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



) Date: April 10	, 19_84
N 0	

2) Operator's Well No._

3) API Well No.

County Permit

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

				A	PPLICA	HON FUR A WEI	LL WURK PERMI	1	
4) WELL TY	PE: A C	il W di	/ G	as X	TO	ONS IT AND	ND CONDITI	DIFICATIONS A	PERMIT MO
	В (І	f "Gas",	Productio	n	X				_/ Shallow X/)
5) LOCATIO	N: Ele	vation: _	1062	.06'	and the second	Watershed: 1	Mushroom Rur	of Little Ka	anawha River
	Dis	strict:	Lee			_ County:(Calhoun	Quadrangle: _	7.5' Arnoldsburg
6) WELL OP	ERATOR	Sterli	ng Dr	illin	g & P	rod. Co., I	no. DESIGNATE	DAGENT Harry	L. Berger, Jr.
Addres	s <u>360</u>	Madis	on Ave	e. Fi	fth F	loor	Address	710 Virginia	St., E.
	New	York,	New '	York	1001	7		Charleston,	W.V. 25301
8) OIL & GA	S INSPEC	TOR TO	BE NOTI	FIED			9) DRILLING C	CONTRACTOR:	
Name _D	eo Mace						NameU	NKNOWN AT THI	S TIME
Addres		t. 1 B					Address		
	_Si	andrid	ge, W.	V. 2	5274				
O) PROPOSE	ED WELL	WORK:	Drill	X	_/ Drill	deeper	/ Redrill	/ Stimulate/	X / 00000
			Plug o	ff old f	formation	/ Perfor	rate new formation	n/	MECHIV
						n well (specify)			The state of the s
1) GEOLOG	ICAL TAR	GET FOR	MATION	,	BROWN	SHALE			
12) Estim	ated depth of	of complet	ed well,		5300	feet			APR 1 1 198
13) Appro							,	feet.	חוות סוים
14) Appro	oximate coa	l seam dep	ths:		0	Is co	al being mined in th	ne area? Yes	OILN& GAS DIVI
CASING	AND TUBI	NG PRO	GRAM						DEPT. OF M
CASING OR		SPEC	IFICATION	S		FOOTAGE	INTERVALS	CEMENT FILL-UP	PACKERS
TUBING TYPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	OR SACKS (Cubic feet)	
onductor									Kinds
esh water	9 5/8	LS	33#	X		275'	275'	To Surface	NEAT
oal									Sizes
termediate	7"	J-55	20#	X		2490'	2490'	100 sks	
roduction	4 1/2	ERW	10.5#	X			5300'	250 sks	Depths set
ubing						E USE ONLY	DIRAGE	OR AS	REG. BY RUL
iners									Perforations: 15.0
		anorise	Jarqua	wollo	Lynn I	предпринения	dates of certain	his to record the	Top Bottom
- E	eted.			1			Carette		
				/ohors	Parameter .	on voiled			Limite are posterile
						OFFICE USE	The state of the s		
						DRILLING PE	RMIT		
ermit number_	47-	013-37	24					May 9,	
mint number _		010 01			5.11.34			Da	The second secon
his permit cove	ering the w	ell operato	r and wel	Locatio	on shown	below is evidence	of permission gran		nce with the pertinent legal
irements subje	ect to the co	onditions of	contained	herein a	ind on the	e reverse hereof. No	otification must be	given to the District Oi	and Gas Inspector, (Refer
o. 8) Prior to t	he construc	tion of ro	ads, locati	ons and	pits for	any permitted work	. In addition, the v	vell operator or his cor	ntractor shall notify the prop
strict oil and g	as inspecto	r 24 hours	before a	ctual pe	rmitted w	ork has commence	d.)		
	ork is as de	escribed in	the Notic	e and A	pplicatio	n, plat, and reclam	ation plan, subject	to any modifications a	and conditions specified on t
verse hereof.	Morr	9, 19	96						107711-211-74 11971011111
ermit expires _	may	9, 19	00			unless well	work is commence	d prior to that date and	prosecuted with due diligend
		. 1/							HER INSPECTIONS
Bond:	Agen	j: 1	Plat:	Casin	g	Fee			
BLANKET	()	1 h	2/1	m	4/1	153		_11	Reason:
	di	///	141	"	Y 64	630	1	11/1	
						The same services of the same	1.	100	102255
							Adn	ninistrator, Office of C	Oil and Gas

