FILE COPY



OL WEST DA
STATE LANGE

1)	Date: Se	ptember	1	, 1983_	
2)	Operator's Well No	839		HORM IV-2(B)	
3)	API Well No.	47	105	-2001-	110
,		State	County	Permit	

(CORRECTED PERMIT NUMBER)

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

APPLICATION FOR A WELL WORK PERMIT

4) WELL TY	PE: A O	iHW-CE	/ Ga	s X	TOI	IONS (IF ANY)	AND CONDIT	UDIEIC ATIONS	PERMIT M
								_/ Deep	
5) LOCATIO	ON: Ele	vation: _	664.	Snr	inac	Watershed: _	Straight For	k & Little K	anawha River .5' Annamoriah
6) WELLOE	Dis	trict:	na Dri	llin	a & Pi	rod. Co. In	DESIGNATED	Quadrangle: /	L. Berger, Jr.
Addres	•					h Floor	Address		irginia St., E.
Addres			rk, Ne				ridaress	A STATE OF THE PARTY OF THE PAR	eston, W.V. 25301
8) OIL & GA	S INSPECT		Sept State Control of the	THE PERSON NAMED IN			9) DRILLING CO		
	Deo Mad					The second second	THE RESERVE OF THE PERSON OF T	KNOWN AT THI	STIME
Addres	sF	Rt. 1	Box 5			<u> </u>	Address E.	AE GEUI	7 7 111
		Sandri	dge, W	.V.	25274		Laborator Control of the Control of	- Constant	311
0) PROPOSE	ED WELL V	WORK:	Drill	Χ	_/ Drill	deeper	/ Redrill	Stimulate 1	and Constant
			Plug of	f old	formation	n/ Perfor	rate new formation_	95438 B	383
						n well (specify)			
1) GEOLOG						HALE		OIL & GAS DI	VISION
12) Estim	ated depth o	f complet	ed well,	5	000	feet	D	FIT OF	MN. T
13) Appro	oximate trata	a depths:	Fresh, _			THE RESERVE THE PARTY OF THE PA		Elfeet. OF	
	oximate coal					O Is co	al being mined in the	area? Yes	/ No/
5) CASING	AND TUBI	NG PROC	GRAM						
CASING OR TUBING TYPE		SPEC	IFICATIONS Weight			FOOTAGE	INTERVALS	OR SACKS	PACKERS
	Size	Grade	per ft.	New	Used	For drilling	Left in well	(Cubic feet)	
Conductor	0.510	10	00"			2001	2061	T C C	Kinds
resh water	9 5/8	LS	33#	X		3001	300'	To Surface	-
Coal	711	1.55	00//	V	100	1825'	1825	100 -1	Sízes
ntermediate	7"	J-55	20#	X		1023	5000	100 sks 250 sks	
Production	4 1/2	ERW	10.5#	Λ.		WHAT BALL B	3000	250 SKS	Depths set
Tubing Liners					77 - 75	3 1410 Tagg 7	74130		Perforations:
Liners		amoilte.	0.00	w. n.			eman 765 natals a	Se Burger et bi la	Top Bottom
		- A4401111111				18 /3 (13) 133 AV	10.112.110.100.0100		Top Bottom
	institution of		100			10.19	The allest		
	-						1 33 733		
					Location in				
						OFFICE USE	ONLY		
						DRILLING PE	RMIT		vell-work started
ermit number_	47_1	05_200	+- 11	101				Octobe	
ermit number_	4/-1	05-200	1	LUI				Dat	THE R. LEWIS CO., LANSING MICH.
his permit cov	ering the we	ell operato	or and wel	1 locati	on show	helow is evidence	of permission grante		ce with the pertinent legal re-
uirements subj	ect to the co	onditions of	contained	herein a	and on th	ne reverse hereof. No	otification must be giv	ven to the District Oil	and Gas Inspector, (Refer to
o. 8) Prior to	the construc	tion of ro	ads, locati	ons an	d pits for	any permitted work	In addition, the we	ll operator or his con	tractor shall notify the prope
						work has commence			
he permitted we everse hereof.	vork is as de	escribed in	the Notic	e and A	Application	on, plat, and reclam	ation plan, subject to	any modifications ar	nd conditions specified on the
ermit expires	Octo	ber 20	, 1985	5		unless wel	l work is commenced	prior to that date and	prosecuted with due diligence
c.mic expires .	3330				16.	united wer		The state and	SWENT SHEET GREET
			Dlat.	Carl		Fac			
Don J.	A				12 //	Fee			
Bond:	Agent		Plat:	Casin	1.				Reason:
Bond:	O K	6	2/	2	1.	550		-100	
Bond: BB	OK Agent	de		2	1.		1	10	1

OKN IV-2(B



STATE OF WEST VINGINE

	71	MSDARI SYD GRA	TO BRIVER OIL	REMIEN	DEPA				
		OFFI	CE USE ONLY	rucur	TA:				
PERMIT M	ODIFICATIONS		TIONS (IF ANY						KELLIN (
woused the same	0 913371 8 8	was inditant			17	acitaubor L. 200			OCATION
	Quadrangle 7.		County: Will		1418	BUTTER			
in Serger. Ur.	ACENT HEIGH	DESIGNATED	00.50°					ERATORS	WELLOPE
iroja Sp		Addiess	1001-1		-9V				Address
Dieds . V. A Dost									
	NTRACTOR:	DRILLING CO			dan	E NOTE	OR TO B	S INSPECT	OIL & GAR
								O VICE	OMSV.
							STYDES		Address
		(firehout -)		Kert V	Y			u i i i i i i i i i	
			Perfora				· loso	e dalined	HUD YOM !
			well (specify)						
	and the second						ETEORY	CAL TARG) GEOLOGII
			feet) GEOLOGII 12), Estima
	I RE . Appl Foot		feet; sait,						
VNOTV		l being mined in the r	i le coa						
		and the second	www.room					MBUT GM	O. CASING A
PACKERS		TERVALS CO.				Moletic I			CASING OR TUBBAG TYPE
		Left in well		basil	Pierw	Ji asq in	Grade		
Billak 15 Oc	esemple of	1005	1005				2.15		owductor cst water
20.00									e tso
		1825,	1825'						
Deaths of	256 sice	2000.	The second		N. X	#2.08	1,383	1/8	oduction
		OFFI	CE USE ONLY		le i				9 gnidu
Perforationer			100 A						
This part of Form IV-20	b) is to record th	e dates of certain	n occurrences as	nd any	follov	v-up ins	pections	4	
		Date						Data	(a)
		Date					-	Date	(S)
Application received		NIA	Follow-up	inspec	ction(s)			
Well work started		TIMS	DRILLING PER		,,				
	Octobe					tit	000 5		
Completion of the drilling							V02 C		ermit nåraber
rocess memman and this a		peimission granted	below is evidence o		localio		iomago I	fing the wel	ns permit cove
	has infritate out of my toos aid to totatego if								
Vell Record received			ork has commenced		rag lau	before act	24 hours	inspector	ng bas lio tahu
Reclamation completed	any modifications an	ion blan, subject to	n, ple, and reglama		A,bna	the Notice		ark is as des	e permitted we
						2005			verse liercof.
prosecuted with due diligence.		vork is commenced;				COKI	07 190	1030U	
OTHER INSPECTIONS	5								
Reason:			Fee	1	Salting.	2 Total	9	Agenti	Hond:
Reason.	1 fee		<u>। एक</u>	0	1	4	3	OK	199

