FILE COPY



1)	Date:_	September 1	, 1983

2) Operator's Well No ..

3) API Well No. State

County Permit (CORRECTED PERMIT NUMBER)

--2000-

1100

STATE OF WEST VIRGINIA DEPARTMENT OF MINES, OIL AND GAS DIVISION APPLICATION FOR A WELL WORK PERMIT

A) WELLTS	VDE: A C	HE A CO	120/16	ac V	ur oz			DIFICATIONS				
4) WELL I								/ Deep				
5) LOCATIO		vation:										
,	Dis	strict: Bu	rning	Spri	ngs	County: Wi	County: Wirt Ouadrangle: 7.5' Annamoriah					
6) WELL OI	PERATOR	Sterl	ing Dr	illi	ng &	Prod. Co., I	nc . DESIGNATE	AGENT Harry	L. Berger, Jr.			
Addres		360 M	adison	Ave	. Fif	th Floor	Address		/irginia St., E.			
		New Y	ork, N	lew Y	ork :	10017		Char1	eston, W.V. 25301			
8) OIL & GA	AS INSPEC		BE NOTI	FIED			9) DRILLING CO	ONTRACTOR:				
Name	The second secon	Mace					Name UNK	NOWN AT THIS	TIME			
Addres		. 1 Bo.					Address	WILDE	200 (2)			
	Sar	ndridg		and the second second	274			A Comment	- 101			
10) PROPOS	ED WELL	WORK:	Drill	X	_/ Drill	deeper	/ Redrill	Stimulate	0 1003			
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						11 / 10 .						
11) GEOLOG	ICAL TAR	GET FOR						011 8 6	AS DIVISION			
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								feet	The Initiation			
	oximate coa							area? Yes	/ No V /			
15) CASING						* 1		100				
CASING OR	11		IFICATION	S	- 1	FOOTAGE I	NTERVALS	CEMENT FILL-UP	PACKERS			
TUBING TYPE	Size	Grade	Weight	New	Used		1	OR SACKS	PACKERS			
Conductor	Size	Grade	per ft.	New	Useu	For drilling	Left in well	(Cubic feet)				
Fresh water	9 5/8	LS	33#	v		300'	300'	T 6 6	Kinds			
Coal	9 3/0		33#	^		200	200	To Surface	By Rule wo			
Intermediate	7"	1 55	2011	V		1860'	18601		Sizes			
Production		J-55		X		1000		100 sks	*			
	4 1/2	ERW	10.5#	X		V Tiers abititie	5000	250 sks	Depths set			
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						DRILLING PE	KIVIII		Well work started			
Permit number_	47-10	05-200	0 11	00	1.4			Octo	ober 20 19 83			
									Completion of the dule			
This permit cover	ering the we	ll operato	r and well	location	on shown	below is evidence of	f permission grante	d to drill in accordan	ce with the pertinent legal re-			
quirements subje	ect to the co	nditions c	ontained	herein a	and on the	e reverse hereof. No	tification must be o	ven to the District Oi	and Cas Inspector (Defer to			
district oil and g	as inspector	24 hours	before ac	tual pe	rmitted w	ork has commenced	in addition, the we	ell operator or his con	tractor shall notify the proper			
								11.01				
reverse hereof.	OIK IS as uc.	scribed iii	the Notice	c and A	кррпсано	ii, piat, and reciama	tion plan, subject to	any modifications a	nd conditions specified on the			
Permit expires _	Octo	ober 2	0, 198	35		unless well	work is commenced	prior to that date and	prosecuted with due diligence.			
							ork is commenced	prior to that date and				
Donde			1-4	<b>.</b>					OTHER INSERTCTIONS			
Bond:	Agent	1	20	Casin	2	Fee			The state of the s			
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99					- 3		1	11				
							Admir	nistrator, Office of O	il and Cas			
NOTE: Keep o	ne copy of	this permi	t posted a	t the di	rilling loc	ation.	, Admin	manufaction, office of O	ii und Odo			

Reason: \_





#### OFFICE USE ONLY

#### PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

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This part of Form 14-2(	b) is to record th	ne dates of certa	in occurrences a		ij rono	ap mopeous		
		Date					Date	e(s)
	<u> </u>	Date						
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OTHER INSPECTION								
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Reason.	1		(73	33			UT.	AA

#### 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).

19

Date:

- 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.
- 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.	01/05/2024

#### WAIVER

The undersigned coal operator/ owner/ lessed amined this proposed well location. If a mine map exists which covers added to the mine map. The undersigned has no objection to the work operator has complied with all applicable requirements of the West V	the area of the well location, the well location has been
applicable requirements of the West V	nginia Code and the governing regulations.

By

FORM	IV-
(Obvers	ie)
(6-82)	



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1)	Date:S	eptember	1	83
2)	Operator's Well No.	838		1100

105

County

Permit

47

State

3) API Well No.

DRILLING CONTRACTOR:

STATE OF WEST VIRGINIA	
DEPARTMENT OF MINES, OIL AND GAS DIV	ISIO

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AT THIS TIME					IIT APPLICATION				
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5) LOCATION			98.22			_/ Underground	Straight Fork	& little Kar	Shallow X
TO BUILDING	Distri	ct: Bu	rning S	prin	igs	County. Wi	rt	Quadrangle	7.5' Annamoriah
6) WELL OPE	RATOR S	terlin	g Drill	ing	& Pro	d. Co., Inc	11) DESIGNATEI	AGENT Harry	L. Berger, Jr.
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		ew Yor	k, New	Yor	k 10	0017		Charles	ston, W.V. 25301
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Refer to No. 10) Prior to the construction of roads, locations and pits for any permitted work.

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 unless drilling is commenced prior to that date and prosecuted with due diligence.