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

Reason:

Reason:



JOS STILL

ORM IV2(B) Obserse)

OFFICE USE ONLY PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK OILV& GAS DIVISION OFFICE USE ONLY 15:01 This part of Form IV-2(b) is to record the dates of certain occurrences and any follow-up inspections. Date Date(s) Application received Follow-up inspection(s) DRILLING PERMIT Well work started Completion of the drilling process, married with present and well location shows below to sometime to sometime with the perfect of the per No. 3) Prior feeling contraction of reads feedings, it for the prior of early in addition, the well operator or his contract Well Record received he perultud work is as described in the Notice and dentition and reclamation plants abject to any modifications ar Reclamation completed OTHER INSPECTIONS

See the reverse side of the APTLICANT'S COPY for Instructions to the well repetator.

FEMALO

secdling for one growing season.

Attach separate sheets as

necessary for comments.



DATE	3-28-84			
WELL N	D. 1/2000	P. W #	920	

API NO.

Duck, WV 25063

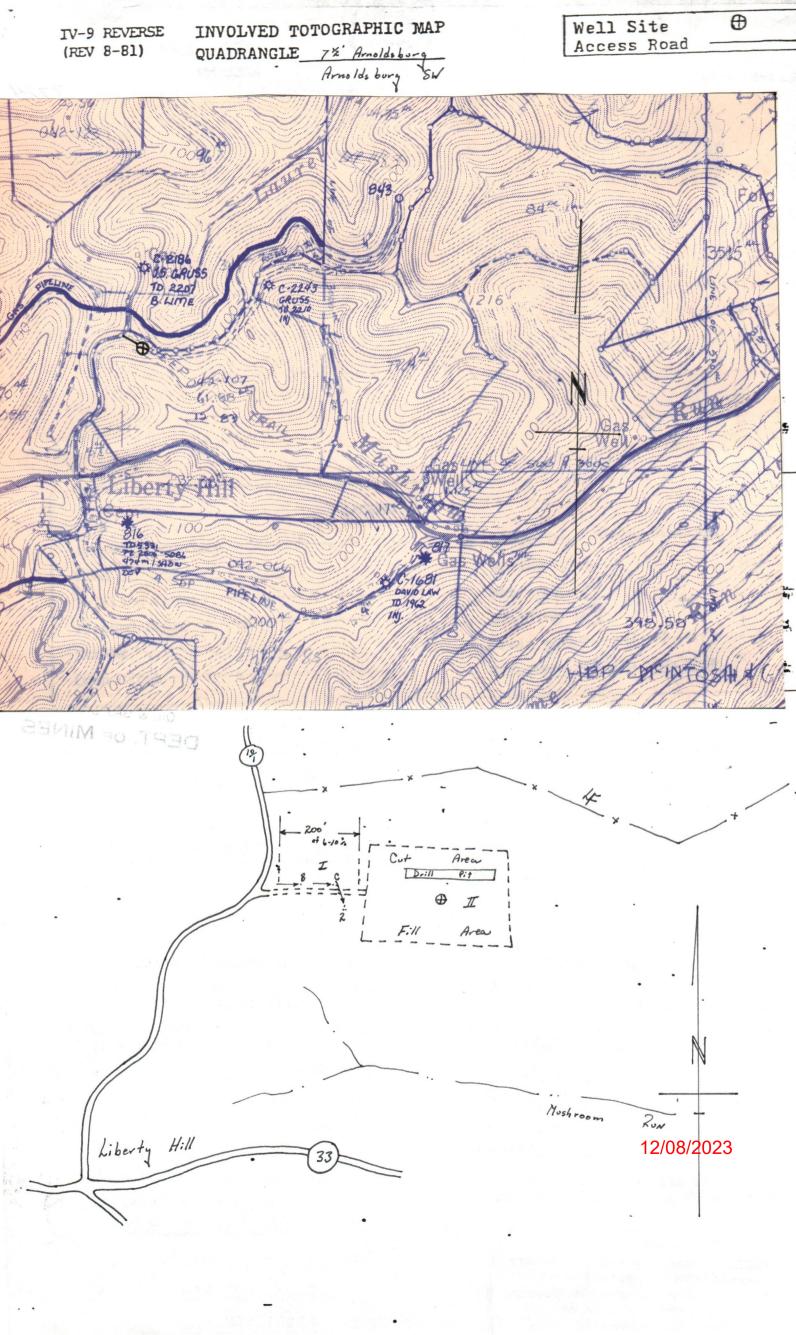
(304) 364-5780

PHONE NO.

Sinde of Mest Bugunta Beparlment of Mines Gil und Gas Bivision

CONSTRUCTION AND RECLAMATION PLAN

			•
COMPANY NAME Sterling Drilling	& Prod. Co	WELL OPERATO	R Sterling Drilling &
Address 360 Madison Ave	NY, NY 10017	Address c/o	H.L.Berger - Chars.
Telephone (212) 949-9100			304) 342-0121
LANDOWNER Melva R. Wagoner		SOIL CONS. D	ISTRICT Little Kananha SCD