Reason:

Permit expires

·Plat:

Casing

Agent:

Bond:



)	Date:_	September	1	19_	83

2) Operator's 839 Well No ._

105 3) API Well No. _ State County 2001 Permit

DRILLING CONTRACTOR:

UNKNOWN AT THIS TIME

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

OIL	AND	GAS	WELL	PERMIT	APP	LICAT	TON

4) WELL TYP 5) LOCATION									
				11					and water
			roduction			_/ Underground	storage	Deep	ShallowX
6 11711 055	: Elev	ation:	664.1 Burning	Cun:		_ Watershed: _	Straight Fork	of Little Ka	nawha River .
	DISTI	terlir	na Dril	ling	& Pro	County: W	irt	Quadrangle: _	7.5' Annamoriah L. Berger, Jr.
Address	RATUR_3	60 Mac	dison A	ve.	Fifth	Floor		AGENT Harry	L. Berger, Jr.
Address			rk, New				Address		ia St., E.
7) OIL & GAS			.,	-	100			Char lescon	, W.V. 25301
ROYALTY	OWNER .	Parke	ersburg	Nati	ona1	Bank	12) COAL OPERA	TORUNOPER	ATED
Address	-1: <u>3173. 18</u>	Parke	rsburg	, W.V	. 261	01	Address	ONOT LIK	
					1 - 77 - 7				PR - P - P
Acreage		88					13) COAL OWNE	R(S) WITH DECLA	RATION ON RECORD:
8) SURFACE C	WNER_		rguson		tion		Name		N
Address					261	01 1++- C+	Address		
A		138.0	4	, W.V	. 201	of Attn. St	eve Richards	-	and the state of t
Acreage 9) FIELD SALI	E (IE MAD		•				Name		
Address	(IF MAD	E) 10:					Address	- Ins	PRIMITION OF
71441633								- 8.8	1000V
10) OIL & GAS	INSPECTO	OR TO BE	NOTIFI	ED				1 1 1 1 11	HON ON RECORD
Name	Deo	Mace					Name	40	SEPON
Address		t. 1 B		GO ST		The state of	Address		28 1983
	S	andrid	ge, W.V	1. 25	274				
15) PROPOSED	WORK:	Drill X		Drill o	ieeper_	Redri	IL Frac	ture or stimulate -	IL & GAS DIVISION
-21	a ti	Plug off	f old form	nation		Perforate	new formation	DEF	T. OF MINES
			ysical cha				W		THE TELES
16) GEOLOGICA						nale			
17) Estimated 18) Approxim						feet			
19) Approxim	nate coal ce	om denth	ins: Fresi	1, 0			salt,		
						Is coa	d being mined in the a	rea? Yes	/ No_X
20) CASING AN	D TUBING	PROGR	AM				mon paparoni (
CASING OR TUBING TYPE		SP	ECIFICATIO	NS	. 11	FOOTAC	E INTERVALS	CEMENT FILL-UP	PACKERS
TOBING TIPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	OR SACKS (Cubic feet)	I ACKERS
Conductor				1			# (136) 11 JULY 13	(Cubic reet)	Kinds
Fresh water	9 5/8	LS	33#	X	1234	300	300'	To Surface	Kilius
Coal	711	1.55	100"		11 34 151				Sizes
Intermediate	7"	J-55	20#	X		1825'	18251	100 sks	1 199
Production Tubing	4 1/2	ERW	10.5#	X			5000'	250 sks	Der hs set
Liners	Jane C		1					3379 1171 1911	
						d. Co. Co. State Co. State Co. Co.			Perforations:
		**************************************							Top Bottom
	- 100 W 100		7/2 / - 115						
21) EXTRACTION	RIGHTS		di antari	3 33	1232	W1652 - 11111	L S N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Check and pro								ng William Ing	
Included The reg	is the leas	e or lease	s or other	continu	ing cont	ract or contracts	by which I hold the r	ight to extract oil or	gas.
22) ROYALTY PR	un cincin of	Code 22	4-1-(c) (1)	throug	th (4). (See reverse side fo	r specifics.)		
			arket the o	il or and	based w	non a lease or est-			
				ner of	the oil o	r gas in place whi	ch is not inherently	or contracts providing	ng for flat well royalty or ar
		1 63	140						e of oil or gas so extracte
If the answer above 23) Required Copie	is No, not	hing addi	tional is no	eded. I	f the an	swer is Yes, you n	nay use Affidavit For	m IV-60.	
			nd the are						
A) Copies of this	rator, coal	owner(s).	and coal	lessee o	n or bef	eclamation plan h	ave been mailed by r	egistered mail or deli	vered by hand to the abov
named coal ope	ston, West	Yirginia.			01 001	ore the day of the	maning of delivery	of this Permit Applie	ation to the Department o
named coal ope	id M.	tillesp	è		1000	_	Signed: Ha	rus L. De	saes b
manie obai ope		May	10, 198	39	2000		lts: Designa	ated Agent	04/05/2024
Mines at Charle	Expires						113.		· U 1/U5/2U24
Mines at Charles	Expires								
Mines at Charle	Expires				OI	FFICE USE O	NLY	,	
Mines at Sharle Notary: Aw My Commission	Expires		•			FFICE USE O			
Mines at Sharle Notary: Aw My Commission	Expires	· · · · · · · · · · · · · · · · · · ·		:4;°>					19
Mines at Charle Notary: My Commission Permit number		perator a			DR	RILLING PER	MIT	Date to drill in accordance	e with the pertinent legal r and Gas Inspector, his contractor shall notify the

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

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

1424

- 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).
- 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

on, the well location has been
on, the wen location has been
is location, provided, the well verning regulations.

Date:	, 19	Ву	

1) Date: Sept. 1 2) Operator's

Well No. 839

3) API Well No. State County Permit

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

				4		
NOTICE OF	APPLICATION	FOR	A	WEIL.	MORK	PERMITT

	Name Westvaco Corp.	5(i) COAL OPERATOR UNOPERATED
(ii)	Address #2 Furguson Dr. Parkersburg, W.V. 26101 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

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. The truth of the information on the

Notice and Application is verified and sworn to and the Notice is signed on behalf of the Well Operator in my County and State by Harry L Berger, this 1 day of Sent 198 My commission expires May 10, 1989 David M. Itallas Notary Publickanawha / State of West Virginia

Sterling Drilling & Prod. Co., Inc. Designated Agent Address 110 Virginia Charleston Telephone 342 - 012

6) EXTRACTION RIGHTS

Check and provide one of the following:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.

The requirement of Code 22-4-1-(c)(1) through (4). (See reverse side for specifics.)

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 oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes

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

INSTRUCTIONS TO APPLICANT

CONCERNING THE LINE ITEMS:

- 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 co-owners of interest described in subsection (a) of this section hold interests in such lands".
 - 5(i) "Coal Operator" means any person, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine.
- 5(ii, iii) See Code § 22-4-20.
 - 6) See 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 23, (iv) unless previously paid on the same well, the fees required by Code § 22-4-la(c) and 22-3-l2a, and (v) if applicable, the consent required by Code § 22-4-8a from the commer of any water well on dwelling within 200 feet of the proposed well.