·Plat: Bond: Agent:

Casing

1) Date: September 1 ,19 83

2) Operator's Well No. 838

3) API Well No. 47 105 - 2000

State County Permit

STATE OF WEST VIRGINIA DEPARIMENT OF MINES, OFFICE OF OIL & GAS

NOTICE	OF	APPLICATION	FOR	A	WELL	WORK	PERMIT	

	RFACE OWNER(S) OF RECORD TO BE SERVED  Name Westvaco Corp.	5(i) COAL OPERATOR UNOPERATED() Address
(ii)	Address #2 Fur guson Dr. Parkersburg, W.V. 26101 Name Address	5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD Name UNKNOWN Address
(iii)	Name Address	Name Address
		5(iii) COAL LESSEE WITH DECLARATION ON RECORD: Name Address

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

(1) The Application for a Well Work Permit on Form IV-2(B) (or Form IV-4 if the well is to be plugged, which sets out the parties involved in the drilling or other work, and describes the well and its location and, if applicable, the proposed casing and cementing program;

(2) The plat (surveyor's map) showing the well location on Form IV-6; and

(3) The Construction and Reclamation Plan on Form IV-9 )unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM IV-2(B) OR FORM 4, DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Administrator of the Office of Oil and Gas, West Virginia Department of Mines, with respect to a well at the location described on attached Application and depicted on attached Form IV-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Administrator.

(a)
Bessell
Manager Common
JUJ
THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW

6) EXTRACTION RIGHTS

Check and provide one of the following:

OIL & GAS DIVISION DEPT. OF MINES

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.)

7) ROYALTY PROVISIONS

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

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

5(55 . 12)

#### INSTRUCTIONS TO APPLICANT

#### CONCERNING THE LINE TIEMS:

- 1) Date of Notice.
- 2) Your well name and number.
- 3) To be filled out by the Office of Oil & Gas.
- 4) & 5) Use separate sheet if necessary.
  - 4) Surface owner(s) of record to be served with Notice and Application. However, see also Code § 22-4-1b(b) if "more than three tenants in common or other owners of interest described in subsection (a) of this section hold interests such lands".

coal Operator" means any person, firm, partnership, partnership association or opporation that proposes to or does operate a coal mine.

- Code § 22-4-20.
- Code § 22-4-11(c). However, in lieu of filing the lease(s) or other continuing contract(s), the Applicant may fill out the information in the space provided below.
- 7) See Code § § 22-4-11(d, e).

#### CONCERNING THE REQUIRED COPIES FOR FILING AND SERVICE:

Filing. Code § 22-4-lk and Regulation 7.02 provide that the original and required copies of the Notice and Application must be filed with the Administrator, 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-lk(d) and the reclamation required by Code § 22-4-l2b and Regulation unless previously paid on the same well, the fees required by Code § 22-4-la(c) 3-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the any water well on dwelling within 200 feet of the proposed well.

In addition, service must be made on the surface owner(s) and the person(s) interest in the coal. See Code § § 22-4-1m, 22-4-2, 22-4-2a, and 22-4-2b.

## INFORMATION SUPPLIED UNDER CODE § 22-4-11(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on the obverse side of this Notice, I depose and say that I am the person who signed the Notice for the Applicant, and that—

- the tract of land is the same tract described in the Application to which this Notice applies, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor,	lessor,	etc.	Grantee, lessee, etc.	Rovalty	Book Page
Parkersburg	Nat'l.	Bank	Sterling Drilling and Production Co., Inc.	1/8	161/434

90000

Contract of



1)	Date: Sep	tember	1	, 1983	
2)	Operator's Well No	838			
3)	API Well No.	47	105	>000	110
		State	County	Permit	

9					
0	CUBBE	William!	PERMIT	MITME	TO 1
V	CHARACTE	MILLI	I DILLL L	INELLED	Each V

## STATE OF WEST VIRGINIA DEPARTMENT OF MINES, OIL AND GAS DIVISION APPLICATION FOR A WELL WORK PERMIT

4) WELL TY	PE: A C	oil	/ Ga	as X								
		f "Gas", l			X		torage	THE CONTRACT OF THE PARTY OF TH	_/ Shallow/)			
5) LOCATIO		evation:	-	5.221	nae	Watershed: County:	THE RESERVE OF THE PARTY OF THE	THE RESERVE TO THE RESERVE THE	anawha River			
6) WELL OP			ing Dr			n n	7) DESIGNATED	Quadrangle:Quadrangle:	1. Serger dr			
6) WELL OP			adisor		-	th Floor	Address	STATE OF THE PERSON NAMED	drainia St F			
Address				low Y	REPORT OF THE PARTY OF	10017	Address		eston. W.V. 25301			
8) OIL & GA	SINSPEC						9) DRILLING CO		eracuit, w.v. Essu.			
Name	Deo	44	DE NOTE	LLD				IOWN AT THIS	TIME			
Address	Rt	. 1 80	x 5				Address					
	Sandridge, W.V. 25274											
10) PROPOSE	D WELL	WORK:	Drill	X	_/ Dril	l deeper	/ Redrill	/ Stimulate	1			
10, 1101 002						n/ Perfora						
						in well (specify)						
11) GEOLOGI	CAL TAR	GET FOR										
12) Estima					500	feet						
13) Appro						feet; salt,		feet.				
14) Appro	ximate coa	l seam dep	ths:		0	Is coa	l being mined in the	area? Yes	/ No/			
15) CASING A	ND TUBI	NG PROC	GRAM									
CASING OR TUBING TYPE	Size	SPEC Grade	Weight per ft.	New	Used	FOOTAGE IN	TERVALS  Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS			
Conductor									Kinds			
Fresh water	9 5/8	LS	33#	X		300'	300'	To Surface	831 Kal 12			
Coal								<b>建筑和</b> 。	Sizes			
Intermediate	7"	J-55	20#	X		1860'	18601	100 sks				
Production	4 1/2	FRW	10.54	X			5000	250 sks	Depths set			
Tubing												
Liners									Perforations:			
									Top Bottom			
				i								
			INS	TRUCT	TIONS T	O COAL OPERATO	OR, OWNER, OR I	ESSEE				
	The r	named coal	loperator	coal o	wner(s).	and coal lessee are he	reby notified that a	ny objection they wisl	n to make or			
								n fifteen (15) days afte	er the receipt			
	of this Ap	plication b	by the Dep	partmer	it.			Oct	ober 20 83			
		The follow	vina waiw	ar must	be come	alated by the soal one	rator and by any as					
								oal owner or coal less sued within fifteen (1				
		days of th						· ·				
						WAIVER						
The undersigned			20 10	0.5	/ owner		_/ lessee	/ of the co	oal under this well location has			
examined this pro	no objection	in to the w	ork prope	map ex	he done	this location, provi	he well location, the	well location has been	n added to the mine map. The all applicable requirements o			
the West Virginia						at time location, provi	ded, the well operati	or has complied with	an applicable requirements of			
			1/									
ALL	K	-	The same of	1		550						
1717					,	3)~	- Committee of the Comm					
Date:			, 1	9		В	/					
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IV-9 (Rev 8-81)

