A-1

DRILLING CONTRACTOR:



1)	Date: Dec	ember 1		_, 19_82
2)	Operator's Well No.	WI026		
3)	API Well No.	47	105	1032
		State	County	Dormit

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

ach are produced densition of ga			OIL AND	GAS WELL PERMIT	APPLICATION	consensional orean Profitcional local In	
4) WELL TYPE:						hancas so sus cose	si ngoria
5) LOCATION:						of Flint Run	/ Shallow X /)
				County:	Wirt	Quadrangle:	
6) WELL OPERA				Inc. 11	) DESIGNATEI	THE RESERVE OF THE PARTY OF THE	Stover
Address		merce Squ ston, WV		less stron env unos	Address	Box 235 Culloden, W	V 25510
7) OIL & GAS						ell'is joyatede	w. stad William
ROYALTYON	VNER Gler		rts Esta	12 12	) COAL OPERA	ATOR N/A	7.3
Address	Elizabet	in, WV		551	Address	AGESTSON SHIP GRIW IS	A SAME TO SECURE
	85		War of the same	The State of the s			
Acreage 8) SURFACE OW	William Control of the Control	Waco.		13	* 方 ・ 変字 は ・ ・ ・ *	ER(S) WITH DECLAR	ATION ON RECORD:
Address	Parkerst	NORTH AND RESIDENCE OF THE PROPERTY OF THE PRO		E Company	Name	ATTO TOTAL PROPERTY AND	(8) Present
Address	T UT KET SE	urg, wv		- 10/15 (6)	Address	50	Reported 149
Acreage	20			Transia .	Name		2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
9) FIELD SALE	(IF MADE) TO			CO .	Address		and the state
Address	atto ragreo u	o acumidas	r graetown	led digital by	1 1000	Minisma 1049180	(C) "" (C)
				14	) COAL LESSE	E WITH DECLARAT	ION ON RECORD:
10) OIL & GAS IN			D	000	Name	370 1. 200 See North	12 K 14) As per 6
	Deo Mace	1. TO 1. TO E. A. T	95 5d 10E	DEDT	S DIAddress	TOTIONS BOTTOM	MI STOWN COL
Address	Rt. 1, F		I senouthwa	OL HOW ON TO	F MINE	CONTRACTOR STREET	TESISHY.
IS PROPOSED II	Sandridg		D : 11 1			ison moon or bailt Su	/FirmeR
15) PROPOSED W		/ I	THE RESERVE TO SERVE ASSESSMENT			cture or stimulate	periodities (At
		r physical chan			ew formation	THE STATE OF THE PARTY OF THE P	
16) GEOLOGICAI						Yatolinual	(1) 30E (1)
17) Estimated					realbale book yas	day feet less was	n dispell 181
18) Approxima				THE RESERVE OF THE PARTY OF THE	alt,	feet.	
19) Approxima				Is coal			No_XXXX
20) CASING AND							
Contract to the Contract of	TODINGTRO	Market at 1990 (pg	rinks stor			a meason paraso b	
CASING OR TUBING TYPE	Size Gra	SPECIFICATION Weight per ft.	New Used		Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
Conductor	13		X	30	30	To surface	Kinds
Fresh water	9 5/8	ad country w	X	250	250	To surface	A(I)
Coal	engerneangs.	letribett#65	Burnagano	a ladioche asarol II	so intractio	e identif satirta i	Sizes
Intermediate	7	23	X	12500	1250	To surface	- 100 sks.
Production	412	10.5	X	1750 AXXXXX	4750	250 sks.	Depths set
Tubing		2,000		W. 6	is recorded.	a telacific off telac	
Liners	3	DECEMBERS	end riens	fise lo znelskor	Title rovality ?	o song uron ishe	Perforations:
					(4)	CO brow (b) I have	Top Bottom
Ned terms 5-V1	onica of Fact	o u et band	on college of	bod ballyzers one	(Adder transport	AND STATE OF THE PARTY OF THE P	Total Total
21) EXTRACTION	PICHTS	ined by Reco	TOROTC MON	na attres of a original	witherneumon	an a state of section and and	AND STATE AND STATE OF THE STAT
Check and prov				r to from thereof t	a Clandinino	R vd bedinger grad	
			continuing c	ontract or contracts b	y which I hold th	e right to extract oil or	
The requ	irement of Cod	e 22-4-1-(c) (1)	through (4)	. (See reverse side for	r specifics.)	Hapbier, victorys:	G egologi
22) ROYALTY PR		midal w gall	lawb to fi	of Bny water we	corn the owner	ty Code \$22-4 an f	t berwo
							ng for flat well royalty or any e of oil or gas so extracted
produced or ma			ner or the o	n of gas in place win	ch is not inherent	ly related to the volum	e of on of gas so extracted
			eeded. If the	answer is Yes, you m	nay use Affidavit	Form IV-60.	tagen of
23) Required Copie			loand mlat ar	d resignation when b	enispeque en	11 10 100000 od 1 to	ivered by hand to the above
named coal ope	rator, coal own	er(s), and coal	lessee on or	before the day of the	mailing or delive	ry of this Permit Applie	cation to the Department of
Mines at Charle						0 , 0	0.
Notary:	Lapo to teny	any coal av		in the cost operat	Signed:	author All	heil
My Commission	Synings	to be issued	er Junion,	6 . 22-4-20 If the		ogist	real odw
wy commission	Expires				its. see:	compliated in the contract of	n <b>io</b> evab
				OFFICE USE O	NLY		
47-	105-1032			DRILLING PER	MIT	ecember 6	0.11.01000.100
Permit number					В		01/12/2024 82
This permit covering	the well opera	tor and well lo	cation shows	helow is evidence of	f permission areas	Date	ce with the pertinent legal re
quirements subject to	o the conditions	s contained her	ein and on t	he reverse hereof. Not	tification must be	given to the District Oi	l and Gas Inspector.
Refer to No. 10) Price	or to the constru	ction of roads,	locations an	d pits for any permitte	ed work. In addition	on, the well operator or	his contractor shall notify th
			re actual per	mitted work has com			paginou san 161a 160
Permit expires	August 6,	1983		unless dri	lling is commenced	d prior to that date and	prosecuted with due diligence

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

Administrator, Office of Oil and Gas

## 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 then 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.

	1 1 to 1	WAIVER	
The undersigned coal operator	/ owner	/ lessee	
mined this proposed well location. If	a mine map exists w	which covers the are	ea of the well location, the well location has been
			sed to be done at this location, provided, the well a Code and the governing regulations.
operator has complied with an applica	one requirements o	the west virginic	Code and the governing regulations.
The state of the s			AND
Date: 100 pag 10 to pag 7 - of 10 s		Ply By	HEREN WINDS

Its

·MN

Line Item 21) - Pursuant to Code 22-4-11(c) the applicant, Bow Valley Petroleum, in lieu of filing the lease with the permit application, does hereby provide the following information:

1.) Gillespie Tract is located in Clay District of Wirt County, West Virginia, containing 85 acres more or less and bounded on the

North by Vernon and Whiteman East by Rex Lands South by Floyd Joy West by Vernon

 Lessor - Glen W. Roberts (deceased) Dorothy Parks Roberts (his wife)

Lessee - Flying Diamond Oil Corporation
Bow Valley Petroleum is successor in interest.

- 3.) Oil and Gas Lease is recorded in Wirt County Recorders office in Book 152 at Page 722.
- 4.) Landowners Royalty is 1/8 of all oil and/or gas produced. Overriding Royalty is 4% of 8/8ths of all oil and/or gas produced. Both are payable to Glen W. Roberts Estate.

I, Dennis K. Dangler, the undersigned, do hereby certify that the above provided information is correct and accurate to the best of my knowledge and belief and shows all the information required by law and regulations issued and prescribed by the Department of Mines.