Revegetation to be carried out		Drilling & P	rod. CoH.L. Bergesent
This plan has been reviewed l	by 1, ++/6 H	Yanawha	SOD. All corrections
and additions become a part of the		-	
and	$\overline{\mathbb{Q}}$	(Date)	
	par	rett Tleu	ton.
		(SCD Agent)	
. ACCESS ROAD		<u></u>	LOCATION .
Structure	(A)	Structure	(1
Spacing .		Material	. 1911 - 19 Nordania <u>. 1</u>
		•	-
Page Ref. Manual		Page Ref. Man	ual
Structure Drainage Ditches	(B)	Structure	RID-RADECETTVEIN
			11503306
Spacing Roads: de	- · ·		Rock APR 1 1 1984
Page Ref. Manual 2.12		Page Ref. Manu	OII & ITAS DIVIS
Structure Cross Ditches .	(C)	Structure	DEPT. OF MINES
Spacing /60' for 6-102	· ·	Material	
Page Ref. Manual 2.4 Table 2		Page Ref. Manu	al
All structures should be inspe commercial timber is to be cut a cut and removed from the site be	md stacked and	all brush and	f necessary. All small timber to be
jeen end gemeent			
	REVEGETATION	4	
Treatment Area I		Treat	bment Area II
	/acr e	Line	2 Tons/acre
or correct to pH 6.5		or correct t	to pH 6.5
Fertilizer 600 lbs/a (10-20-20 or equivalent)	acre	Fertilizer (10-2	600 lbs/acre
which Hay 2 Tons	/acre	Mulch Hay	2 Tons/acre
Seed* Ky-31. 40 lbs/a		Seed* K. 3/	40 lbs/acre
Lodino Clover 4 lbs/2		Ladino Clo	4 lbs/acre
lbs/a	cre		12/08/2020
*Inoculate all legumes such as ve	tch. trefoil a	nd clovers with	the proper bacterium.
noculate with 3% recommerded amount		Moore	's Well Services, Inc.
	PLAN PREPA	FED BY R.L.	L. X. Campbell
NOTES: Please request landowners'	J AL	DDRESS Route	1 Box 30
cooperation to protect new	1 .		