necessary for comments.



DATE 8.27-83

WEIL NO. Parkersbury Bank # 838 API NO. 47 - 105 - 1100

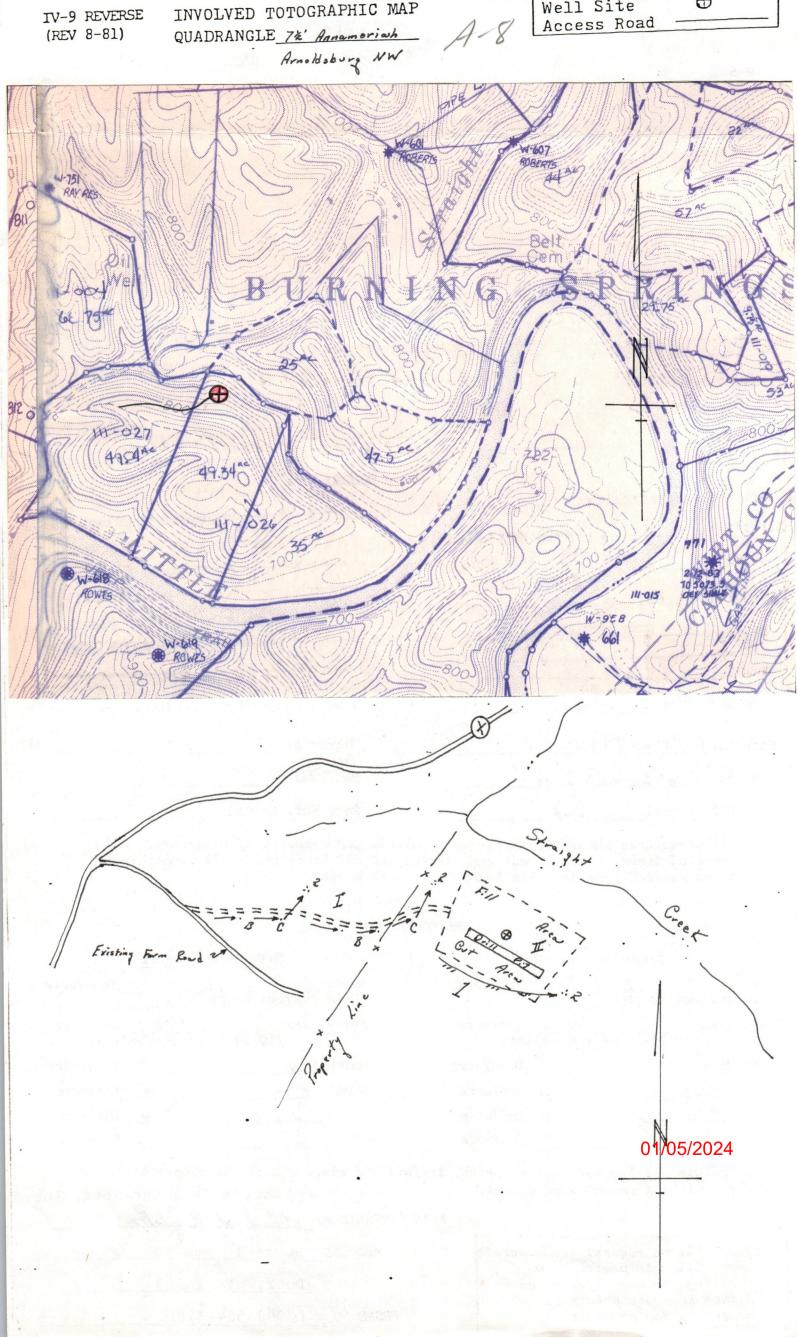
State of Mest Birginia

Beparlment of Mines Bil und Gas Bivision

#### CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Sterling Drilling & Pr	od. Co WELL OPERATOR Sterling Drilling & I
	Y 10017 Address c/o H.L.Berger - Chars., WY
Telephone (212) 949-9100	Telephone (304) 342-0121
LANDOWNER Westraco Corp.	SOIL CONS. DISTRICT Little Language SOD
	terling Drilling & Prod. CoH.L. Bergegent)
This plan has been reviewed by	He Kanawha SOD. All corrections
and additions become a part of this plan	
	(Date)
	farrett lewton.
ACCESS ROAD	LOCATION
Structure	(A) Structure Diversion D:tch (1)
Spacing .	Material Earthen -
Page Ref. Manual	Page Ref. Manual 2-12
12	ROBOR DE
Structure Drainage Ditches	(B) Structure Rip-Rap (2)
Spacing Roadside	SEP. Material Rock
Page Ref. Manual 2-12	Material Rock  Page Ref. Manual 2-9  CO DF MINES  Material (3)
DEP	C. GAS DIVISION
Structure Cross Ditches	(C) OF MINIO
Spacing 135' for 4-6's grade	Material
Page Ref. Manual 2-4	Page Ref. Manual
All structures should be inspected a commercial timber is to be cut and stacut and removed from the site before a	regularly and repaired if necessary. All acked and all brush and small timber to be lirt work begins.
PEN	EGETATION .
Treatment Area I	Treatment Area II
or correct to pH 6.5	Lime Z Tons/acre or correct to pH 6.5
Tertilizer 600 lbs/acre	Fertilizer 600 lbs/acre
(10-20-20 or equivalent)	(10-20-20 or equivalent)
tulch Hay 2 Tons/acre	Mulch Hay 2 Tons/acre
eed* <u>Ky-31</u> <u>40</u> lbs/acre	Seed* 6.31 40 lbs/acre
Ladino Clover y lbs/acre	Ladino Clover 4 lbs/acre
lbs/acre	<del>01/05/2024°</del>
*Inoculate all legumes such as vetch, to moculate with 3% recommended amount.	refoil and clovers with the proper bacterium.
	Moore's Well Services, Inc.
P	PLAN PREPARED BY Rland S. Compbell
NOTES: Please request landowners'	ADDRESS Route 1 Box 30
seedling for one growing season.  Attach separate sheets as	Duck, WV 25063
deputite offetto ub	