Dennis K. Dangler Land Manager

DEC 0 1 1982

OIL & GAS DIVISION

OIL & GAS DIVISION
DEPT. OF MINES



(Rev 8-81)

necessary for comments.

November 27, 1982 WHIL ID. #WFOZG

State of Mest Mirginia API 10. 47 - 105 Department of Mines

Wil und Gas Birision

## CONSTRUCTION AND RECLAMATION PLAN

Address CHARLESTON, WEST VIRGINIA	Address	CULLUZEN, WY
Telephone 304-344-8393		304-562-3376
		DISTRICT LITTLE KANSONA
ANDOWNER Westurico Corre		
Revegetation to be carried out by Bon		
This plan has been reviewed by $2.4$		SCD. All corrections
and additions become a part of this plan:	(Date)	
	la Home	I/
7	(SCD Agent	
ACCESS ROAD		LOCATION
en e		
tructure DRAINAGE DITCH (A	) Structure_	see sketch 11
Spacing .	Material_	<del></del>
Page Ref. Manual 2-15	Page Ref. M	lanual.
Structure Courses (18") (B	) Structure	B
Spacing	Material	WIE CER
		THE OBLIVE
Page Ref. Manual 2-8	Page Ref. M	DEC.
Structure (C	structure	DEC 0 1 1982
, contract the second s		DERT GAS DIVISION  Annual MINES
Spacing	Material	- CAT DIVISION
Page Ref. Manual	Page Ref. N	Manual MINE
All structures should be inspected re	egularly and repairs	ed is necessary. Aut
commercial timber is to be cut and stace	eked and all brush c	and small timber to be
cut and removed from the site before di	irt work begins.	
REVI	EGETATION	
Treatment Area I /I	4	Preatment Area II
Lime z Tons/acre	Lime	Tons/acre
or correct to pH 6.5		ect to pHlbs/acre
Fertilizer 600 lbs/acre (10-20-20 or equivalent)	Fertilizer	(10-20-20 or equivalent)
Mulch Hay z Tons/acre	Mulch	Tons/acre
Seed* Kentucky 31 Fescus 45 lbs/acre	Seed*	lbs/acre
LADING CLOVER 31bs/acre		· lbs/acre
		lbs/acre
Acceptance of the second of th	Constant Control	01/12/2024
*Inoculate all legumes such as vetch,	trefoil and clovers	with the proper bastercan.
Inoculate with 3X recommended amount.		11 -11
	PLAN PREPARED BY	WILLIAM F. HENRICHS, #
NOTES: Please request landowners'	ADDRESS 6	OD COMMERCE SQ.
seedling for one growing season.		HARLESTON, WY
		The state of the s
Attach separate sheets as		04-344-8393

CAN THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE COURT OF SHIP OF S THE BUBLE OF THE ATTACH OR PROTECOPY SECTION OF LEXELO INVOLVED TOPOGRAPHIC MAP. QUADRANGLE GIRTA Well Site (+) Access Road LOCATION IS LOCATED ON TOP OF A SMALL BRUSHY KNOLL. CONSTRUCTION OF LOCATION AND ALLESS ROAD WILL REQUIRE VERY LITTLE TIMBER TO BE CUT AND A MINIMUM OF GRADING WEIL 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 -Road = = = = = Spring O> Existing fence --- x--- X-Wet spot & Building 3 Planned fence ----/-Drain pipe O > O Stream \... ---->---Open ditch -LEFT FORK FLINT RUN ROMO (10) ROAD TO BE CONSTRUCTED

ROAD TO 90 GRADE

L APPROX. 150 FEET LOCATION # WIOZG 01/12/2024 RIDGE TOP



The cost of the state of the st

01/12/2024

# RECEIVED

JAN 3 - 1983

IV-35 (Rev 8-81) OIL AND GAS DIVISION WYDEPARTMENT OF MINES



# State of Mest Nirginia

Department of Mines Gil and Gas Division

Date December 30.	1982
Date <u>December 30</u> , Operator's	
Well No.WI-026	
Farm Gillespie	
APT No. 47 - 105	- 1032