SURFACE OWNER'S COPY



,		State	County	Dormit
3)	API Well No.	47		
2)	Operator's Well No.	20		10.71.00442
1)	Date: Anni 1	10		, 19 84

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

4) WELL TYI	PE: A O	il.	/ 0	as X	,					
4) WELLITI			Productio			/ Underground	l storage	/ Deep	_/ Shallow/)	
5) LOCATIO		vation:	1062	.061				of Little Ka		
,		strict:	Lee			_ County:	Calhoun	Quadrangle:	7.5' Arnoldsburg	
6) WELL OP	ERATOR	Sterli	na Dri				7) DESIGNATE	DAGENT Harry	L. Berger, Jr.	
Address	360	Madis	on Ave	_ F1	fth E	loor	Address	710 Virginia	St. F.	
	New	York.	New Y	ork	1001	7		Charleston, b	L.V. 25301	
8) OIL & GA			BE NOTI	FIED				ONTRACTOR:		
Name _De								IKNOWN AT THIS	TIME	
Address Address Address										
10) PROPOSE	D WELL	WORK:	Drill	STATE OF THE PARTY OF	_/ Drill			/ Stimulate	The second secon	
							orate new formation	1/		
		CET FOR				n well (specify)				
11) GEOLOGI					200	fee				
12) Estima 13) Appro							lt,	feet.		
14) Appro					0			e area? Yes	/ No X	
15) CASING A										
CASING OR			CIFICATION	S		FOOTAGE	INTERVALS	CEMENT FILL-UP	PACKERS	
TUBING TYPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	OR SACKS (Cubic feet)	easonable state one of the opposite	
Conductor	Sille	- Constant							Kinds	
Fresh water	9 5/8	LS	334	X		275'	275'	To Surface		
Coal									Sizes	
Intermediate	7"	J-55	204	X		24901	2490'	100 sks	a se samu kasagna (arga)	
Production	4 1/2	ERW	10.5#	X			5300*	250 sks	Depths set	
Tubing										
Liners									Perforations:	
									Top Bottom	
									1 2 2 111	
								1	# 5	
									2 20 13	
	The l	aw require	es a comm	ent per	iod for su	irface owners. How	vever, the permit can	be issued in less than	15 days from	
								luntary Statement of N		
	on a facsi	mile of th	is surface	owner's	s copy of	the Application.			[Constitution of	
				vo	LUNTAI	RY STATEMENT	OF NO OBJECTIO	N		
								The last section in		
									ermit, and that I have received	
copies of (1) a No	otice of Ap	plication i	for a Well	Work I	ermit on	Form IV-2(A), (2)	or proposed well wo	ork on my surface land	Form IV-2(B), (3) a survey plat	
									nit being issued based on those	
materials.										
						Œ		mal managema)		
(For execution b	y corporat	ion, partn	ersnip, etc	<u>:.</u>)		<u>(Fo</u>	or execution by natu	rai persons)		
NAME:							melva.	R Guas	Tones - 1/18/10	
D.						_	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(Signature)	Date: 4/18/8	
Ву									Date:	
ItsDate					ate			(Signature)	Date.	

INSTRUCTIONS TO SURFACE OWNERS AND EXPLANATION OF METHODS AND TIME LIMITS TO COMMENT ON OIL AND GAS WELL WORK PERMIT

The well operator named in the Notice and this Application and the attached materials is applying for a permit from the State to do oil or gas well drilling or other well work. You are being served with these materials because surface owners have the right to file comments before the permit is issued. (NOTE: If the surface tract is owned by more than three persons, in multiple heirship for example, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22, Article 4 of the W. Va. Code. Permits are valid for 24 months.

If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator named in the materials and the Administrator of the Office of Oil and Gas in the West Virginia Department of Mines immediately.

NOTE: You are not required to file any comment at all.

Where to file comments and obtain additional information:

Administrator of the Office of Oil and Gas West Virginia Department of Mines 1615 Washington Street East Charleston, West Virginia 25311 (304) 348-2057

Who may file comments? If you wish to file comments, you must be an owner of record of (1) an interest in the surface tract on which the well already is or is about to be located, or (2) an interest in any other surface tract under the same oil or gas lease which will be utilized for roads or other land disturbances.