Service. In addition, service must be made on the surface owner(s) and the person(s) with an 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 cath 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	081/434

V047

11.00



1) Date:	ptembe	r 1	, 19	
2) Operator's Well No	839			
3) API Well No.	47	105	2001	
	State	County	Permit	1101

PERMIT NUMBER)

STATE OF WEST VIRGINIA	(CORRECTED
DEPARTMENT OF MINES, OIL AND GAS DIVISION	
ADDITION FOR A WELL WORK DEDMIT	

4) WELL TY									
6) LOCATIO					X	/ Underground s		_/ Deep	
5) LOCATIO		evation: _	urnino		inas			Quadrangle:	41.5
6) WELL OP		A STATE OF THE PARTY OF THE PAR	THE RESERVE OF THE PARTY OF THE	ARCHITECTURE DE LA CONTRACTOR DE LA CONT	COLUMN TO SERVICE STATE OF THE		7) DESIGNATED		
Address			dison		Fift		Address	710 V	irginia St., E.
		New Yo	rk. Ne	W Yo	ork 1	0017		Charl	eston, W.V. 25301
8) OIL & GA	S INSPEC	TOR TO	BE NOTI	FIED			9) DRILLING CO	NTRACTOR:	
Name	Dec Ma	ce					NameU	NKNOWN AT THI	S TIME
Address			Box 5				Address		
		Sandri		I.V.	25274				
10) PROPOSE	D WELL	WORK:	Drill		_/ Drill			/ Stimulate	/
						n/ Perfora	ite new formation_		
11) GEOLOGI	CALTAR	CET EOD				n well (specify)			
12) Estima									
13) Appro								feet.	
14) Appro							al being mined in the		/ No/
15) CASING A									
CASING OR	1	SPEC	FICATIONS			FOOTAGE IN	TERVALS	CEMENT FILL-UP	PACKERS
TUBING TYPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	OR SACKS (Cubic feet)	
Conductor									Kinds
Fresh water	9 5/8	LS	33#	X		3001	300'	To Surface	3481k 1505
Coal									Sizes
Intermediate	7"	J-55	20#	X		1825'	1825'	100 sks	
Production	4 1/2	ERW	10.5	Ł X			5000	250 sks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom
			INS	TRUCT	TIONS T	O COAL OPERATO	OR, OWNER, OR I	LESSEE	
	The n	amed coal	operator,	coal o	wner(s),	and coal lessee are he	ereby notified that a	ny objection they wish	to make or
						filed with the Depart	ment of Mines withi	n fifteen (15) days afte	
	of this Ap	plication	by the Der	artmen	ıt.			Octob	er 20 83
		The follow	ving waive	r must	be comp	oleted by the coal ope	erator and by any co	oal owner or coal lesse	ee
		who has re	ecorded a	declara	tion und	er Code §22-4-20, if		sued within fifteen (1:	
		days of th	e filing of	the Ap	plication	1.			
						WAIVER			
The undersian	ad agal ana	noton.			/		(1)		
The undersigned this pro-			If a mine		/ owner	h covers the area of t	_/ lessee the	well location has been	al under this well location has added to the mine map. The
undersigned has	no objectio	n to the w	ork propo	sed to	be done a	at this location, provi	ded, the well operat	or has complied with a	all applicable requirements of
the West Virginia									
10-41			3/	X7	/				
00.	K	1 /		1	7 5	550		many 1	
Date:			, 19)		В	V	11/	fred to the
			7			В			
						It			



DATE 8-27-83

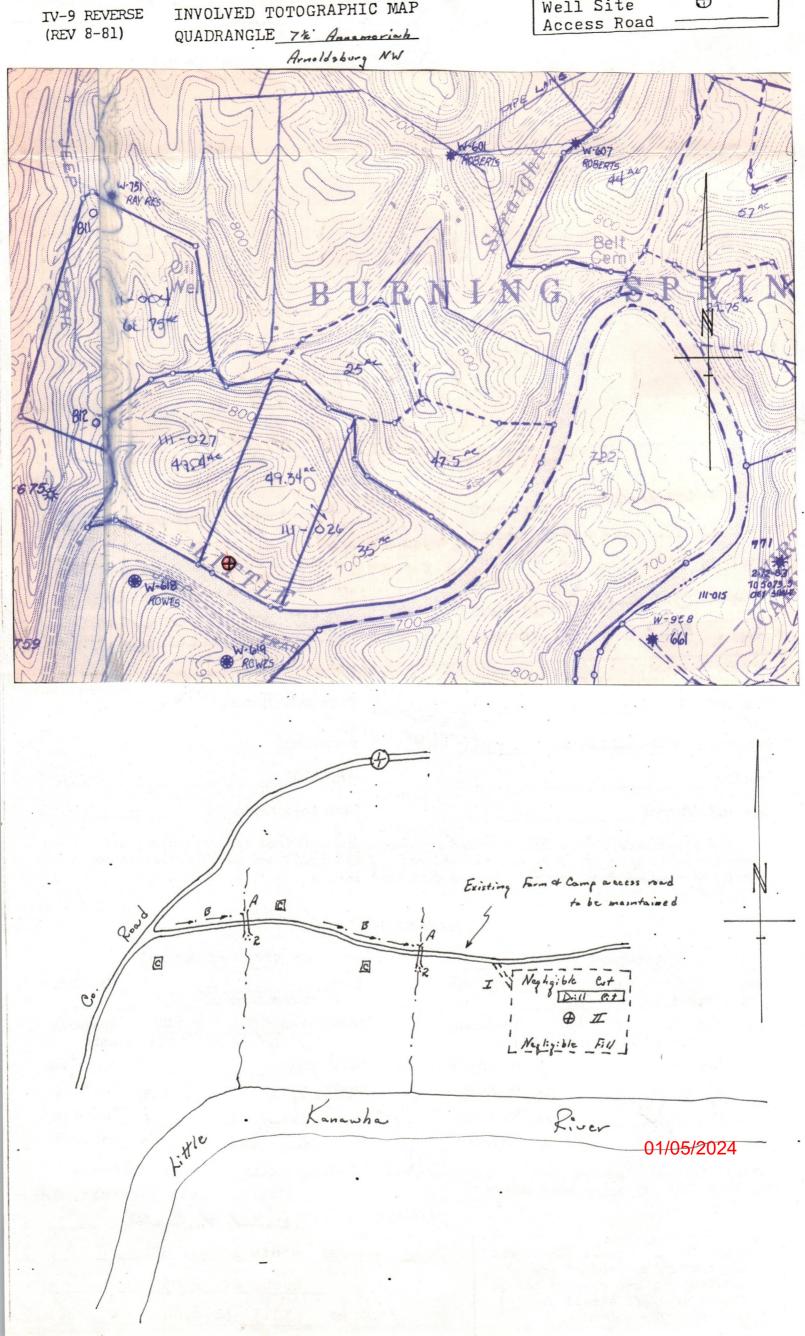
WEIL NO. Parkersburg Pank # 839 API NO. 47 - 105-1101