WELL OPERATOR'S REPORT

DRILLING,	FRACTURING	AND/OR	STIMULATING,	OR	PHYSICAL	CHANGE	
						100	

010.07	Right fork	of Flint R	un	
LOCATION: Elevation: 818.67 Watershed  District: Clay County Wir				
		_~-		
COMPANY Bow Valley Petroleum Inc				dram
ADDRESS 600 Commerce Sq. Charleston, WV 2530	Casing	Used in	Left	Cement
DESIGNATED AGENT W. E. Stover	Tubing	Drilling	in Well	fill up Cu. ft.
ADDRESS Culloden, WV	Size			
SURFACE OWNER Glen W. Roberts Estate	20-16 Cond.			
ADDRESS Elizabeth, WV	13-10"	24	24	15 sks
MINERAL RIGHIS OWNER Westvaco	9 5/8	290.75	290.75	125 sks
ADDRESS Parkersburg, WV	8 5/8	230.73	250.75	123 5/5
OIL AND GAS INSPECTOR FOR THIS WORK Deo	7	1513.60	1513.60	160 sks
Mace ADDRESS Sandridge, WV	5 1/2	1313.60	1313.60	160 SKS
PERMIT ISSUED 12-7-82			4650.00	1000
DRILLING COMMENCED 12-13-82	3		4650.90	280 sks
DRILLING COMPLETED 12-21-82				
IF APPLICABLE: PLUGGING OF DRY HOLE ON	2	-		
TIMITAL DESCRIPTION TO THE TOTAL TOTAL TOTAL		1		
CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OPTAINED	Liners			
REWORKING. VERBAL PERMISSION OBTAINED ON	Liners			
REWORKING. VERBAL PERMISSION OBTAINED ON	used	Paul	1	
REWORKING. VERBAL PERMISSION OBTAINED ON  GEOLOGICAL TARGET FORMATION Devonian Shale -	used Marcellus	Dept		676'_feet
REWORKING. VERBAL PERMISSION OBTAINED ON  EDOLOGICAL TARGET FORMATION Devonian Shale - Depth of completed well 4676 feet	used Marcellus Rotary X	/ Cable	h <u>1446'-4</u> Tools	676' feet
REWORKING. VERBAL PERMISSION OBTAINED ON  EDOLOGICAL TARGET FORMATION Devonian Shale  Depth of completed well 4676 feet Water strata depth: Fresh 116 feet;	Marcellus Rotary X Salt	/ Cable feet	Tools_	
REWORKING. VERBAL PERMISSION OBTAINED ON	Marcellus Rotary X Salt	/ Cable	Tools_	
REWORKING. VERBAL PERMISSION OBTAINED ON	Marcellus Rotary X Salt Is coal	/ Cable feet being mine	Tools_	area? No
REWORKING. VERBAL PERMISSION OBTAINED ON	Marcellus Rotary X Salt Is coal	_/ Cablefeet being mine zone dept	t Toolsd in the	area? No
REWORKING. VERBAL PERMISSION OBTAINED ON	Marcellus Rotary X Salt Is coal Pay Oil: Ini	/ Cablefeet being mine zone dept tial open	t Tools_d in the h_1446'-4	area? No  676' feet  Bbl/d
REWORKING. VERBAL PERMISSION OBTAINED ON	Marcellus Rotary X Salt Is coal Pay Oil: Ini Fin	/ Cablefeet being mine  zone dept tial open al open fl	Tools_d in the h_1446'-4 flow_ow_	area? No  676' feet Bbl/d Bbl/d
Depth of completed well 4676 feet Water strata depth: Fresh 116 feet; Coal seam depths: N/A  Producing formation Devonian Shale Gas: Initial open flow show Mcf/d Final open flow 400 Mcf/d Time of open flow between initial	Marcellus Rotary X Salt Is coal Pay Oil: Ini Fin	/ Cablefeet being mine  zone dept tial open al open flu	tools_d in the h_1446'-4 flow_owhow	area? No  676' feet Bbl/d Bbl/d
Depth of completed well 4676 feet Water strata depth: Fresh 116 feet; Coal seam depths: N/A  Producing formation Devonian Shale Gas: Initial open flow show Mcf/d Final open flow 400 Mcf/d Time of open flow between initial	Marcellus Rotary X Salt Is coal Pay Oil: Ini Fin	/ Cablefeet being mine  zone dept tial open al open flu	tools_d in the h_1446'-4 flow_owhow	area? No  676' feet Bbl/d Bbl/d
EMORKING. VERBAL PERMISSION OBTAINED  DEPUTE OF COMPLETED Well 4676 feet  Water strata depth: Fresh 116 feet;  Coal seam depths: N/A  PEN FLOW DATA  Producing formation Devonian Shale  Gas: Initial open flow show Mcf/d  Final open flow 400 Mcf/d	Marcellus Rotary X Salt Is coal Pay Oil: Ini Fin tial and fin	/ Cablefeet being mine  zone dept tial open al open flu	tools	area? No 676' feet Bbl/6 Bbl/6
Depth of completed well 4676 feet Water strata depth: Fresh 116 feet; Coal seam depths: N/A  PEN FLOW DATA  Producing formation Devonian Shale Gas: Initial open flow show Mcf/d Final open flow 400 Mcf/d Time of open flow between initiation of the strate	Marcellus Rotary X Salt Is coal Pay Oil: Ini Fin tial and fin ce measurem	/ Cablefeet being mine  zone dept tial open al open flo nal tests_ ent) after	tools	area? No  676' feet Bbl/6 Bbl/6 irs rs shut ir.
REWORKING. VERBAL PERMISSION OBTAINED  DEPOLOGICAL TARGET FORMATION Devonian Shale — Depth of completed well 4676 feet Water strata depth: Fresh 116 feet; Coal seam depths: N/A  DPEN FLOW DATA  Producing formation Devonian Shale Gas: Initial open flow show Mcf/d Final open flow 400 Mcf/d  Time of open flow between initiation of open flow between initiation of open flow show of the completion of the comple	Marcellus Rotary X Salt Is coal Pay Oil: Ini Fin tial and fin ce measurem n) Pay	/ Cablefeet being mine  zone dept tial open al open flo nal tests_ ent) after  zone dept	tools  d in the  h1446'-4  flow  hou  hou	area? No  676' feet  Bbl/c  Bbl/c  rs  rs shut in  1/12/2024 feet
REWORKING. VERBAL PERMISSION OBTAINED  DEPTH OF COMPleted well 4676 feet  Water strata depth: Fresh 116 feet;  Coal seam depths: N/A  Producing formation Devonian Shale  Gas: Initial open flow show Mcf/d  Final open flow 400 Mcf/d  Time of open flow between initiation of open flow between initiation of open flow show multiple completion second producing formation  Gas: Initial open flow Mcf/d  Gas: Initial open flow Mcf/d	Marcellus Rotary X Salt Is coal Pay Oil: Ini Fin tial and fin ce measurem n) Pay Oil: Init	/ Cablefeet being mine  zone dept tial open al open flual tests ent) after  zone dept tial open :	tools  d in the  h1446'-4  flow  hour  hour  flow	area? No  676' feet  Bbl/6  Bbl/6  rs shut ir  /12/2024 feet  Bbl/6
REWORKING. VERBAL PERMISSION OBTAINED  DEPOLOGICAL TARGET FORMATION Devonian Shale — Depth of completed well 4676 feet Water strata depth: Fresh 116 feet; Coal seam depths: N/A  DPEN FLOW DATA  Producing formation Devonian Shale Gas: Initial open flow show Mcf/d Final open flow 400 Mcf/d  Time of open flow between initiation of open flow between initiation of open flow show of the completion of the comple	Marcellus Rotary X Salt Is coal Pay Oil: Ini Fin tial and fin ce measurem n) Pay Oil: Ini Oil: Fina	/ Cablefeet being mine  zone dept tial open fla nal tests ent) after  zone deptl tial open fla	tools  d in the  h1446'-4  flow  hour  hour  flow  flow  ow	area? No 676' feet Bbl/d Bbl/d irs rs shut ir /12/2024 feet Bbl/d Bbl/d

Bol

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

Well fraced in two stages; each stage consisting of 1,000,000  ${\rm sft}^3$  of  ${\rm N}_2$  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 Sand Shale Sand & Shale Shale		0 3 40 2225 3311	3 40 2225 3311 4676 TD	
				Electric log tops
				Sunbury Shale 1400'-1446' Dev. Shale 1448'
			d day	

(Attach separate sheets as necessary)

Bow	Valley	Petroleum	Inc.	
	Well Or	perator		
By:	MI	arin	Combo	04/40/0004
- 0				U1/12/2024
Date	e: Decer	mber 30, 19	982	

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 weal, encountered in the drilling of a well."

Bis

IV-35 (Rev 8-81)

## OIL & GAS DIVISION DEPT. OF MINE

±	1303	STA		LIA.
S	DIVISION	BA SON		* The Land
F	MINE	.5	Commen	

Date December 30, 1982
Operator's

State of Hest Hirginia Well No. WI-026

Farm Gillispie

API No.47 - 105 - 1032

REVISED

WELL OPERATOR'S REPORT

Bepartment of Mines

wie und Cas Bivision

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WEIL TYPE: Oil / Gas X / Liquid Injecti (If "Gas," Production X / Undergr	on/ Wast	e Disposa e / Deep	1/ o / Sha	llow /)
LOCATION: Elevation: 818.67 Watershed R				-
District: Clay County W				75!
		· Samerangi		
COMPANY Bow Valley Petroleum				
ADDRESS 600 Commerce Sq. Charleston, WV	Casing	Used in	Left	Cement fill up
DESIGNATED AGENT Robert Long	Tubing	Drilling	in Well	Cu. ft.
ADDRESS Culloden, WV	Size			
SURFACE OWNER Glen W. Roberts	20-16 Cond.			
ADDRESS Elizabeth, WV	13-10"	24	24	15 sks
MINERAL RIGHTS OWNER West Vaco	9 5/8	290.75		125 sks
ADDRESS Parkersburg, WV	8 5/8			
OIL AND GAS INSPECTOR FOR THIS WORK Deo	7	1513 60	1513 60	160 sks
Mace ADDRESS Sandridge, WV	5 1/2	1717.60	1717.60	160 SKS
PERMIT ISSUED 12-7-82	4 1/2		/1650 90	280 sks
DRILLING COMMENCED 12-13-82	3		4000.00	200 SKS
DRILLING COMPLETED 12-21-82	2			
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners used			
GEOLOGICAL TARGET FORMATION Devonian Shale -	Marcallu	c Done	<b>- h</b> 1446	1.676 5
Depth of completed well 4676 feet				The same of the sa
Water strata depth: Fresh 116 feet;			2 1001s	
Coal seam depths: N/A		and a functional	.a	
	_ is coar.	being nune	a in the	area?
OPEN FLOW DATA				
Producing formation Devonian Shale	Pay	zone dept	h 1446-4	676 feet
Gas: Initial open flow Show Mcf/d	Oil: Ini	tial open	flow	Bbl/d
Final open flow 400 Mcf/d	Fin	al open fl	row	Bbl/d
Time of open flow between ini	tial and fi	nal tests	hou	irs
Static rock pressurepsig(surfa-		ent) after	hou	cs shut in
(If applicable due to multiple completion	n)		01/	12/2024
Second producing formation	Pay	zone dept	h	feet
Gas: Initial open flow Mcf/d	Oil: Ini	tial open	flow	Bbl/d
Final open flow Mcf/d	Oil: Fin	al open fl	-ow_	Bbl/d
Time of open flow between ini				
Static rock pressurepsig(surface	e measureme	nt) after	hour	s shut in
			3-3-1	verse side)