Time limits for comments. The law requires these materials to be delivered on or before the date the operator files his Application. You have FIFTEEN (15) DAYS after the filing date to file your comments as provided in Methods for Filing Comments below. You may call the Administrator's office at the above telephone number to be sure of the date. However, if you have been contacted by the well operator, and if you have signed a "voluntary statement of no objection" to any of the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number, and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Methods for filing comments. Comments must be filed in person or received in the mail at the Administrator's office by the time stated above. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling.

The Administrator for Oil and Gas has the power to deny or condition a well work permit based on your comments on the following grounds:

- "(1) The proposed well work will constitute a hazard to the safety of persons; or
- "(2) The plan for soil erosion and sediment control is not adequate or effective; or
- "(3) Damage would occur to publicly owned lands or resources; or
- "(4) The proposed well work fails to protect fresh water sources or supplies."

If you want a copy of the permit as it is finally issued, or a copy of the order denying the permit, you should request a copy from the Administrator.

List of Water Testing Laboratories. The Administrator maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Administrator's office or an Oil and Gas Inspector to obtain a copy of the list.

l m

FORM IV-2(A) Obverse [8-83]

Harry L. Berger, Jr.

April My commission expires May 10 , 19 89.

, 19 84.

County,

this 10day of

Notary Public, Kanawha

State of West Virginia

1) Date: April 10

,1984

2) Operator's Well No.

