well Operator

By: *Marvin Combs*

Date: December 30, 1982

01/12/2024

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."