FORM IV-35 (REVERSE) B-4

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

## 1st. Stage (N<sub>2</sub> Frac)

Perforation Intervals = 30 holes from 3490' - 4523' 1,080,000 S Ft.  $^3$  of N $_2$  , 1,200 gallons HCL. (Partial ballout) N $_2$  Injection Rate: 47,000 S Ft.  $^3$ /min. Breakdown = 2625#

## 2nd Stage (N<sub>2</sub> Frac)

Perforation Interval = 26 holes from 1402' - 2912'  $1,000,000 \text{ S Ft.}^3$  of N2, 1,100 gallons HCL. (Partial ballout) N2 Injection Rate:  $60,000 \text{ S Ft.}^3/\text{min.}$ 

## WELL LOG

			REMARKS		
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	Including indication of all fresh and salt water, coal, oil and gas		
Drillers Log					
Diffiels Log					
Soil Sand	0 3	3 40			
Shale	40	2225			
Sand & Shale Shale	2225	3311 4676 TD			
Share	7711	4070 10			
Electric Log Tops					
Elev. 819					
K. B. 829					
Salt Sands	460	510			
Maxon Sand	710	824			
Big Lime Injun Sand	835 980	980 1012			
Weir Shale (Pocono)	1012	1404			
Sunbury Shale Upper Devonian Shales	1404	1446 2836			
Huron Shale	2836 4142	4142 . 4676 TD			
Rhinestreet	4142	. 4676 ID			
	The state of the s				
The same of the sa					

(Attach separate sheets as necessary)

BOW VALLEY PETROLEUM, INC.

Well Operator

By: Marin Comb 01/12/2024

Date: Décember 30, 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

and, encountered in the drilling of a well."

OG-111 /

12-14.82 DATE

# STATE OF WEST VIRGINIA DEPARTMENT OF MINES

DEPARTMENT OF MINES

# RECEIVED

DEC 21 1982

Wes Mare

DISTRICT WELL INSPECTOR

OIL AND GAS DIVISION WY DEPARTMENT OF MINES

## INSPECTOR'S WELL REPORT

			Oil o	Gas Well
Company Bow Valley	CASING AND TUBING	USED IN DRILLING	LEFT IN	PACKERS
Address	Size			and the second second
Farm Roberts	16			Kind of Packer
Well No. 61 026	13			
District Clay County With	81/4	3 2 2 38 2 3 3	The second section of the second seco	Size of
Drilling commenced 12-14-82	65%		ar roome	Depth set
Drilling completedTotal depth	5 3/16	3	0,180 180 2 8	
Date shotDepth of shot	2		A COLORA COLOR	Perf. top
Initial open flow/10ths Water inInch	Liners Used			Perf. bottom
Open flow after tubing/10ths Merc. inInch				Perf. bottom
VolumeCu. Ft.				No. FTDat
Rock pressurelbshrs.	NAME OF SERV	ICE COMPAN	Y	
bbls., 1st 24 hrs.	COAL WAS ENC	OUNTERED A	т	FEETINCHE
resh waterfeetfeet	FEET_	INCHE		FEETINCHES
alt waterfeetfeet	FEET			. Accepted the control of the contro
rillers' Names Rley Brochus	#4	MORE	, F	EETINCHES
290' of 93/8 11	To be a	ematol	Ry 4	Touell
Cementers not there	· lestre	x 7.13	1 PM	,

DATE

#### STATE OF WEST VIRGINIA

### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

ermit No.				We	I No	
OMPANY			ADDRESS		in any town	August 1
ARM		DISTRICT		COUNTY		13
lling Material Used						
ner L	peation	Amount	Packer	Location	T 12 1	
PLUGS USED	AND DEPTH PLACED		BRIDGES	CASIN	G AND TU	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
			3.9.4.			A ton
				V 10 10 10 10 10 10 10 10 10 10 10 10 10		
				+		
				* *		
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lers' Names				The second like second is such that I want to		
ners Names	334				. y	
narks:						
				Bright Fre		

01/12/2024

DISTRICT WELL INSPECTOR

105-1022

### STATE OF WEST VIRGINIA

## DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

# RECEIVED

DEC 2 1 1982

OIL AND GAS DIVISION WY DEPARTMENT OF MINES

## INSPECTOR'S WELL REPORT

Permit No. 700 7	032				0.13:	W. 1	
Company Bow	Valley		CARING AND TURING	CONT.	FF IN	PAC	KFDS
Address			Size		-		france griff
Farm Rober	to		16			a Kadarata	5.4 Y
Well No. Lel	026		13			The Bit of the state of	Artist was added
2			10			2120 miles	
District Play	County_4	sut	81,4				11-11-11-11-11-11-11-11-11-11-11-11-11-
Drilling commenced			6.5%			TOTAL TELE	
			5 3 16	-			
Drilling completed	Total depth_		3				
Date shot	Depth of shot		2				
In:tial open flow	/10ths Water	inInch	Liners Used		A distribution of the second		-
Open flow after tubing	/10ths Merc. i	nInch					1
volume		Cu. Ft.	CASING CEMP	. 17.11	· · F		liste
lock pressure	lbs		NAME OF SEA				
0:1	bbls.,	1st 24 hrs.	COAL WAS EN	( UNTERED)	4		I'n des
resh water			FEET_				
alt water							
rillers' Names Ru							
290' of	93/8" 1	25 51	45 Was	will	12-14	1.82	
1513'	7"	125 50	TS Well	erell 1	2-16-	87	

12-16-82 BATE

We Mace

## DEPARTMENT OF MINES

OIL AND SAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					Contract to the same of the sa	
OMPANY			ADDRESS		A STATE OF THE STA	
ARM		DISTRICT.	CO	UNTY		1
illing Material Used						
iner Loc	ation	Amount	Packer	Location		
PLUGS USED A	ND DEPTH PLACED		BRIDGES	CASIN	G AND TU	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
			3 338			A. Carried Co.
-						
				19,312,41		
AC	Total Marie Control of the Control o			aniri :		Contract to
				i detail	24.4	
illand Name						
illers' Names						
marks:			X			

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

DATE

## DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

# RECEIVED

DEC 2 9 1982

OIL AND GAS DIVISION WY DEPARTMENT OF MINES

## INSPECTOR'S WELL REPORT

103-1032 Oil or Gas Well CARING AND Bow Valley PACKEDS Size Address - 026 65% Drilling commenced\_ 5 3/16 Drilling completed 12-21-82 Total depth 4696 Date shot Depth of shot Liners Used Initial open flow\_\_\_\_\_/10ths Water in\_\_\_Inch Open flow after tubing /10ths Merc. in Inch Volume \_\_Cu. Ft. CASING CEMENTED TOE NO. ET. NAME OF SERVICE COMPANY Rock pressure\_ lhs \_bbls., 1st 24 hrs. COAL WAS ENCOUNTERED AT TRET INCHES Fresh water\_ INCHES INCHES Salt water\_ feet feet FEET INCHES FEET INCHES Desources Hy Remarks: Dig moring to 105 - 1042.