920

3) API Well No. 47-0/3-3724 State County Permit

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

NOTICE OF ADDITIONATION FOR A COMPANY

		NOTICE OF APPLICATION FOR A WELL WORK PERMIT
4) SU	RFACE OW	ER(S) OF RECORD TO BE SERVED 5(i) COAL OPERATOR UNOPERATED
(i)	Name M	Address Address
	Address	Na R. Wagoner Box 53 Arnoldsburg Rt. 5(ii) COAL OWNER(S) WITH DECLARATION ON PROS
	_	Spencer, W.V. 252/6
(ii)	Name	Name UNKNOWN
	Address	Address
(:::)	N7	Name
()	Name Address	Address
	mui ess_	Address
	-	5(iii) COAL LESSEE WITH DECLARATION ON RECORD:
		Name
		Address
		nts:
		is is
		4 = 1 = 3 12 × 1 (% 24
		D W W W W W W W W W W W W W W W W W W W
		S G S W W W W W W W W W W W W W W W W W
		COVERAGE PRITIFIE COVERAGE PRI TERNATIONAL WAGONE V. V. Z V. V. Z V. V. Z SERVIFIE SERVICE Owing Delivered Delivered SERVIE SERV
		P 377 67 P 377 67 RECEIPT FOR CERTIF NO INSURANCE COVERAGE NOT FOR INTERNATION (See Reverse) Sent to MELVA R. WAGOA Street and No. Street and No. Street and SIP Code SPEACER, W. V. Postage Certified Fee Special Delivery Fee Return Receipt Showing to whom and Date Delivered Return Receipt Showing TOTAL Postage and Sievered Return Receipt Showing who Date, and Address of Office Fostmark or Office Sand Belliam of Sand Belliam TOTAL Postage and Sand Belliam Return Receipt Showing who Date, and Address of Office Return Receipt Showing who Date, and Address of Office TOTAL Postage and Sand Belliam Return Receipt Showing who Belliam and Address of Office Return Receipt Showing who Special Delivery Fee Return Receipt Showing Return Receipt Showing TOTAL Postage and Sand Return Receipt Showing Return Receipt Showing Return Receipt Showing Return Receipt Showing Special Delivery Fee Return Receipt Showing Certified Fee Special Delivery Fee Return Receipt Showing Fostage Return Receipt Showing Special Delivery Fee Return Receipt Showing Special Delivery Fee Return Receipt Showing Return Receipt Showing Return Receipt Showing Special Delivery Fee Return Receipt Showing Special Delivery Fee Return Receipt Showing Return Receipt Showing Special Delivery Fee Special Delivery Fee Return Receipt Showing Special Delivery Fee Return Receipt Showing Return Receipt Showing Special Delivery Fee Return Receipt Showing Special Delivery Fee Return Receipt Showing Special Delivery Fee Special Delivery Fee Return Receipt Showing Special Delivery Fee Return Receipt Showing Special Delivery Fee Special Delivery Fee Return Receipt Showing Special Delivery Fee Special Delivery
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		FOR INTERIOR Shows the session of th
		A Very F Poly State of State o
		NOT F
		P 377 RECEIPT FOR CONDINSURANCE CONDINSURANCE CONDINSURANCE CONDINSURANCE CONDINSURANCE CONDINSURANCE CONDINSURANCE CONDINSURANCE CONTINE CON
		PS Form 3800, Feb. 1982
		Check and provide one of the following:
		Included is the lease or leases or other continuing contract or contracts by which DIG (C) 2 V 2 V
		The requirement of Code 22-4-1-(c)(1) through (4). (See reverse side for specifics.)
		7) ROYALTY PROVISIONS
		The right to extract, produce or market the oil or gas based mon a lease or lease
		for compensation to the owner of the oil or gas in place which is not interesting the case of the oil or gas in place which is not interesting the case of the owner of the oil or gas in place which is not interesting the case of the owner of the oil or gas in place which is not interesting the case of the owner of the oil or gas in place which is not interesting the owner of the owner of the oil or gas in place which is not interesting the owner of the owner of the oil or gas in place which is not interesting the owner of the owner o
		to the volume of oil or gas so extracted, produced or marketed? Yes NoXX
		If the answer above is No, nothing additional is needed. If the answer is Yes DEPT. OF MINE you may use Affidavit Form IV-60.
		Total may use Allicavit Form IV-60.
		See the reverse side for line item instructions, and for instructions concerning
		the required copies of the Notice and Application, plat, and Constructions concerning Reclamation Plan.
The	truth of	the information of
Noti	ce and Ar	T T desired to
and	sworn to	olication is verified OPERATOR Sterling Drilling & Prod. Co., Inc.
sign	ed on bel	alf of the Well Operator By Hanny & Derse
in m	y County	Its Designated Agent
	Lاء	Daves 1

12/08/2023

Address 710 Virginia St., E. Charleston, W.V. 25301

Telephone 342 - 0121

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-lb(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 § 22-4-8 from the owner 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-lm, 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-

- (1) 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.	Royalty	Book Page
Melva R. Wagoner Box 53 Arnldsbrg. Rt. Spencer, W.V. 25276	Sterling Drilling and Production Co., Inc.	1/8	086/171

Ray Reading
Louise Curtis
Samuel Hays
Bernard Hays
Perry Hays
Betty Keller
Richard Hays
Mary Powell
Anna Hays
Vicki McKinley
George R. Hays



IV-35 (Rev 8-81)	Miles Comment
TEN (1911/1/12
De la	OCT 15 1985 OCT 15 1985 OCT 15 1985 VISION OF OIL & GAS VISION OIL
DI	VISION OF OF BARTMENT OF
DE	DRILLING, FRA

State of Mest Birginia Bepartment of Mines Gil und Gas Bivision

Date	August	23,	198	5		
Operator's Well No. 920						
	Wagoi	ner	17.			
API N	ю. 47	- 0	13		3724	