State of Mest Nirginia

Beparlment of Mines Bil und Gas Bivision

CONSTRUCTION AND RECLAMATION PLAN

COPANY NAME Sterling Drilling & Prod. C	o WELL OPERATOR Sterling Drilling & I
	17 Address c/o H.L.Berger - Chars., W)
Telephone (212) 949-9100	Telephone (304) 342-0121
LANDOWNER Westvaco Corp.	SOIL CONS. DISTRICT Little Kanandka SCD
	ng Drilling & Prod. CoH.L. Bergegent)
This plan has been reviewed by 1.44/e	Kanawha SOD. All corrections
and additions become a part of this plan:	9-1-83
	(Date)
Ja	(SCD Agent)
. ACCESS ROAD	LOCATION
Structure Cylund (A)	Structure see Sketch (1)
Spacing . Size IR."	Material
Page Ref. Manual 2-8	Rage Ref. Manual
MECELV	Dia Da
Structure Drainage Ditches (B)	Structure Rip-Rap (2)
Spacing Roads: de SEP 28 198	3 Material Rock
Page Ref. Manual 2-12	AINES
Structure Cross Ditches DEFT (C) F	Structure (3)
	VM
Spacing	Material
Page Ref. Manual	Page Ref. Manual
All structures should be inspected regular commercial timber is to be cut and stacked a	ely and repaired if necessary. All
cut and removed from the site before dirt wo	
REVEGETAT:	ION
Treatment Area I	Treatment Area II
Lime 2 Tons/acre or correct to pH 6.5	Lime 2 Tons/acre or correct to pH 6.5
Fertilizer 600 lbs/acre	Fertilizer 600 lbs/acre
(10-20-20 or equivalent)	(10-20-20 or equivalent)
Mulch Hay 2 Tons/acre	Mulch Hay 2 Tons/acre
Seed* Ky-3/ 36 lbs/acre	Seed* K-3/ 30 lbs/acre
Onhard grass 10 lbs/acre	Onhardonas 10 lbs/acre
Ladino Clover 4 lbs/acre	hadina Clove 01/05/2024
*Inoculate all legumes such as vetch, trefoil Inoculate with 3% recommended amount.	and clovers with the proper bacterium. Moore's Well Services, Inc.
	EPARED BY Reland X. Compbell
	V
NOTES: Please request landowners' \ cooperation to protect new	ADDRESS Route 1 Box 30
seedling for one growing season. Attach separate sheets as	Duck, WV 25063
	HONE NO. (304) 364-5780



Sent to

WEST VACO CORP.

Street and No.

Z FURGUSON DR.

P.O., State and ZIP Code
PARKERS BURG, W. W. 26/01

Postage

Certified Fee

Special Delivery Fee

Restricted Delivery Fee

Return Receipt Showing to whom and Date Delivered

Return Receipt Showing to whom, Date, and Address Spelivery

TOTAL PROSPERSION SIZE

Postman Control Corp.

Street and No.

Z FURGUSON DR.

Z FURGUSON D

P 522 051 881

(See Reverse) Sent to WEST VACO CORP. Street and No. 井Z FURGUSON P.O., State and ZIP Code PARKERS BURB, W. V 26/01 Postage Certified Fee Special Delivery Fee -Restricted Delivery Fee Return Receipt Showing to whom and Date Delivered Return Receipt Showing to whom, Date, and Address Form 3800, Feb. 1982 TOTALP \$1.72 Postma PS

105,200



OIL & GAS DIVISION
DEPT. OF MINES

939, 840 P 522 056 692

RECEIPT FOR CERTIFIED MAIL

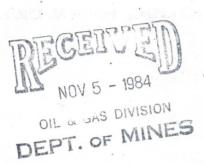
NO INSURANCE COVERAGE PROVIDED -NOT FOR INTERNATIONAL MAIL

(See Reverse) Sent to STEVE RICHARDS Sent to STEVE RICHARUS
WESTVACO CORP.
Street and No.
AZ FURGUSON DR.
P.O., State and ZIP Code
PARKERS BURG, W. V. Z6/01 Postage Certified Fee Special Delivery Fee Restricted Dalivery Fee Return Receipt Showing to whom and Date Delivered Return Receipt Showing to whom, Date, and Address of Delivery TOTAL Postage and Fa

PS Form 3800, Feb. 1982

3.1

IV-35 (Rev 8-81)



TO THE ST VIEW IN THE STATE OF THE STATE OF

State of Mest Nirginia Pepartment of Mines Gil und Cas Pivision

Date	Oct.	24,	1984	
Opera Well			839	
Farm	Pkbg	Nat'1	Bank	
API N	0. 47	-105	- 110)1

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas x / Liquid Injection (If "Gas," Production x / Undergro	ound Stora	age/ Deep	p/ Sha	
LOCATION: Elevation: 664.11 Watershed St				
District: Burning SpringsCounty Wirt	100	_Quadrangle	e 7½' Ann	amoriah
COMPANY Sterling Drilling & Production Co., Inc.			100 to 10	
ADDRESS 710 Virginia St., E, Charleston, WV	[C:	luna in	7-64	Cement
DESIGNATED AGENT Harry L. Berger, Jr. 25301	Casing	Used in	Left	fill up
ADDRESS 710 Va. St., E. Charleston, WV 25301	Tubing	Drilling	in Well	Cu. ft.
SURFACE OWNER Westvaco Corp.	Size 20-16 Cond.		Tana sa	12 T 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ADDRESS Box 577, Rupert, WV 25984	13-10"			
MINERAL RIGHTS OWNER Pkbg Nat'l Bank	9 5/8	298'	298'	120 sx
ADDRESS Parkersburg, WV 26101	8 5/8	270	230	120 58
OIL AND GAS INSPECTOR FOR THIS WORK Deo	7	1850'	1850'	160 sx
MACE ADDRESS Rt 1, Bx 5 Sandridge, WV 25274	5 1/2			
PERMIT ISSUED 10/20/83			F006	200
DRILLING COMMENCED 7/9/84	4 1/2		5086	290 sx
DRILLING COMPLETED 7/15/84	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
	Rotary	_	e Tools	
	Salt 620		_	
Coal seam depths: NONE		l being min		area?NO
OPEN FLOW DATA	- 15 300	L Dellig man		10
Producing formation Devonian Shale	Pa	ay zone dep	th 3117'-	5102' feet
		nitial open		
Final open flow 335 Mcf/d		inal open f		
Time of open flow between init				
Static rock pressure 895 psig(surface		_	0.4.10	
(If applicable due to multiple completion				as since
Second producing formation		ay zone dep	th ;	fee
Gas: Initial open flow Mcf/d	- Fr. 520 7			Bb1/
		inal open f	-	Bbl/c
	I.	open I		

Br

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

Perforations:

1st stage: 27 holes from 4517' to 5102'
2nd stage 27 holes from 3788' to 4365'
3rd stage 26 holes from 3117' to 3686'

Treatment:

1st stage 1000 gals of 15% HC1; 1584 MSCF of N $_2$ 2nd stage 1000 gals of 15% HC1; 1584 MSCF of N $_2$ 3rd stage 1000 gals of 15% HC1; 1584 MSCF of N $_2$ WELL 100

	gradena (al Pe	managet it is	REMARKS
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	Including indication of all fre and salt water, coal, oil and g
			all measurements 10' KB
Sandstone and Shale	0	1350	Fresh water @ 80'
Salt Sand	1350	1395	Salt water @ 620'
Shale	1395	1446	Sait water @ 620
Maxon	1446	1495	
Shale and Lime	1495	1547	
Big Lime	1547	1676	
Big Injun	1676	1708	
Siltstone and Shale	1708	2074	
	2074	2089	
Sunbury Shale	2074	2581	
Siltstone and Shale		4518	m 5 7 F (2021
Shale	2581		Top of Java Formation 4283'
Siltstone	4518	4534	Gas show 3117' - 3686'
Shale	4534	5135	3788' - 4365' 4517' - 5102'
			TD 5135'
and the second s			
	A CARL ST		
and the second s			
		200	
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Note that the state of the state of the
		A STATE OF THE PARTY OF THE PAR	
and a	and the second		
#	Ingenius and		
10,000			
the state of the s			
		1 1	