12-21-82 DATE DISTRICT WELL INSPECTOR

## DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

Permit No.				We	II No	1 1 1 1 1 1
COMPANY			ADDRESS		particular programmes and a second	
FARM		DISTRICT	C	OUNTY		
Filling Material Used		and the second s				
Liner Lo	eation	Amount	Packer	Location		
	ND DEPTH PLACED		BRIDGES	CASIN	G AND TL	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LUCATION	RECOVERED	SIZE	LOST
		,				
			22 / 20 / 20 / 20 / 20 / 20 / 20 / 20 /			
				. En tracks		
4 a - 20						si Banga .
				7 e-71-	2/10/2	3° 3
*						
rillers' Names				40.00		
emarks:						

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

1AT 1127

OG-11

#### STATE OF WEST VIRGINIA

### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S WELL REPORT

Permit No. 105-1052			Oil or	Gas Well	
Company Bow Valley	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKE	ERS
Address	Size				
Farm Gillespli	16			Kind of Pack	er
Well No. 41 026	13			Size of	
District Clay County With	81/4				
Drilling commenced	65/8			Depth set	
Drilling completedTotal depth	5 3/16			Perf. top	
Date shotDepth of shot	2			Perf. bottom.	
Initial open flow/10ths Water inInch	Liners Used			Perf. top	
Open flow after tubing/10ths Merc. inInch				Perf. bottom.	
VolumeCu. Ft.	CASING CEME	NTED	_SIZE	No. FT	Date
Rock pressurelbshrs.	NAME OF SEF	RVICE COMPA	NY		
Dilbbls., 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	_FEET	_INCHES
Fresh waterfeetfeet	FEET_	INCH	ES	_FEET	_INCHES
Salt waterfeetfeet	FEET_	INCH	ES	FEET	_INCHES
Drillers' Names					
Diniels Manies			27 - M	REGEL	WE
Remarks: Release			la de la constante de la const	JUL 2 0	1983

OIL & GAS DIVISION
DEPT. OF MINES

7-14-83

W S MORGA 2024
DISTRICT WELL INSPECTOR

## DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

## INSPECTOR'S PLUGGING REPORT

Permit No				Wel	I No	
COMPANY			ADDRESS			
ARM	DISTRICT		C	COUNTY		
'illin <b>g Mat</b> erial Used						
iner Lo	cation	Amount	Packer	Location		
PLUGS USED A	AND DEPTH PLACED		BRIDGES	CASIN	G AND TU	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
			,			
	_					
				-		
rillers' Names						
emarks:		-				
emarks:						
	I hereby certify I vi	isited the abov	ve well on this date.			

01/12/2024
DISTRICT WELL INSPECTOR

B-12



# State of West Virginia Bepartment of Mines Oil and Gas Division Charleston 25305

THEODORE M. STREET

August 8, 1983

WALTER N. MILLER

DIRECTOR

Bow Valley Petroleum, Inc. 600 Commerce Square Charleston, W. Va. 25301

## Gentlemen:

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:

PERMIT NUMBER	FARM AND WELL NUMBER	DISTRICT
WIRT-0938 WIRT-0946 WIRT-0977 WIRT-1032	Westvaco, Rex Tract #950 Dennis McGee, #969 Ada Perrin, #979	Clay Burning Springs Clay
WIRT-1032	Westvaco, #W1026	Clay

ry truly yours,

eodore M. Streit, Administrator Fice of Oil & Gas-Dept. Mines

THE PERENT OF THE BUNK. 14 digits.	1	_7_/	-1110 -100	111111	· ·		
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	Course Course	Section of NGPA					
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)		LII 71 OIL					
4.0 Name, address and code number of applicant: (35 letters per line	Bow	Valley Petr	- "DEF	T. OF MIN			
maximum. If code number not evaluable, like ve blank.)	Name				040189 St. C. C.		
	Street	Connerce Sa			_		
	City	rleston		WV 25301	-		
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 latters maximum for field name.)	Bu Field N County	IRT	Springs	State Zip Code	<u> </u>		
(b) For OCS wells:	i			State			
	Area Na	ame		B'ock Numbe	er.		
		Date of Lease:					
(c) Name and identification number							
of this well: (35 letters and digits maximum.)	Gill	lispie !	WI-026				
of this well: (35 letters and digits	Gil	lispie !	WI-026		_		
of this well: (35 letters and digits maximum.)  (d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters	Col	umbia Gas Tr			004030		
of this well: (35 letters and digits maximum.)  (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					004030 Buyer Co.:-		
of this well: (35 letters and digits maximum.)  (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.)	Col		ansmission (	Corporation			
of this well: (35 letters and digits maximum.)  (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.)	Col		ansmission (	Corporation			
of this well: (35 letters and digits maximum.)  (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.)  (b) Date of the contract:	Col		ansmission (	Corporation  Y.  MMc!  Ic) All Other  Prices [Indicate			
of this well: (35 letters and digits maximum.)  (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.)  (b) Date of the contract:  (c) Estimated annual production:  0 Contract price: (As of filing date. Complete to 3 decimal places.)	Col	umbia Gas Tr	ansmission (	Corporation  Y.  MMc!  (c) All Other	(d) Total of (a). (b) and w		
of this well: (35 letters and digits maximum.)  (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.)  (b) Date of the contract:  (c) Estimated annual production:	Col	umbia Gas Tr	ansmission (Mo. Day	Corporation  Y.  MMc!  Ic) All Other  Prices [Indicate	(d) Total of (a). (b) and w.		
of this well: (35 letters and digits maximum.)  (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.)  (b) Date of the contract:  (c) Estimated annual production:  0 Contract price: (As of filing date. Complete to 3 decimal places.)  0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)  0 Person responsible for this application:	Colt	(a) Base Price (\$/MMBTU)  5.420	ansmission ( Mo. Day	Corporation  Y:  MMc!  [c) All Other Prices [Indicate [+) or (-).]	(d) Total of (a). (b) and w.  6.226		
of this well: (35 letters and digits maximum.)  (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.)  (b) Date of the contract:  (c) Estimated annual production:  0 Contract price: (As of filing date. Complete to 3 decimal places.)  0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)  0 Person responsible for this application: Agency Use Only	Colt Name  Robert Name	(a) Base Price (\$/MMBTU)  5.420  5.420  t N. Hart	ansmission (Mo. Day	Corporation  Y.  MMc!  (c) All Other  Prices [Indicate (·) or (-).]  V.P. Ge	(d) Total of (a). (b) and w.		
of this well: (35 letters and digits maximum.)  (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.)  (b) Date of the contract:  (c) Estimated annual production:  0 Contract price: (As of filing date. Complete to 3 decimal places.)  0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)  0 Person responsible for this application:	Colt Name  Robert Name	(a) Base Price (\$/MMBTU)  5.420  t N. Hart	ansmission (Mo. Day	Corporation  Y:  MMc!  [c) All Other Prices [Indicate [+) or (-).]	(d) Total of (a). (b) and w.  6.226		

	DATE: 31N 201983	BUYER-SELLER CODE
	OPERATOR: Bow Valley Petroleum Inc	040189
FIRST	PURCHASER: Columbia Gas Trans.	004030
OTHER		Dev.
w	ELL DETERMINATION FILE NUMBER	
83	03 01 .107.105 : 1032 QUALIFIED	
	Above File Number on all Communications lating to Determination of this Well	
ITEM NO	CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING	
	FERC -121 V Items not completed - Line No. 7.0 8.0	C
	IV-1 Agent Robert N. Hart	
3.	IV-2 Well Permit	•
4.	IV-6 Well Plat	
5.	IV-35 Well Record Drilling Deepenin	g
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:	
	IV-48 Application for certification. Complete?	
10-17.	IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? Af	fidavit Signed 🚩
18-28.	Other: Survey Logs Geological Charts	,
	Structure Map 1: 4000 Map Well Tal	bulations
(5)	Date commenced: 12-13-82 Date completed 12-21-82 Deeper	ned
(5)	Production Depth: 1446 - 4676	
	Production Formation: Devonian	
(5)	Final Open Flow: 400 mcf	
(5)	After Frac. R. P. testing	
(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:	
(5)	Oil Production: From Completion Report	
0-17.	, and the state of	
	Notalized:	01/12/2024
	ficial well record with the Department confirm the submitted informati	
	nal information Does computer program confirm?	
as Det	ermination Objected to By Whom?	