PHONE NO. (304) 364-5780



(Rev 8-81)



OIL . AS DIVISION

## DEP1. OF MSHASof Mest Mirginia

Bepartment of Mines Gil und Gas Bivision

Date	Oct. 23, 1984
Operator	's
Well No.	838
Farm Pkt	og Nat'l Bank
API No.	47 - 105 - 1100

WELL OPERATOR'S REPORT OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

	•	ge/ Lee		allowx_/)
IOCATION: Elevation: 698.22 Watershed St				
District Burning Sprng County Wirt		Quadrangle	e 7½' Ann	amoriah
COMPANY				
COMPANY Sterling Drilling & Production Co., Inc.	1	0.00		Cement
ADDRESS 710 Virginia St., E, Charleston, WV DESIGNATED AGENT Harry L. Berger, Jr. 25301	Casing	Used in		fill up
ADDRESS 710 Va. St., E. Charleston, WV 25301	Tubing	Drilling	in Well	Cu. ft.
SURFACE OWNER Westvaco Corp.	Size 20-16			
ADDRESS Box 577, Rupert, WV 25984	Cond.			
MINERAL RIGHTS OWNER Parkersburg Nat'l Bank	13-10"	Towns .		G.,
ADDRESS Parkersburg, WV 26101	9 5/8	3041	304!	to surface
OIL AND GAS INSPECTOR FOR THIS WORK Deo	8 5/8			
Mace ADDRESS Rt 1, Bx 5 Sandridge, WV	7-	1859'	1859'	175 sx
PERMIT ISSUED 10/20/83 25274	5 1/2			1
DRILLING COMMENCED 7/23/84	4 1/2		5140	290 sx
DRILLING COMPLETED 7/29/84	3			
IF APPLICABLE: PLUGGING OF DRY HOLE ON	2			
CONTINUOUS PROGRESSION FROM DRILLING OR	Liners			
REWORKING. VERBAL PERMISSION OBTAINED ON	used			
	<u> </u>			
GEOLOGICAL TARGET FORMATION Devonian Shale			h 5000'	
Depth of completed well 5154 feet			e Tools_	
Water strata depth: Fresh 250 feet;				
Coal seam depths:	Is coal	being mine	ed in the	area? NO
OPEN FLOW DATA				
Producing formation Devonian Shale	Pay	zone dept	12208!-51	05! feet
Gas: Initial open flow Mcf/d	Oil: Ini	tial open	flow	_ Bbl/d
122/4	Fir	al open fl	low	Bbl/d
Final open flow 335 Mcf/d		nal tests	ho	urs
	ial and fi	R	01/05	2024 rs shut in
Final open flow 335 Mcf/d		ment) after	96 hou	
Final open flow 335 Mcf/d  Time of open flow between init	e measuren	ment) after	96 hou	
Final open flow 335 Mcf/d  Time of open flow between init  Static rock pressure 895 psig(surface)  (If applicable due to multiple completion)	e measuren	ment) after v zone dept		feet
Final open flow 335 Mcf/d  Time of open flow between init  Static rock pressure 895 psig(surface)  (If applicable due to multiple completion)	e measuren	zone dept	·h	feet Bbl/d
Final open flow 335 Mcf/d  Time of open flow between init  Static rock pressure 895 psig(surfact  (If applicable due to multiple completion  Second producing formation	e measuren) Pay Oil: Ini	zone dept	hflow	

FORM IV-35 B-2 (REVERSE)

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

Perforations:

100 holes

2208' - 5105'

Treatment:

4250 gal 15% HCl; 6088 MSCF  $\mathrm{N}_2$ 

#### WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all freshand salt water, coal, oil and gas
			all measurements 10' KB
Sandstone and Shale	0	1029	all measurements to kp
Salt Sand	1029	1200	
Sand and Shale	1200	1490	
Maxon	1490	1580	With the state of
Shale and Lime	1580	1605	
Big Lime	1605	1710	
Big Injun	1710	1743	
Shale	1743	1762	
Big Injun Sand	1762	1772	
Siltstone	1772	2127	
Sunbury Shale	2127	2141	
Sandy Siltstone and Shale	2141	2495	
Gordon	2495	2501	
Silty Shale	2501	4575	
Grey Siltstone	4575	4590	
Grey and Dark Shale	4590	5154	TD 5154' KB
Grey and Dark Shale	4390	3134	1D 3134 KB
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		THE RESERVE	TO PERSONAL PROPERTY OF THE PROPERTY OF THE PERSONAL PROPERTY OF THE PE
		ab.ava.twa	Harris to reservo la materiale de la
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			Norway and the state of the sta
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		1.00	I fine helf a proposito ad qualitati
			on the first of the second
		se La la sel como mon	
			ANAC BOT MESS

(Attach separate sheets as necessary)

_Sterlin	ng Drilling and Production Co., Inc. Derator 01/05/2024
Well	Operator 01/05/2024
By:	tund Bergers
Date:	Oct/ 23, 1984