(Attach separate sheets as necessary)

Ste	ling Drilling and Production Co., Angos 12024	
	ell Operator	
By:_	Harry L. Deiger of	
Date	October 24, 1984	

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



INSPECTOR'S WELL REPORT

OIL & GAS DIVISION DEPT. OF MINES

Permit No. 105-11	<u>0</u> 1		Oil or Gas Well				
Company Sterlin	na Oullin	et Brod	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACK	ERS
Address Charles	ton, W. 118		Size				
Farm Parkerslin	so Not Bas	nk.	16			Kind of Paci	ker
Well No. 839			13				
District Burning &	print county M	est	81/4			Size of	
Drilling commenced	1110011		65%			Depth set	
Drilling completed	1- 1	5/00	5 3/16_ 8_ U/2		5675		
Date shot	/		2		30/0	Perf. top Perf. bottom	
Initial open flow			Liners Used			Perf. top	
Open flow after tubing						Perf. bottom	
			CASING CEMEN	NTED 4/2	SIZE 50	25 _{No. FT.} 2	122/8/1
Rock pressure	lbs	hrs.	NAME OF SER		and the second	Dowell	7
0il	bbls.,	1st 24 hrs.	COAL WAS EN	COUNTERED	AT	FEET	INCHES
Fresh water	feet	feet	FEET_	INCH	IES	FEET	INCHES
Salt water	feet	feet	FEET_	INCH	IES	FEET	INCHES
Drillers' Names Ran	de Short		Pund	hes Ros	n min 1	Pasta	
The TRights	A						
Remarks: 7/22/84 pipl and Plug de	J. D. d.	Well	5100 ft.	Ran	5075	It of	4/2"
pipe and	Cemented w	eth 2	90 sacks	20850	50 pos	mix	
Plug de	run 9:00	P.m.	by low	rell		,	
•			V and make			37.611	
7/23/84 BATE	<u>a adag</u> Tujus aig			Hon	res Hi	01/05/00 DISTRICT WELL II	South
/ PATE	1				,	DISTRICT WELL II	NSPECTOR

Form 26 2/16/82

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

OMPANY	p 3,44		ADDRESS			N. and
			C			
UNIOSET EN	2.3974 3.334	7.1.393				N. Sand College
lling Material Used						
				Loc	ation	
ner Loc		Amou				PING
PLUGS USED A	ND DEPTH PLACED		BRIDGES		SIZE	LOST
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST
						1.
And the second				No. of the last		
			Acres de la constant			
get free				- 12.		
resonance to manager of \$2.14 a. 2.2.2.2. A special						
		1	over and the first state of the second	The state of the s		P SOLD I
Part bother			and the second second	o man	201 17	238 0 21
	7.37	Tarry's 13				
113633	YMACMO	T MINERAL				ano phi
			,			
1001	Minney TA GERT	12000414	n in and on the late and asset the			
rillers' Names	778177451	4.50				
Timers Traines						
	2611041L	en e	Constitution of the consti	NA ALVANO	V-representation	. 14. 95. 30. 5
emarks:						
		11002	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1			7
DATE	I hereby certify I vi	sited the above	well on this date.			
UALE						

OG-11 3

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

AUG - 1 1984

OIL AND GAS WELLS DIVISION

INSPECTOR'S WELL REPORT DEPT. OF MINES

Permit No. 105-110) /				Oil or	Gas Well	
Company Sterling	2 Dilling	+ Brod	CASING AND TUBING	USED IN DRILLING	LEFT IN	PACI	KERS
Address Charles	ton, Wood	7,	Size				
Farm Parkersbu	ig Noti Bar	k.	1320		56 H	Kind of Pac	eker
Well No. 839	2 (24)	6_0	10 0 5		212	Size of	
District Burning S	pringoounty Mi	II.	894 978	H	3/2	Depth set_	7
Drilling commenced	16/89		5-9/16		1862	Depth sec_	
Drilling completed	Total depth_		3			Perf. top	
Date shot	Depth of shot		2			Perf. botton	m
Initial open flow	/10ths Water i	inInch	Liners Used			Perf. top	
Open flow after tubing	/10ths Merc. in	nInch				Perf. botton	m
Volume		Cu. Ft.	CASING CEME	NTED 93	SIZE 3/	No. FT.	1/10/8 Hate
Rock pressure	lbs	hrs.	NAME OF SER	VICE COMP	ANY A) owell	
Oil	bbls.,	1st 24 hrs.	COAL WAS EN	COUNTERE	O AT	FEET	INCHES
Fresh water	feet	feet	FEET_	INC	HES	FEET	INCHES
Salt water	feet	feet	FEET_	INC	HES	_FEET	INCHES
Drillers' Names Rand	ly Short		Rushe	, Rons	nie las	to	a dama oli
Hurt Rig #8	2						
Remarks: 7/106/84	moved on &	Starte	of drilling	s. ran	56 ft g	1378 8	nductor
an 312 ft of	18" surfa	be pop	e and cen	enled u	7/17/54	by Down	esnea
Hurt Reg #8 Remarks: 7/106/84 Pan 312 ft g Pa GC, + 12 d 1/19/84 Ran Neat 3% CC,	1862 ft	of 2110	pepe and	ceme	nted e	beth 1	60 sac
neat 3% C.C.	t 5/6, 86	loule	Plugdo	own 10;	00 P91	n by Do	owell.
7/23/84	nijw (testžio		U	How	nes H	10 PORISA	skuti
DATE				1 6/	- Andrews	DISTRICT WELL	INSPECTOR

Form 26 2/16/82

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

Permit No. Management No.					Well No.			
COMPANY	a life		ADDRES	S			· And Charle	
FARM		DISTRICT	and the second of	C	OUNTY	and the second		
Filling Material Used								
Liner Loc	ation	Amou	ınt	Packer	Loc	ation		
PLUGS USED A	ND DEPTH PLACED		BRI	IDGES	CASINO	G AND TU	BING	
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUC	CTION-LOCATION	RECOVERED	SIZE	LOST	
	215				VALUE OF THE PARTY		-/*	
the (Cype)						3 - 3		
men in the continues of the second se								
Agency design of the control of the				100000				
a see a	(a) -			to the second se	- Markana			
			577 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	the second of				
mound test								
			857					
	1.19	Lagrage way					serince	
	V 243340	1 271 14.15	C SHAPE		. 3			
		100		and the second s				
3.8070	A GHRS	MEGODESERS	W. LACO Lan	S SET LESS STATE				
Drillers' Names					1.693			
Dimers Traines								
and the State Empire responsible to the State Control of the State Contr	and the second s				erga i direktarak naze 19 kar	appropriate in the	Automotive and a	
Remarks:								
The state of the state of	I hereby certify I vis	sited the above s	well on this date					
DATE	inology coldly i vis	Silva illo abbvo	on on this date.					