# Operator's WI-026 Well No. WI-026 API Vell No. 47 - 105 - 1032 State County Territ

## STATE APPLICATION FOR WELL CLASSIFICATION

Previous File No. (II Applicable)

WELL OPERATOR BOW Valley Petroleum Inc.	Pohort M. Hart
ADDRESS 600 Compared Sa	SICNATED ACENT Robert N. Hart
Charleston, WV 25301	DRESS 600 Connerce Sq.
Cas Purchase Contract No. and Date	Charleston, WV 25301.
Heter Chart Code	(Month, cay and year)
Name of First Purchaser Columbia Gas Transmission	on Corporation
Box J.273	on comporation
Charleston (Street or ). 0.	Box) 25225
(City) (State)	25325 (Zip Code)
FERC Seller Code 040189	RC Buyer Code 004030
TYPE OF DETERMINATION BEING SOUGHT:	
(1) Initial determination (See FERC Form 121.) See  (2) Determination that increased production is the recovery technology.	ction of NGPA Category Code result of enhanced
(3) Determination of a seasonally affected well.	
Rome	Dert Hart Vice President-General Manage
	obert that
	eture
Stree	O Commerce Sq.
Ch	parleston, WV 25301
City (304	. Carp code)
Area Code	Phone Number
(Certificate of Proof of Service to Purchaser)  Mailed copy to Columbia Gas Transmission - C	ontract DEpartment c/o Jackie Sydnor
(All of the above to be completed by the Operator/Applic	ant)
(To be completed by Jurisdictional Agency. Executed coppurchaser, if known).	y to be returned to Operator/Applicant and
(NGPA): [ for for determination that increased production ander Section 108 of (NGPA); [ ] or for determination of	ar ecite well under Section 100 - flucture
All interested parties are hereby notified that he office of the Oil and Gas Division in Charleston, We be heard there will be a public hearing, if requested, o	t on theday of
This Application is assigned File No.	
Initial review of information submitted indica entitled to certification as claimed under the Natural C and any additional evidence will be made at the time app is the matter may be heard.	tes the well is. is not as Policy Act (NGPA). A review of this evidence ointed for a public hearing or as soon thereefter
Unless objections are timely filed or a requestary, a hearing will not be held except on exparte motion to determination.	t for a hearing is made within fifteen (15) on of the department and the matter will
West v	IRGINIA DEFARTMENT OF MINES
	Paradillar of Kines
MAR 1 1983	<u> </u>
1111	Director
ate received by urisdictional Agency	
	Ву

(12-78)DEPARTMENT OF MINES OIL AND GAS DIVISION Operator's Well No. WI-026 API Well No. 47 - 105 - 1032 State County Permit WELL CLASSIFICATION FORM HIGH COST CAS WELL - DEVONIAN SHALE NGPA Section 107 DESIGNATED AGENT Robert Hart 600 Commerce Square Charleston, WV 25301 LOCATION Elevation 8/8.67 WELL OPERATOR Bow Valley Petroleum Inc. Watershed PT. 600 Commerce Square ADDRESS Charleston, WV 25301 Gas Purchase Contract No. Columbia Gas Trans. Corp. GAS PURCHASER Meter Chart Code ADDRESS Box 1273 Charleston, W.V 25325 Date of Contract Date surface drilling began: 12-13-82 Indicate the bottom hole pressure of the well and explain how this was calculated. BHP = PWH + PWH PWH - WELL HEAD PRESSURE

L - DEPTH TO MIDDLE OF PRODUCING FORM.

G - SPECIFIC GRAVITY OF THE GAS

TWH - TEMPERATURE AT WELL HEAD OF

TBH - TEMPERATURE BOTTOM HOLE OF BHP = 450.1 AFFIDAVIT , 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 Gauma Ray index of less than 0.7 if a Gauma 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. STATE OF WEST VIRGINIA a Notary Public in and for the state and county aforesaid, do certify that , whose name is signed to the writing above, bearing date the 4th day of acknowledged the same before me, in my county aforesaid. anuary, 198 Given under my hand and official seal this + +day of My term of office expires on the 25 th day of (NOTARIAL SEAL)

# APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT

Operator: Bow Valley Petrolewn	Agent: TY ARVIN COMBS
Type Determination being sought - 107	(Devonian Shale)
API Well No.: 47-105-1032	Well Name: Gillispie WI-026
West Virginia Office of Oil and Gas References: SJA File No.	County: WIRT
Vol Page Line	
(c) intervals with Gamma	marked with the (a) Shale Base nting 0.7 x (Shale Base Line), Ray units less than 0.7 x (Shale is included with this analysis.
II. Gamma Ray elevation indices:	
A. Shale Base Line (API	Units)
1. GR Value at Base 2. Remarks:	Line = /30 * API Units
	at 0.7 x Value at Base Line
1. GR Value = <u>/30</u> 2. Calculation: 0.	* API Units 7 (GR Value at Base Line) 7 ( <u>/30</u> *) = <u>9/</u> API Units
'III. Intervals with GR index less th	nan 0.7 x (Value at Base Line):
of I	Interval Feet of less than*  O.7 (Shale Base Line)  Feet Feet
4676 : 1448	3228' 22
Total Devonial Interval 3	228
Total Less Than 0.7 (Shale Base)	22
% Less Than 0.7 (Shale Base Line) =	-006 x 100 = .68 %

\*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.

III not available, lazve blank. 14 digits.)	i	7/-/	105/030	2	
2.0 Type of determination being sought: (Use the codes found on the front of this form.)		103 Section of	Category Cod		
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)			*ke:		
4.0 Name, address and code number of applicant: (35 letters per line	Bow	Valley Petr	oleum Inc.		040189
maximum. If code number not sociable, leave blank.)	Name	0 0		Sei er C ::-	
	Street	Commerce Sq			-
	City	rleston		₩ 25301	_
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	Bur Field N. County	ENING Spame		State Z.p Code	
(b) For OCS wells:	100		DECEMBER 1	State	
	Area Na	Date of Le Mo. Day		B'ock Numbe	
(c) Name and identification number of this well: (35 letters and digits maximum.)	Gil	.,	/I-026	OCS Lease Number	
(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.)	Col:	umbia Gas Tr	ansmission (	Corporation	004030
(b) Date of the contract:	100000	A. Carlotte			Buyer Corte
	n, 6120	7. 7.	Mo. Day	Y	
(c) Estimated annual production:	Testas bus	C A Spirit		*	
		-		MMcf	
		(a) Base Price (\$/MMBTU)	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and or
7 0 Contract price: (As of filing date. Complete to 3 decimal places.)		2.710	403		3.113
8.0 Maximum lawful rate: (As of filing data. Complete to 3 decimal places.)		2.710	403		3.1.13
9.0 Person responsible for this application:					
Agency Use Only	Rober Name	t N. Hart			neral Mgr.
MAR 1 1983  Date Received by FERC	Rober Signature	A. Hart		Title	4/, 4
	Date App	lication is Complete	<del>-</del>	Prone Number	_

# U.S. DEPARTMENT OF ENERGY Federal Energy Regulatory Commission Washington, D.C. 20426

# APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA) (Sections 102, 103, 107 and 108)

## PLEASE READ BEFORE COMPLETING THIS FORM:

#### General Instructions:

Complete this form if you are applying for price classification under sections 102, 103, 107 or 108 of the NGPA. A separate application is required for each well. If any reservoir qualifies for a category which differs from the category applicable to the producing well, separate applications must be made for the producing well and the reservoir. Complete each appropriate item on the reverse side of this page. The code numbers used in items 4.0 and 6.0 can be obtained from the Buyer/Seller Code Book. If there is more than one purchaser or contract, identify the additional information in the space below. Enter any additional remarks in the space below.