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"

B13

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



#### INSPECTOR'S WELL REPORT

OIL & GAS DIVISION
DEPT. OF MINES

Permit No. 105-1	1100				Oil or Gas Well		
Company Sterle	ing Oxilling	+ Prode	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PAC	KERS
Address Charle	ston, M.	Va.	Size			229 (3)	
Farm Parkerst	burg not. B	anki	16			Kind of Pac	eker
Well No. 838	30		10			Size of	
District Burning	Springe ounty M	it_	81/4				
Drilling commenced_	2/23/84	-	65%			Depth set_	
Drilling completed	Total dept	h	5 3/16			Perf. top_	
Date shot	Depth of shot_		2			Perf. botto	
Initial open flow	/10ths Wate	r inInch	Liners Used			Perf. top	
Open flow after tubing	/10ths Merc.	inInch				Perf. botto	m
Volume		Cu. Ft.	CASING CEME	NTED	SIZE	No. FT	Date
Rock pressure	lbs	hrs.	NAME OF SEF	RVICE COMP	ANY		
Oil	bbl	s., 1st 24 hrs.	COAL WAS EN	COUNTERE	D AT	_FEET	INCHES
Fresh water	feet	feet	FEET	INC	HES	FEET	INCHES
Salt water	feet	feet	FEET	INC	HES	_FEET	INCHES
Drillers' Names Ra	ndy Short	+	Pus	her Ro	nnée t	esto	
Clint Huri	+ Oki #8						
Remarks: 7/23/	840 Rig on	roved of	on & Rig	ged up	v stor	ting to	drill
Rot ho	to Rig in le on air	. pit	constr	reted	on up	per su	leof To

7/23/84 DATE Homes The David State INSPECTION

Form 26 2/16/82

#### STATE OF WEST VIRGINIA

#### **DEPARTMENT OF MINES**

#### OIL AND GAS WELLS DIVISION

## **INSPECTOR'S PLUGGING REPORT**

COMPANY	e 1.3.		ADDR	ESS	100		V pM air
FARM		DISTRICT		C	OUNTY		
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illing Material Used					4/1		
iner Loc	cation	Amor	unt	Packer	Loc	cation	(a)
	ND DEPTH PLACED			BRIDGES	CASIN	G AND TU	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTI	RUCTION-LOCATION	RECOVERED	SIZE	LOST
				7.76			
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an emperiment. THE STREET					NA STATE		
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	THE STATE OF THE S	Lostvias				200	1
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HID The Second Prints	- TA CISSO	Marching 3	A19	end AS agree declara-			
Orillers' Names	The street of	April 2		taril and the second			16 11 17
2 to 1924 - 1909 250							
Remarks:							
	I hereby certify I vi	sited the above	well on this d	late.			
DATE							
						1	100
				DIS	STRICT WELL IN	01/05	2024

B4

#### STATE OF WEST VIRGINIA

### DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



#### INSPECTOR'S WELL REPORT

OIL & GAS DIVISION
DEPT. OF MINES

Permit No. 105-1100 Oil or Gas Well. (KIND) CASING AND USED IN LEFT IN PACKERS Size Kind of Packer\_\_\_ Size of\_ Depth set\_ Drilling commenced Drilling completed\_\_\_ Total depth Perf. top\_\_\_ Date shot\_ Depth of shot. Perf. bottom\_\_\_ Liners Used Perf. top\_\_\_ Initial open flow\_ \_/10ths Water in\_ \_Inch Perf. bottom\_ Open flow after tubing\_\_\_\_\_/10ths Merc. in\_\_ Volume\_ Cu. Ft. NAME OF SERVICE COMPANY lbs. Rock pressure. hrs. Oil bbls., 1st 24 hrs. COAL WAS ENCOUNTERED AT. FEET INCHES Fresh water\_ feet feet FEET INCHES FEET INCHES Salt water. FEET INCHES FEET INCHES Rusher Ronnie East lake Plug down 9" pipl & cem

ug down 12:30 AM

7/26/84 DATE Homes Hi MOSIONALI INSPECT

Form 26 2/16/82

#### STATE OF WEST VIRGINIA

#### **DEPARTMENT OF MINES**

#### **OIL AND GAS WELLS DIVISION**

## **INSPECTOR'S PLUGGING REPORT**

ermit No.					V	Vell No	
OMPANY	120		ADDRES	S			1
ARM							wall be they as deposit
	A CONTRACT SOLE	Cusen e	WENT A.				
illing Material Used							
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iner Loc	cation	Amor	unt	Packer	1	cation	
PLUGS USED A	ND DEPTH PLACED			IDGES		G AND TU	T
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUC	CTION-LOCATION	RECOVERED	SIZE	LOST
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	\$ 17 A ST. K.C.					80-1000kg *- g-* c	ogs ray
11707 Paragram and ART Lan				Mild of at air a			
Orillers' Names	2017/10/2						
				and the second of the second			
Remarks:							
- 11	I hereby certify I vi	sited the above	well on this date				
DATE	Will Company						
			1				
				DIS	TRICT WELL IN	SPECT98	5/2024

B15

#### STATE OF WEST VIRGINIA

#### DEPARTMENT OF MINES OIL AND GAS WELLS DIVISION



#### INSPECTOR'S WELL REPORT

OIL & GAS DIVISION

Permit No. 105-1180

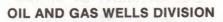
DEPTH OF MINES

Company Sterlin	a Drillin	g + Prod.	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACK	ERS
Address Charles	tox w.	JA.	Size			_	
Farm Parkeralus	a nationa	Bank	16			Kind of Pac	ker
Well No. 838	0	3004	13			Size of	
District Burning S	County 2	Firt	81/4			Size of	
Drilling commenced			6%			Depth set_	
			5 3/16				
Drilling completed	Total depth		3			Perf. top	
Date shot	Depth of shot		2			Perf. botton	1
Initial open flow	/10ths Water	inInch	Liners Used			Perf. top	
Open flow after tubing	/10ths Merc.	inInch				Perf. botton	1
Volume		Cu. Ft.	CASING CEME	NTED	SIZE	No. FT	Date
Rock pressure	lbs	hrs.	NAME OF SER	VICE COMPA	ANY		
Dil	bbls	s., 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	_FEET	INCHES
Fresh water	feet	feet	FEET	INCI	HES	_FEET	INCHES
Salt_water	feet	feet	FEET_	INCI	HES	_FEET	INCHES

Remarks: 9-24-84 - Inspected reclamation on road + location reclamation done, location + road seeded and mulched with straw by Aonald Lane Inc. can be released when grass grown.