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES OIL AND GAS WELLS DIVISION



INSPECTOR'S WELL REPORT OIL & GAS DIVISION

Permit No. 105-1101

DEPT. OF MINES

Oil or Gas Well_____

Company Sterle	na Drillis	rat Prod.	CASING AND TUBING	USED IN DRILLING	LEFT IN	PAC	KERS
Address Charles	ston, w.	0 1 A .	Size				
Farm Parheisle	,		16		No.	Kind of Pa	cker
Well No. 839	0 /1-0		13				
4		ah :+	10			Size of	
District Burning S	County_	West	65/8			Depth set	
Drilling commenced			5 3/16				
Drilling completed	Total de	pth	3			Perf. top_	
Date shot	Depth of sho	ot	2			Perf. botto	m
Initial open flow	/10ths Wa	ater inInch	Liners Used				
Open flow after tubing	/10ths Me	rc. inInch				Perf. botto	m
Volume		Cu. Ft.	CASING CEME	NTED	SIZE	No. FT	Date
Rock pressure	lbs	hrs.	NAME OF SER	VICE COMP	ANY		
Oil		obls., 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	INCHE
St.	tus re	hat					18.41001.09
Livillers Numes &/A	THE TOP	por					

14-84 - Inspected reclamation on road + location reclamation done, location + road seeded and muched with straw by Ronald Lane Inc. can be released when grass grows.

9-24-84

Homes H. Reverse INSPECTOR

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

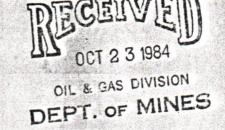
OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

ARMilling Material Usediner Loca	n.a.	DISTRICT _		Loc		en grande
illing Material Usediner Loca	ation ND DEPTH PLACED	Amou	nt Packer BRIDGES	Loc	ation	
iner Loca	ation ND DEPTH PLACED	Amour	nt Packer BRIDGES	Loc	ation	
PLUGS USED AN	ND DEPTH PLACED		BRIDGES	CASING		BING
PLUGS USED AN	ND DEPTH PLACED		BRIDGES	CASING		BING
	1	LEAD			G AND TUI	BING
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	IRECOVERED		
				1	SIZE	LOST
			The state of the state of			
				A AND THE RESERVE OF THE PARTY		etron year
					en de la composiçõe	
			2007			mour 's
Company of the Parks of the Company				1 5.41		
			a si ogsil si	3 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		3.23 NO.25 TO
	Chr.	antitana)			service of the service of	(6)
	21(A32K03	etaveta k	STEELING TO THE RESIDENCE OF THE PERSON OF T	C. Strill		
				And State Services		
MALLEL TO THE		KUODKU SE	WIDARD BEAT MINER	<u> </u>		
Orillers' Names						
Timers Names						
		4373			P11.5 - 49.15 - 49.11	
Remarks:						
DATE	hereby certify I visi	ted the above w	vell on this date.			

B-12





State of West Virginia

Bepartment of Mines

Gil and Gas Bivision

Charleston 25305

FINAL INSPECTION REPORT INSPECTORS COMPLIANCE REPORT

71	harleston, W.V.A. 25301 O Virginia ST., East	DIST. & COUNTY B. Springs
RULE	DESCRIPTION	IN COMPLIANCE YES NO
23.06 25.04 25.03 16.01 15.03 15.02 15.01 15.04 15.05 23.02 25.01 23.04 23.05 23.07 16.01 16.02 7.05	Notification Prior to Starting Work Prepared before Drilling to Prevent W. High-Pressure Drilling Required Permits at Wellsite Adequate Fresh Water Casing Adequate Coal Casing Adequate Production Casing Adequate Cement Strenght Cement Type Maintained Access Roads Necessary Equipment to Prevent Waste Reclaimed Drilling Pits No Surface or Underground Pollution Requirements for Production & Gatherin Well Records on Site Well Records Filed Identification Markings	aste V
	INSPECTED THE ABOVE CAPTIONED WELL AND I	DATE 10/17/84 Dougherty
with Ch	11 record was received and reclamation apter 22, Article 4, Section 2, the above for the life of the well.	requirements approved. In accordance we well will remain under bond Administrator-Oil & Gas Division
TMS/nw		January 18, 1985 DATE

PRICE	UNDER THE	NATURAL C	AS POLICY ACT	(NGPA)	1-1-
1.0 API well number:		47	105 - 1101		
(If not assigned, leave blank, 14 digits.)	1			(D)	ungganeron anna artistagh tiga an madhambhan in anna an 1959
20 Type of certermination being sought:	1		107	DISPE	3000
(Use the cooks found on the from	!		107	Category	MED
of this form.		500	tion of NGPA		A TO THE
3.0 Depth of the deepest completion	1 ,			NOV_	201
location: (Only reacted if sections 103	,		5135	fust -	1 1984
pr 107 in 20 above.					
4.0 Name, address and code number of	i	Duilling	and Droduction	CO. DEPT. OF	S DIK18084
applicant: (35 letters per line	Sterli	ng urilling	and Production	OF OF	018084
meximum. If code number net	Name				MINE Spoile Coo
evoileble, leave blanks	710 Vir	ginia St. Ed	ast, Arcade Bui	land	· · · · · · · · · · · · · · · · · · ·
	Street				
	Charles	ton,, WV 2530	01 -		
	Gry		Stat	Zo Coc	•
5.0 Location of this west: [Complete la)	-				
or (b).1	Bu	rning Spring	S		
(a) For anshare wells	Field Name			*	
(35 letters maximum for field	Wi	rt .	;		
name.)	County		Star	• V!V	-
(b) For OCS wells:	1	etti massanigang eri inadigaba maariti madibu. Perior estilla ilikuliketilis min esti			
	1				
	Area Name			Block Num	Oaf ·
		•			
·	l	D	of Lacour	•	
	1		of Cacae.		
		Mo.	Day Yr.	OCS Lessa Number	
let Name and icontification number		MO.	Day II.	OCS CEESE 1401110er	
of this well: (35 letters and digits	ni n	The man	4020	,	•
Lmumacam	PKDE	Nat'l Bank	#839		
(g) If coos 4 or 5 in 2.0 above, name		· normalitification engages "Carl Chross Editionality on edit month action of descriptions	TO A STREET WHEN THE PROPERTY OF THE PROPERTY		
	1	• . •			
of the reservoir: (35 letters					
Lmumixem					
6.0 (a) Name and code number of the	1	d-1			1
purchaser. (35 letters and digits	1	INIDA	D T C 1 MDD		
meximum. If code number not		UNDE	DICATED		CONTRACTOR SCHOOL STATEMENT
, aveilable, legve blank.)	Name	REPORTED THE COMMUNICATION OF THE PARTY OF T		The second secon	Buver Cods
(b) Date of the contract:	i	·			
	1				
			Ma. Day	Yr.	
(c) Estimated total annual production	1		10		
from the west:	1	Approximate an extraction of	10	Million Cub	c Feet
				Ici Ali Other	(d) Total of (a).
•	1	(a) Bass Price	. (b) Tax	Prices (Indicate	'(b) and (c)
				[+1 or (-1.]	
7.0 Contract price:			an appendix		
(As of filing care. Complete to 3	SIMMETU	5 8 6 6	CHICAGO D HOUSE MARIND CHARAGE	Manuel Country Space 9 (Million	second 4 owners cannot com
ceamel piscel					
8.0 Maximum lawrus rate:	1			!	
(As of filling date. Complete to 3	SIMMBTU	5 8 6 6	SAMPLE OF STREET, STRE	CHARLES & SHOULD	
cearmer places.					
9.0 Person responsible for this application:	1 /				-
	Harry	L. Berger,	Ir/	Designa	ted Agent
Agency Use Oniv	1 Name	7	to all	Title	
Care Received by June Agency	Hai	my X. K	SIGET A		
NOV - 1 1984	Signature	7	1		
Sate Received by FERC	Oct. 24	,/1984	/	304-342-0	121
	E STATE OF THE PARTY OF THE PAR	tion is Completed		Phone Number	
	AND THE RESIDENCE OF THE PARTY	The same of the last of the la	THE RESERVE OF THE PARTY OF THE		