Submit the completed application to the appropriate Jurisdictional Agency as listed in title 18 of the CFR, part 270.103. If there are any questions, call (202) 275-4539.

## Specific Instructions for Item 2.0, Type of Determination:

Section of NGPA		Category Code	Description
	102	1	New OCS Lease
	102	. 2	New onshore well (2.5 mile test)
	102	3	New onshore well (1,000 feet deeper test)
	102	4	New onshore reservoir
a become a single	102	5	New reservoir on old OCS Lease
	103	( )	New onshore production well
	107	_	High cost natural gas
-	108		Stripper well

#### Other Purchasers/Contracts:

Contract Date (Mo. Day Yr.)	Purchaser	Buyer Code

Remarks:

DATE: JUN 2 0 1983	BUYER-SELLER CODE
PARTICIPANTS;	
WELL OPERATOR: Down Valley Petroloum	040189.
FIRST PURCHASER: Columbia Gas Trans.	004030
OTHER:	
W. Va. Department of Mines, Oil & Gas Division	/ /
WELL DETERMINATION FILE NUMBER	
43 03 01 - 103 - 105 = 1032 Usa Above File Number on all Communications  APPR	Olm
Polating to Determination of this Well	
JUN _	7 1984
CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING	1
1. FERC -121 Items not completed - Line No. 1.0 \$.0	
2. IV-1 Agent Robert Hart	
3. IV-2 Well Permit	
4. IV-6 Well Plat	
5. IV-35 Well Record Drilling Deepen:	ing
6. IV-36 Gas-Oil Test: Gas Only Was Oil Produced?	
7. IV-39 Annual Productionyears	
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?	
13-28. Other: Survey Logs Geological Charts	
Structure Map 1: 4000 Map Well T	
Gas Analyses	
(5) Date commenced: 12-13-82 Date completed 12-21-82 Deep	ened
(5) Production Depth: 1446 - 4676	
(5) Production Formation: Devonian	
(5) Final Open Flow: 400 mcf	
(5) After Frac. R. P. testing	•
(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:	
(5) Oil Production: From Completion Report	
10-17. Does lease inventory indicate enhanced recovery being done	
10-17. Is affidavit signed? Notarized?	01/12/2024
Does official well record with the Department confirm the submitted informa	tion?
Additional information Does computer program confirm?	
Was Determination Objected to By Whom?	

MAR

ate received by urisdictional Agency

1 1983

TDEPARTMENT OF HIMES, OIL AND CAS DIVISION

F	C	2	٧:	1	٧	_	5	1.	r.c	
1										

DEPARTMENT OF MINES, OIL AND CAS DIVISION

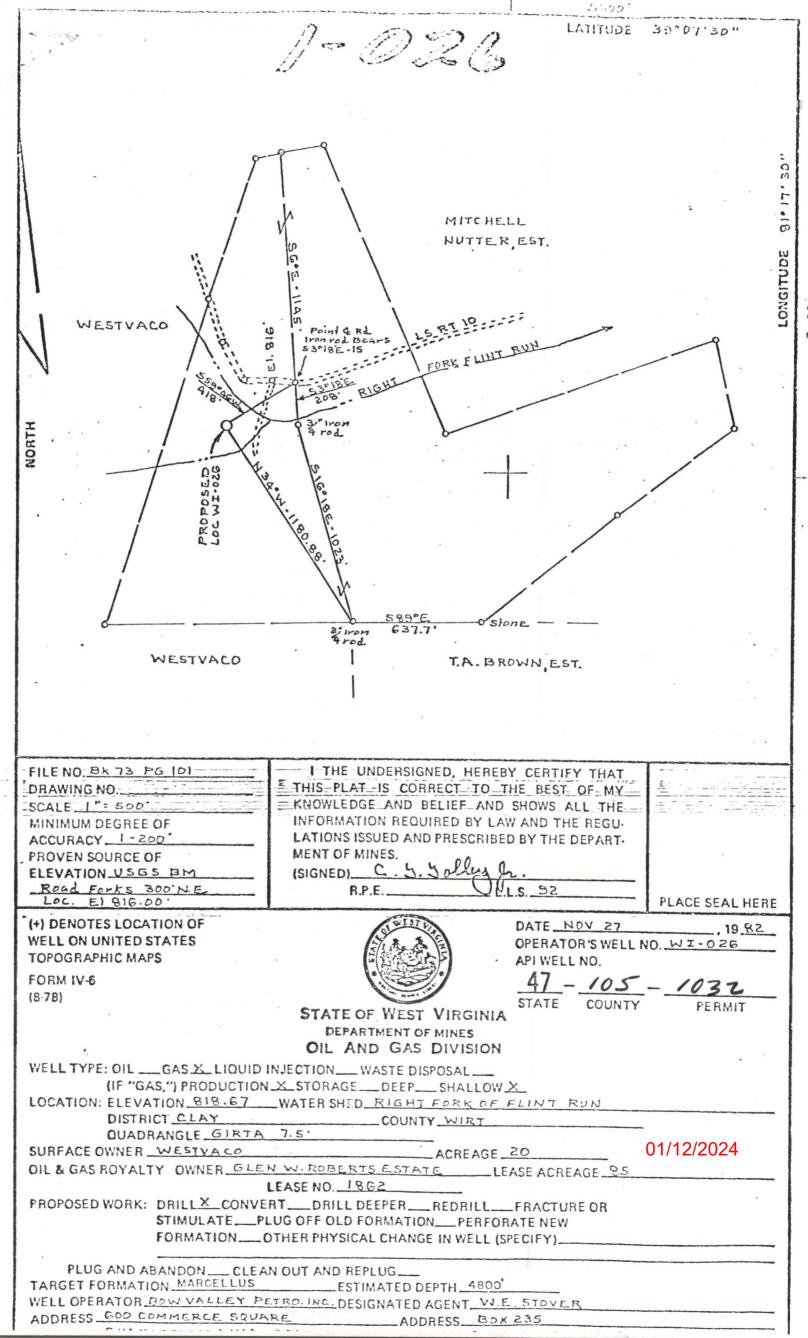
tate	4-	. 1983
Operator's Well No.	WI-08	26
No. 47 - State	105	- 1032