#### STATE OF WEST VIRGINIA

#### **DEPARTMENT OF MINES**



## INSPECTOR'S PLUGGING REPORT

CEMENT-THICKNESS WOOD-SIZE ELAD SOLOTION TO SOLOTION T	OF MINE PARAMO				RESS			
CEMENT-THICKNESS WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE LEAD CONSTRUCTION-LOCATION SIZE SIZE LEAD CONSTRUCTION-LOCATION SIZE SIZE SIZE SIZE SIZE SIZE SIZE SIZE	ARM	The second secon	_ DISTRICT _		C	OUNTY		
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PLUGS USED AND DEPTH PLACED  CEMENT-THICKNESS  WOOD-SIZE  LEAD  CONSTRUCTION-LOCATION  RECOVERED  SIZE  LEAD  A  A  A  A  A  A  A  A  A  A  A  A	illing Material Used			66.5	11.17.4.			3/04/5
CEMENT-THICKNESS WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE L	iner Loc	cation	Amou	nt	Packer	Loc	ation	
	PLUGS USED A	ND DEPTH PLACED			BRIDGES	CASIN	G AND TU	IBING
	CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONS	TRUCTION-LOCATION	RECOVERED	SIZE	LOST
					a tale	n		
	Variable Committee Committ			1.02.68				
					10	44 A	Sec. 175 (198)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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	make to spile to the spile to t				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S. V. I. A. Marian Commission Com	Control of the Contro	2004
						d 011	Zwidul er	r system
	1		TOTALES)					
		V A MOS	201 638 (	J. J. W	The state of the s			
						and the second second	and the action	
Drillers' Names	HOVTOR	January Charge	7/100X3 3K	WEAG	ene eff tel del del del			
	Orillers' Names	838.771	4.17		34.3			50 1 1 1 1 1 A
The first term of the first te								
Remarks:	Domarka		en 1999 september 19		energie, en	an explanation and the same of the same	Newsperson and the	Segunda Antonio de la Companio de Segunda de
Nellidiks.	Keniai Ks.							
The state of the s		I hereby certify I vis	ited the above v	well on this	date.			

IV-20 Obverse 1-84



### State of West Virginia

Department of Mines Gil and Gas Division Charleston 25305

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT

RECEIVE OCT 2 3 1984	
OCT 2 3 1984	ש

OIL & GAS DIVISION

DEPT. OF MINES

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

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

Administrator-Oil & Gas Division

January 18, 1985
DATE

coverage for the life of the well.

#### APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA) 1.0 API well number: - 1100 -105 47 (If not assigned, leave blank, 14 digits.) 7.2 Type of cetermination being sought: 107 the the cooks found on the from Section of NGPA Category 7 of this form. 3.0 Depth of the deepest completion NOV - 1 1984 5154 location: (Only needed if sections 103 or 107 in 20 shoved OIL & GAS DIV Sterling Drilling and Production Co. In DEPT. OF ALLES 4.0 Name, address and cods number of applicant: (35 letters per line maximum. If code number not 710 Virginia St. East, Arcade Building evolute, less blanks Charleston,, WV 25301 Zio Coos State E.O Location of this weet: [Complete la) Burning Springs District Field Name Wirt (a) For anshore wells (35 letters maximum for field County State Lamen Ibl For OCS wells: Block Number Area Name Dote of Lease: 1 1 1 1 1 OCS Lessa Number les Name and identification number of this well: (35 letters and digits Pkbg Nat'l Bank #838 Lanumixam (a) If coos 4 or 5 in 2.0 above, name of the reservoir: (35 letters 6.0 (a) Name and code number of the d-4- .- . purchaser. (35 letters and digits UNDEDICATED maximum. If code number not Suver Coce eveilable, leave blank.) Name (b) Care of the contract: 1111 Day (c) Emmared total annual production 10 from the west: Million Cubic Fret ici Ali Other (d) Total of (a). (a) Same Price (b) Tax Prices [Indicate (b) and (c) (+) or (-1.] 7.0 Contract price:

5 8 6 6

5 8 6 6

1984

Berger, Jr.

SIMMETU

SAMMETU

Harry

Oct

23

Care Application is Completed

(As of filing care. Complete to 3

(As of filling asts. Complete to 3

9.0 Person responsible for this application:

Agency Use Only

690 may piscer]

ceamer places.