FERC-171 18-871

STATE OF WEST VIRGINIA

NOV 29 1984

DEPARTMENT OF MINES, OIL AND GAS DIVISION

47-105-1101

COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

Date: Oct. 24 ,19 84	AGENCY USE ONLY DE
Applicant's Name: Sterling Drilling & Production Co	., Inc. WELL DETERMINATION FILE NUMBER
Address: 710 Virginia Street, E. Arcade Bldg	841101 -107-105-1101
Charleston, WV 25301	141101 -101-103-1101
Gas Purchaser Contract No.	Use Above File Number on all Communications Relating to This Well
Date of Contract (Month, day and year)	
First Purchaser: UNDEDICATED	Designated Agent: Harry L. Berger, Jr.
Address:	Address: Sterling Drilling & Prod. Co.,
(Street or P.O. Box)	710 Virginia St., E. Arcade Bld Charleston. WV 25301
(City) (State) (Zip Code) FERC Seller Code 018084	FERC Buyer Code
NAME AND TITLE OF PERSON TO WHOM QUESTIONS CONCERN BE ADDRESSED:	ING THIS APPLICATION SHALL
Name: Harry L. Berger, Jr. (Print) Signature: Address: Sterling Drilling & Prod. Address: 710 Virginia St., E., Arce (Street or P.O. Box) Charleston, WV (City) (State) Telephone: 304 342-0121 (Area Code) (Phone	25301 (Zip Code) Number)
(Certificate of Proof of Service to Purch	aser)
NGPA Catagory Ap	plied For
NGPA SECTION/SUBSECTION	
102 New Natural Gas 102-2 2.5 Mile Test 102-3 1000 Foot Deeper Test 102-4 New Onshore Reservoir 103 New Onshore Production Well 103 New Onshore Production Well	108 Stripper Well Natural Gas 108- Stripper Well 108-1 Seasonally Affected 108-2 Enhanced Recovery 108-3 Temporary Pressure Builds
107 High Cost Natural Gas 107-0 Deep (more than 15,000 feet) 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	AGENCY USE ONLY
NOV - 1 1984 OIL & GAS DIV.	QUALIFIED 1/05/2024
DEPT. OF MINES	

Operator's #839 Well No. Pkbg Nat'l Bk

API Well No.

47 - 105 - 1101 State County Permit

WELL CLASSIFICATION FORM HIGH COST GAS WELL - DEVONIAN SHALE

NGPA Section 107

	DESIGNATED AGENT Harry L. Berger, Jr.
	ADDRESS Arcade Building; 710 Virginia St., E.
•	Charleston, WV 25301
	LOCATION Elevation 664.11
WELL OPERATOR Sterling Drilling and Product	ion Watershed St Fk & Little Kanawha River
ADDRESS 710 Virginia St., East	Inc. Dist.Brng Spr County Wirt Quad. 72 Annamorh
Charleston, WV 25301	Gas Purchase
GAS PURCHASER UNDEDICATED	Contract No
ADDRESS	Meter Chart Code
	Date of Contract
* * * *	* * *
Date surface drilling began: 7/9/84	·
Indicate the bottom hole pressure of the we	ell and explain how this was calculated.
Bottom Hole Pressure. PSIA Pf = Pwe XL	GS
	$x = \frac{1}{53.34} \times \frac{558}{} = .0000336$
Pf = 895 x 2.7183 +0000336 x 4/10	$x / 690 \times / .08 = 992$ PSIA
The Proposition of the Propositi	IDAVI T
AFE	DAVII
I have calculated the percentage of footage Devonian Shale as indicated by a Gauma Ray described in subparagraph (3)(i) or (3)(ii) report described in subparagraph (3)(ii)(B) of potentially disqualifying non-shale footpercent of the gross Devonian age interval:	index of less than 0.7 if a Gamma Ray log (A) has been filed, or as indicated by the); I have demonstrated that the percentage tage is equal to or less than five (5) ; and I have no knowledge of any information inconsistent with a conclusion that the well
	Harry J. Derger Ja
STATE OF WEST VIRGINIA	
COUNTY OF Kananha, TO-WIT:	
I, bAnn K. Brooks, a Notary	Public in and for the state and county
aforesaid, do certify that Harry L. Berger	, Jr, whose name is signed to
the writing above, bearing date the 24	
acknowledged the same before me, in my cour	
Given under my hand and official seal this	/
My term of office expires on the 29 day	of <u>Octover</u> , 1991
OFFICIAL SEAL NOTARY PUBLIC] John K Brooks

ADDI TOATTON TOO	SHALE	GAMMA RA	Y 100	ANATV	CIC	
APPLICATION FOR	DETERN	TATATTA	2 200	MALL	212	
Brown Tow	DETERM	ITMATION	OF THE	E MAXTI	MIIM	TAWFIII
PRICE UND	ER THE	NATIIRAT	CACD	OTTOV	A OT	ZHINI UL
		THITUINE	GAS P	OLICI	ALI	