•	CHASSITICATION FOR	
<u>Ki</u>	EW ONSHORE PRODUCTION WELL	
•1	NGPA Section 103	7
	DESIGNATED ACENT Robert Hart	
	ADDRESS 600 Commerce Sq.	
	Charleston, WV 25301	
WELL OPERATOR BOX Valley Petr		
ADDRESS 600 Commerce Sq.	Watershed Rt. FK AF Flint Punk	
Charleston, W 25	Dist. Clay county WIRT quad GIR	TO
GAS PURCHASER - Columbia Gas Tr	ans Corp. Gas Purchase	47
ADDRESS_ Box 1273	Contract No.  Meter Chart Code	
Charleston, WV 253	Date of Contract	
		-
* * * * * *		٠.
		•
Date surface drilling was begun:	12-13-82	
the state of the s	ressure of the well and explain how this was calcul	200
the state of the s		acec
BHP - DWH I DWH O TICLE	(0.0000347 G L)	
BHP2 = PWH + PWH 2.71828	-I WHERE	
0.0000247 IS A FA	CTOR TAKING INTO ACCOUNT	
TEMPERATURE AND	SUPERCOMPRESSIBILITY	_
PWH - WELL HEAD PRESSURE	$BHP_2 = \gamma \partial t$	0.1
C - SPECIFIC GRAVITY OF THE GAS TWH - TEMPERATURE AT WELL HEAD P		
TBR -TEMPERATURE BOTTOM HOLE	F	
man n	AFFIDAVIT	
surface drilling of the well for	mes, having been first sworn according to law store than	
	mes, having been first sworn according to law stare that hich this determination is sought was begun on or after Telegraps e state or federal well spacing requirements and the well is now not at the time surface drilling because and the well is now	14.
reservoir from which ear is an ail	1 La de la	he
was capable of producing one in	and aller rearranty ly 1977 and aller	h
is a new onshore production wall a	dge and belief, that the well for which this determination is sou	yh:
application which is inconsistent	with this conclusion.	
: 1	$\mathcal{M}$ . $\mathcal{O}$	
	prira Combs	
	:	
STATE OF West Virginia		
COUNTY OF Kanauking WIT!		
I. Nelen Mas No	the allotary Public in and for the state and county aforesaid.	
to certify that a // land in a	My Lashaga mana da ai	
day of jurner asig.	19 17, has acknowledged the same before me, in my county aforesa	id
	distribution of the state of th	
My term of office exp	ires on the 25 day of July . 1988.	
	01/12/20	024
		J_ T
[NOTARIAL SHAL]	Helen When Inother and	
	Notary Public.	

FORM IV-1

## DESIGNATION OF AGENT BY WELL OWNER OR OPERATOR

Well Operator/	Owner X / Bo	w Valley Petrol	eum Inc.		
		ess 600 Commerc			
			West Va. 253	01	
• •					
Pursuant to	the provisions of	Code B 22-4-1k.	and subject to	the meaning	
7.01, the undersigned	hereby designates	the following p	erson to be the	the requirement	s of Regulation
purpose of receiving	process, notices.	orders and other	Sommunication.	agent of the un	dersigned for the
22 of the Code of Wes	t Virginia:	aracts and other	commuteations	which may be is	sued under Chapter
Designated Agent			*		
	600 Comerce Squ	are			
	Charleston, Wes	-	01		
Telephone	304 344-8393	•			
The undersi	gned represents the	at said designate	ed agent is a bo	na fide residen	+ of Abo Carro
West Virginia, and has	s agreed to accept	the designation	This designat	ion annies te	or the State of
	owned or operated h				the following wells
	listed below (Wre:				
		part better of the	or rate state of a	ttaen (13t)	
•					
[COMPLETE AS APPLICABI	E)				
		horoby reservation			\$a
	The undersigned is the initial adoption		g an existing de	signation of age	ent made prior to
•	Zmrciai adoptit	on of form IV-1.			
7	The undersigned is	proposing to own	or operate wel	ls in West Virg	inia for the first
	ime, so that this				
, u	indersigned with th				
5- 11	he undersigned has			4	
-	the undersigned has				
,	rear 19, but ha	s not neretolore	e appointed a de	signated agent.	
1	his designation su	bstitutes a new	designated agen	t for the unders	signed, who has
	wned or operated a				
. P	resent designated	agent of the und	lersigned, who w	ill continue as	such, if he is .
	ble, until this ne				
	Agent being re	placed		N	
		ddress		-	
		daress			
**		•	Bow Valle	y Petroleum Inc	2.
			By: (2.11)	11 Owner or Open	ator
CCEPTED this Onw	ary 4 , 19'8	2			II.
1.011	- 130		its: vace thes	ident-Generagy	19212024
. (Signature of des	ionated accept)			•	
aken, subscribed and	•	inic 4th.	f janu	02	
otary Public Kelly	711 1		/ /	19/	
· · · · · · · · · · · · · · · · · · ·	The whole has	My commi	ssion expires _	July	<u>25</u> , 19 <u>88</u>
cll owner or operator ualified representati	must be a respons	ible officer of	the corporation	, trustee, indiv	ridual or legally
producti	or owner or the	werribl.			Terrandonia



1V-35 (Rev 8-81)

Date December 30, 1982
Operator's
Well No. WI-026

Sinte of Mest Pirginia Well No.

Beparlment of Mines
Oil und Gas Bivision

Farm Gillispie
API No.47 - 105 - 1032

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

VELL TYPE:	Oil / (If "Gas,"	Gas X / 1	Liquid Injection on x/ Underground	/ Waste Disposal Storage / Deep	_/ _/ Shallow/)
LOCATION:	Elevation:	818.67	Watershed Right	Fork of Flint	Run
	District.	Clay	County Wirt	Quadrangle	Girta 75'

COMPANY Bow Valley Petroleum
ADDRESS 600 Commerce Sq. Charleston, WV
DESIGNATED AGENT Robert Long
ADDRESS Culloden, WV
SURFACE OWNER Glen W. Roberts
ADDRESS Flizabeth, WV
MINERAL RIGHTS OWNER West Vaco
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
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Casing	Used in	Left	Cerent fill up
Tubing	Drilling	in Well	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			

GEOL	OGICAL	TARGET FORMATION Devonian Sh	ale -	Marce	ellus Depth la	446-4676 feet
	Depth	of completed well 4676	feet F	Rotary	X / Cable Too:	ls
	Water	strata depth: Fresh 116	feet;	Salt_	feet	
	Coal	seam depths: N/A		Is co	oal being mined in	the area?
OPEN	FLOW :	DATA				
	Produ	cing formation Devonian Shal	е		Pay zone depth 144	46-4676 feet
	Gas:	Initial open flow Show N	cf/d	Oil:	Initial open flow	Bbl/d
		Final open flow 400 M	cf/d		Final open flow	Bbl/d
		Time of open flow between	en initi	ial and	i final tests	hours
	Stati	c rock pressurepsig	(surface	e measi	urement) after	hours shut in
	(If a	pplicable due to multiple comp	letion-	)	(	01/12/2024
	Secon	d producing formation	•		Pay zone depth	feet
	Gas:	Initial open flowN	/cf/d	Oil:	Initial open flow	Bbl/d
		Final open flow 1	/cf/d	Oil:	Final open flow	Rbl/d
		Time of open flow between	en initi	ial and	final tests	hours
	Stati	c rock pressurepsig(s	surface	measu	rement) after	hours shut in

DEPAILS OF PERFORMIED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, EIC.

## lst. Stage (N<sub>2</sub> Frac)

Perforation Intervals = 30 holes from 3490' - 4523'  $1,080,000 \text{ S Ft.}^3$  of  $N_2$ , 1,200 gallons HCL. (Partial ballout)  $N_2$  Injection Rate: 47,000 S Ft. $^3$ /min. Breakdown = 2625#

## 2nd Stage (N<sub>2</sub> Frac)

Perforation Interval = 26 holes from 1402' - 2912' 1,000,000 S Ft.<sup>3</sup> of N2, 1,100 gallons HCL. (Partial ballout) N2 Injection Rate: 60,000 S Ft.<sup>3</sup>/min.

## WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET		REPARKS		
		BOITOM FEET	Including	indication	of all fresh, oil and gas
Drillers Log			an saic	vater, coar	, 011 411 913
Soil Sand Shale Sand & Shale Shale	0 3 40 2225 3311	3 40 2225 3311 4676 TD			
					*
Electric Log Tops Elev. 819 K. B. 829					
Salt Sands Maxon Sand Big Lime Injun Sand Weir Shale (Pocono) Sunbury Shale Upper Devonian Shales Huron Shale Rhinestreet	460 710 835 980 1012 1404 1446 2836 4142	510 824 980 1012 1404 1446 2836 4142 4676 TD			

(Attach separate sheets as necessary)

BOW VALLEY PETROLEUM, INC.

By: December 30, 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 cond, encountered in the drilling of a well."