-----

NOV - 1 1004

Designated Agent

304-342-0121

## DEPARTMENT OF MINES, OIL AND GAS DIVISION

47-105-1100

## COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

The state of the s	THE CENSSII ICATION
Date: Oct. 23 ,19 84	AGENCY USE ONLY Dev
Applicant's Name: Sterling Drilling & Production Co.,	Inc. WELL DETERMINATION FILE NUMBER
Address: 710 Virginia Street, E. Arcade Bldg	84401 107 105
Charleston, WV 25301	841101 -107-105-1100
Gas Purchaser Contract No.	Use Above File Number on all Communications Relating to This Well
Oate of Contract (Month, day and year)	
	Designated Agent: Harry L. Berger, Jr.
Trac Furchaser.	Address: Sterling Drilling & Prod. Co., In
(Street or P.O. Box)	710 Virginia St., E. Arcade Bldg. Charleston, WV 25301
(City) (State) (Zip Code) FERC Seller Code 018084	FERC Buyer Code
NAME AND TITLE OF PERSON TO WHOM QUESTIONS CONCERNI	
Name: Harry L. Berger, Jr. (Print)	Agent (Title)
Signature: Hung X. 124GR Sterling Drilling & Prod. C Address: 710 Virginia St., E., Arcad	o., Inc. e Bldg.
(Street or P.O. Box) Charleston, WV (City) (State)	25301
Telephone: (304) 342-0121 (Area Code) (Phone No	(Zip Code)
(Certificate of Proof of Service to Purchas	
NGPA Catagory Appl	lied For
IGPA SECTION/SUBSECTION	
02 New Natural Gas 102-2 2.5 Mile Test 102-3 1000 Foot Deeper Test 102-4 New Onshore Reservoir	108 Stripper Well Natural Gas 108- Stripper Well 108-1 Seasonally Affected 108-2 Enhanced Recovery
03 New Onshore Production Well  103 New Onshore Production Well	108-3 Temporary Pressure Buildup
07 High Cost Natural Gas 107-0 Deep (more than 15,000 feet)	AGENCY USE ONLY
107-1 Geopressured Brine 107-2 Coal Seams 107-3 Devonian Shale	
107-5 Production enhancement 107-6 New Tight Formation 107-7 Recompletion Tight Formation	
RECEIVED	QUALIFIED 01/05/2024
OIL & GAS DIV. DEPT. OF MINES	

Date Received

Determination Date

Operator's Well No.Pkbg Nat'l Bk 8

API Well No.

47 - 105 - 1100 State County Permit

# WELL CLASSIFICATION FORM HIGH COST GAS WELL - DEVONIAN SHALE

11011 0002 0110		
NGPA Sec	tion 107	
	DESIGNATED AGENT Harry L. Be	erger, Jr.
	ADDRESS Arcade Building; 710 Charleston, WV 25301	
	LOCATION Elevation 698.	
ELL OPERATOR Sterling Drilling and Produc	tion Watershed Straight Fk of L	ittle Kanawha R.
DDRESS 710 Virginia St., East	, Inc. Dist.Brng Spr County Wirt	Quad. 72' Anamor
Charleston, WV 25301	Gas Purchase Contract No.	-
AS PURCHASER UNDEDICATED  DDRESS	Meter Chart Code	-
	Date of Contract	

Date surface drilling began: 7/23/84

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

Bottom Hole Pressure. PSIA -- Pf = Pwe XLGS

 $t = 60 + (0.0075 \times 5/54) + 459.67 = 558$   $x = \frac{1}{53.34} \times 558 = .0000336$  $x = \frac{1}{53.34} \times \frac{558}{2.7183} \times \frac{0.000336}{2.7183} \times \frac{3657}{2.7183} \times \frac{108}{2.7183} = \frac{98}{2.7183} \times \frac{108}{2.7183} = \frac{108}{2.7183} \times \frac{1$ 

#### AFFIDAVIT

I, Harry L. Berger, Jr., 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.

STATE OF WEST VIRGINIA

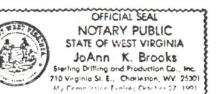
COUNTY OF Kanawha, TO-WIT:

aforesaid, do certify that Harry L. Berger, Jr., whose name is signed to the writing above, bearing date the 34 day of October, 1984, has acknowledged the same before me, in my county aforesaid.

O1/05/2024

Given under my hand and official seal this 24 day of October, 1984. My term of office expires on the 89 day of October, 1991.