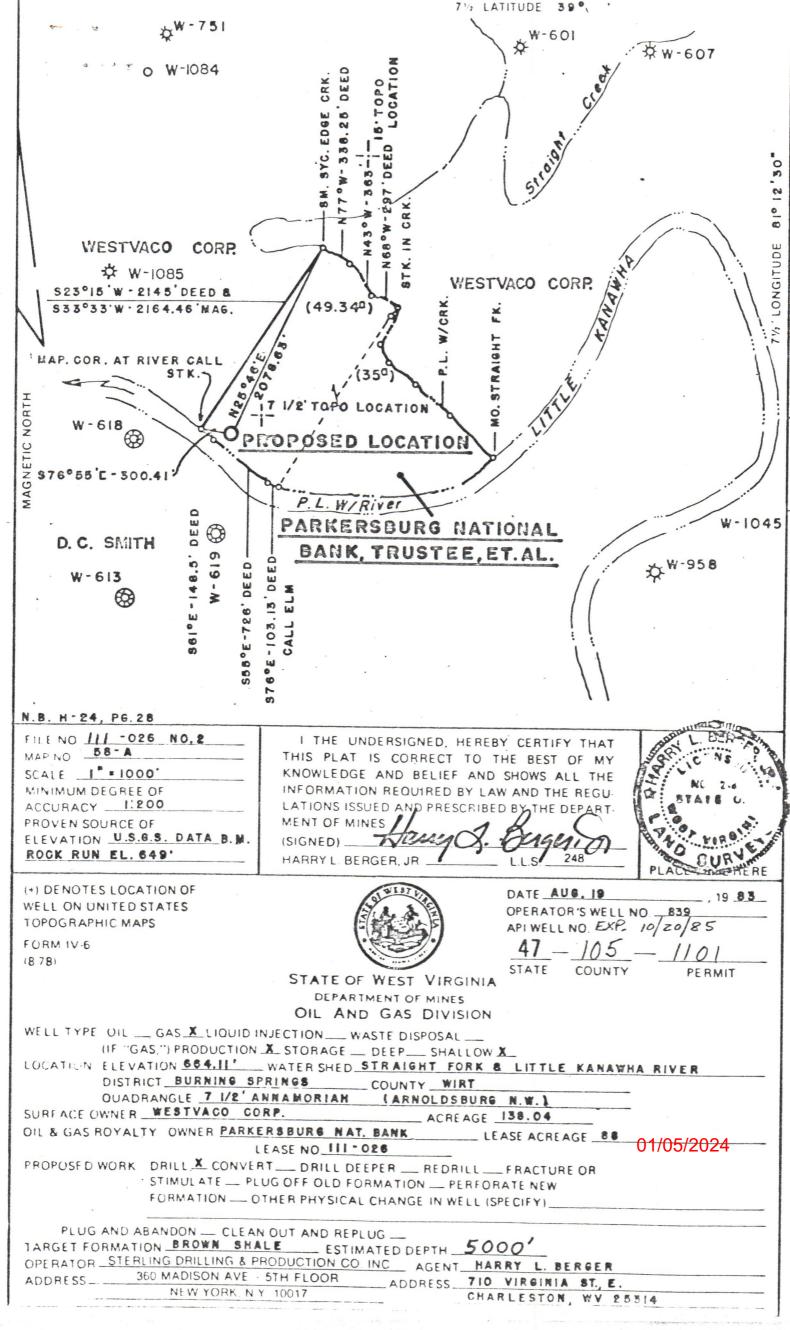
Oper	ator:	HERL	ing]	Rilling GY	RodG.	Agent;	Hally	L BERGER, JK	0
Type	Determ	inati	on b	eing soug	ht - 107	(Devonia	an Shale		
API	Well No	.: <u>+</u>	7-1	105-1101				isbar Nat 1	E. I. F.
West Refe	Virgin rences:	ia Of SJA	fice	of Oil a e No.	nd Gas	County:	iv.rt		
V	01.	Pag	е	Line _					
I.	NOTE:	(c)	int	ervals wi	th Camma	Day with	x (Sha	(a) Shale B le Base Line than 0.7 x (this analys:),
II.	Gamma	Ray	elev	ation indi	ces:				
		A.	Sha	le Base Li	ne (API	Units)			
			1.	GR Value Remarks:	at Base	Line = /	£5. *	API Units	
					•				
			,						
		В.	Gamm	a Ray Log	Value a	t 0.7 x V	alue at	Base Line	
			1.	GR Value : Calculatio	= 1/5.5 * on: 0.7 0.7	API Unit (GR Valu (<u>/t5</u> *)	:s ie at Ba = <u>//5</u>	se Line) E API Units	
III.	Interv	als w	ith	GR index	les s than	0.7 x'(Value a	t Base Line)	:
	From**	Inter	val	To***	of Int	t	Feet 0.7 (of less than Shale Base Li Feet	ı* ine)
	2010			7/12	303	° 2 '		133	-
4.1									
	Tota	l Dev	onia	l Interval	303:				
Total	Less Tha	an 0.	7 (S	hale Base)	STATE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.			133	
-				Base Line		8 x 100	= 44.	7	
					1		717	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.

7.





IV-35 (Rev 8-81)

State of Mest Birginia

Bepartment of Mines Bivision

Date	Oct.	24,	1984	
-	ator's		020	
Well	No.		839	-
Farm	Pkbg	Nat'l	Bank	
ADT .	T			

WELL OPERATOR'S REPORT OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas x / Liquid Injection / Waste Disposal / (If "Gas," Production x / Underground Storage / Deep / Shallowx /)						
LOCATION: Elevation: 664.11 Watershed Straight Fk & Little Kanawha River						
District: Burning SpringsCounty Wirt Quadrangle 72' Annamoriah						
COMPANY Sterling Drilling & Production Co., Inc.		_				
ADDRESS 710 Virginia St., E, Charleston, WV	Casing	Used in	Left	Cement fill up		
DESIGNATED AGENT Harry L. Berger, Jr. 25301	Tubing	Drilling	in Well	Cu. ft.		
ADDRESS 710 Va. St., E. Charleston, WV 25301	Size		nermenhage manager) selves suggeste selve sampline dilibit			
SURFACE OWNER Westvaco Corp.	20-16 Cond.					
ADDRESS Box 577, Rupert, WV 25984	13-10"					
MINERAL RIGHTS OWNER Pkbg Nat'l Bank	9 5/8	298'	298'	120 sx		
ADDRESS Parkersburg, WV 26101	8 5/8	270	270	120 SX		
OIL AND GAS INSPECTOR FOR THIS WORK Deo	7	1850'	1850'	160 sx		
MACE ADDRESS Rt 1, Bx 5 Sandridge, WV 25274	5 1/2		1000	100 5%		
PERMIT ISSUED 10/20/83	-		5006			
DRILLING COMMENCED 7/9/84	4 1/2		5086	290 sx		
DRILLING COMPLETED 7/15/84	3					
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners used					
GEOLOGICAL TARGET FORMATION Devonian Shale		Dept	h 5000	feet		
Depth of completed well 5135' KB feet R	otary v					
Water strata depth: Fresh 80 feet;			Management			
Coal seam depths: NONE		being mine	ed in the	area?NO		
OPEN FLOW DATA				Shirtenessanda		
Producing formation Devonian Shale	Pay	zone dept	h 3117'-5	102' feet		
Gas: Initial open flow Show Mcf/d						
Final open flow 335 Mcf/d			Contract of the last of the la	Bbl/d		
Time of open flow between initi				A CONTRACTOR OF THE PARTY OF TH		
Static rock pressure 895 psig(surface		_				
(If applicable due to multiple completion-			01/05/			
Second producing formation		zone dept	h	feet		
Gas: Initial open flow Mcf/d		_	Selection of the select			
Final open flow Mcf/d			Warrant Committee Committe			
Time of open flow between initi			The same of the sa	and the same of th		
Static rock pressurepsig(surface measurement) afterhours shut in						

(REVERSE)

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

Perforations:

1st stage: 27 holes from 4517' to 5102'
2nd stage 27 holes from 3788' to 4365'
3rd stage 26 holes from 3117' to 3686'

Treatment:

1st stage 1000 gals of 15% HC1; 1584 MSCF of N $_2$ 2nd stage 1000 gals of 15% HC1; 1584 MSCF of N $_2$ 3rd stage 1000 gals of 15% HC1; 1584 MSCF of N $_2$ WELL LOG

		200	
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fre and salt water, coal, oil and ga
Sandstone and Shale Salt Sand Shale Maxon Shale and Lime Big Lime Big Injun	0 1350 1395 1446 1495 1547 1676	1350 1395 1446 1495 1547 1676 1708	all measurements 10' KB Fresh water @ 80' Salt water @ 620'
Siltstone and Shale Sunbury Shale Siltstone and Shale	1708 2074 2089 Ne	2074 2089 √. ○△○ 2581	
Shale Siltstone Shale	2581 4518 4534	4518 4534 5135	Top of Java Formation 4283' Gas show 3117' - 3686' 3788' - 4365'
		,	4517' - 5102' TD 5135'
STATE OF THE STATE			
Townsen			
• • • • • • • • • • • • • • • • • • • •			

(Attach separate sheets as necessary)

Sterling Drilling and Production Co., Ir	10
MCII UVPTATOR	01/05/2024
By: Harry J. Deiges of	0.,00,202.
Date: October 24, 1984	

4.406

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