(NOTARIAL SEAL



Notary Public

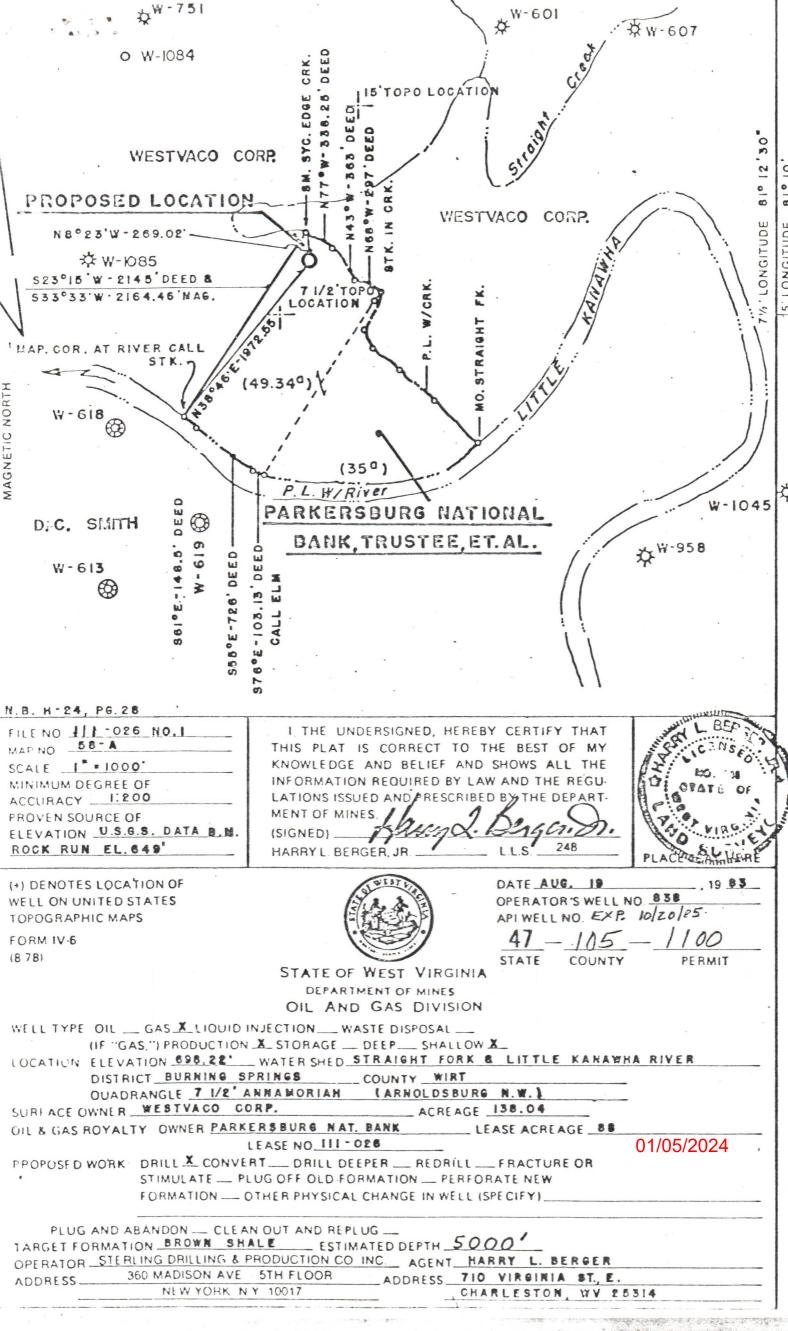
Hany J. De

APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT
1  D = A  D  A  C  T  A  B  C  C  C  C  C  C  C  C  C
Operator: Firling Orilling On Production Co., Inc. Agent: H. L. Berger
Type Determination being sought - 107 (Devonian Shale)
API Well No .: 47-105-1100 Well Name: Parkersburg Nat'l Bank +8.
West Virginia Office of Oil and Gas County: Wrt 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:
. Cammo Ray Scale = 0 -> 200 AP) Units
B. Gamma Ray Log Value at 0.7 x Value at Base Line
1. GR Value = 160 * API Units 2. Calculation: 0.7 (GR Value at Base Line) 0.7 (160 *) = 112 API Units
III. Intervals with GR index less than 0.7 x (Value at Base Line):
Interval Thickness Feet of less than* of Interval 0.7 (Shale Base Line From** To***
2141 5152
Total Devonial Interval 3011
Total Less Than 0.7 (Shale Base)
% Less Than 0.7 (Shale Base Line) = 0.0146 x 100 = 1.46 %
01/05/2024

\*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.





IV-35 (Rev 8-81)

## State of West Birginia

Bepartment of Mines Gil und Cas Bivision

Date	Oct. 23, 1984
Operator	's
Well No.	838
Farm Pkb	g Nat'l Bank
API No. 4	

hours shut in

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

	,				
1	WELL TYPE: Oil / Gas x / Liquid Injection (If "Gas," Production x / Undergrou	/ Wast	e Disposal e/ Deep	L/ p/ Sha	llow <u>x</u> /)
	LOCATION: Elevation: 698.22 Watershed Str	aight Fk o	f Little Ka	anawha R.	
	District Burning Sprng County Wirt				moriah
	COMPANY Sterling Drilling & Production Co., Inc.			,	
	ADDRESS 710 Virginia St., E, Charleston, WV	Casing	Used in	Left	Cement
	DESIGNATED AGENT Harry L. Berger, Jr. 25301	Tubing	Drilling		fill up Cu. ft.
	ADDRESS 710 Va. St., E. Charleston, WV 25301	Size			
	SURFACE OWNER Westvaco Corp.	20-16 Cond.			
	ADDRESS Box 577, Rupert, WV 25984	13-10"	- may any and a second		o
	MINERAL RIGHTS OWNER Parkersburg Nat'1 Bank	9 5/8	304	304!	to surface
	ADDRESS Parkersburg, WV 26101	8 5/8		4 1 q k	A Leave
	OIL AND GAS INSPECTOR FOR THIS WORK Deo	7	1859'	1859'	175 sx
	Mace ADDRESS Rt 1, Bx 5 Sandridge, WV 25274	5 1/2			
	PERMIT ISSUED 10/20/83	4 1/2		5140	290 sx
	DRILLING COMMENCED 7/23/84	3			
	DRILLING COMPLETED 7/29/84	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		Dep	th 5000'	feet
	Depth of completed well 5154 feet				
	Water strata depth: Fresh 250 feet;				
	Coal seam depths:				area? NO
	OPEN FLOW DATA				
	Producing formation Devonian Shale	Pas	zone den	+1+0208!-51	05! feet
	Gas: Initial open flow Mcf/d				
	Final open flow 335 Mcf/d				
	Time of open flow between init			Commission (Commission Commission	
	Static rock pressure 895 psig(surface				
	(If applicable due to multiple completion			<del>- 201/0</del> 5/2	2024
	Second producing formation		, zone den	th	feet
	Gas: Initial open flow Mcf/d				
	Final open flow Mcf/d				
	Time of open flow between init				15
	A STATE OF THE PARTY OF THE PAR				

Static rock pressure psig(surface measurement) after

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

Perforations:

100 holes

2208' - 5105'

Treatment:

4250 gal 15% HCl; 6088 MSCF N2

#### WELL LOG

			REMARKS
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	Including indication of all freand salt water, coal, oil and o
*.			all measurements 10' KB
Sandstone and Shale	0	1029	all measurements to KD
Salt Sand	1029	1200	
Sand and Shale	1200	1490	
Maxon	1490	1580	
Shale and Lime	1580	1605	*
Big Lime	1605	1710	
Big Injun	1710	1743	-
Shale	1743	1762	
Big Injun Sand	1762	1772	
Siltstone	1772	2127	のでは、1999年後の日本の大学の中では、他の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の
Sunbury Shale	2127	2141	
Sandy Siltstone and Shale	2141 Dev		
Gordon	2495	2501	onspirite in higher negletism meget in some begriffen der die der der der der der der der der der de
Silty Shale	2501	4575	
Grey Siltstone	4575	4590	
Grey and Dark Shale	4590	5154	TD 5154' KB
Gley and Dark Share	4330	3134	10 3234 KB
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(Attach separate sheets as necessary)

1.4606 Sterling Drilling and Production Co., Inc.

01/05/2024

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 that, encountered in the drilling of a well"