WELL OPERATOR'S REPORT

OF FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

LOCATION: Elevation	1062.06	Wate	rshed Mu	shroom	Run	of Little	Kanawha	River	
District:	Lee	Coun	ty Calho	un		Quadrangle	<u>Arnolds</u>	burg 7½'	
COMPANY Sterling Dri	lling & Pro	duction (Co. Inc.						
ADDRESS 710 Va. St.				Caşin		Used in	Left	Cement	
DESIGNATED AGENT W.				Tubin	- 1	Drilling	20160	fill up Cu. ft.	
ADDRESS 710 Va. St.		ton, WV	25301	Size	9	2111119			7
SURFACE OWNER Melva				20-16		- some set	×		
ADDRESS Box 53, Arno		1979		Cond.		9		7 7	
MINERAL RIGHTS OWNER			262/6	9 5/8		294'	294'	110 sks.	
ADDRESS Same				8 5/8		231			
OIL AND GAS INSPECTO	OR FOR THIS	WORK [)eo	7		2525'	2525'	190 sks.	23
Mace ADDRES	SSSandridge	, WV 252	274	5 1/2					
PERMIT ISSUED May	y 9, 1984			4 1/2			4748'	250 sks.	
DRILLING COMMENCED_	July	8, 1985	<u> </u>	3					
DRILLING COMPLETED_	July	14, 1985		2					
IF APPLICABLE: PLUC				Liner				1	
CONTINUOUS PROGRESSI REWORKING. VERBAL I CN				used					
GEOLOGICAL TARGET FO	ORMATION	Devoni	an Shale			Dep	th 53	00' fe	et
Depth of comple	eted well	4805'KB	feet !	Rotary	Χ	/ Cabl	e Tools_		
Water strata de	epth: Fres	sh repor	tedfeet;	Salt	160	o' feet			
Coal seam depti								area? N	0_
OPEN FLOW DATA									
Producing form	ation	Devoniar	Shale		Pay	zone dep	th 2574'	-3858' fe	et
Gas: Initial of									
Final ope	en flow_	531	Mcf/d		Fin	al open f	low	Bbl	/d
Time	e of open :	flow betw	veen init	ial and	l fi	nal tests	17½ ho	ours	
Static rock pro	essure 58	80 ps:	ig(surfac	e measu	iren	ent) afte			
(If applicable	due to mu	ltiple co	ompletion)			12/08	/2023	
Second produci	ng formation	on			Pay	zone dep	th	fe	et
Gas: Initial									
_	en flow								
	e of open								
Static rock pr	essure	psic	(surface	measur	reme	nt) after	hou	irs shut	in
battle rock pr			and the same				2 3 8 6 7 7 7		

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

Perforations		
1st Stage-	13 holes	3557'-3858'
2nd Stage-	14 holes	3014'-3130'
3rd Stage-	17 holes	2574'-2805'
Treatment		
1st Stage-	500 gals.	15% HC1; 1,068 MSCF N ₂
2nd Stage-	500 gals.	15% HC1; 1,014 MSCF N2
3rd Stage-	500 gals.	15% HC1; 977 MSCF N ₂
		WELL LOG

	-	
11	02	\cap
	9/	

	T	# 920	REMARKS
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	
Sandstone Sandstone Shale Sandstone Shale Sandstone Siltstone and Shale Salt Sand Silty Shale Salt Sand Silty Shale Maxon Little Lime Blue Monday Pencil Cave Big Lime Big Injun Silty Shale Sunbury Shale Sunbury Shale Berea Siltstone and Shale Gordon Shale Total Depth	0 971 1060 1124 1303 1330 1354 1663 1730 1750 1831 1870 1925 1948 1966 1972 2116 2129 2451 2469 2472 2781 2810	971 1060 1124 1303 1330 1354 1663 1730 1750 1831 1870 1925 1948 1966 1972 2116 2129 2451 2469 2472 2781 2810 4805 4805	All depths from 10'KB Salt water @ 1600' Top of Java formation @ 4644'

(Attach separate sheets as necessary)

Sterling Drilling and Production Co., Inc.

Well Operator

12/08/2023

Date: October 14, 1985

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."

DEPARTMENT OF MINES OIL AND GAS WELLS DIVISION



OIL & GAS DIVISION

INSPECTOR'S WELL REPORDEPT. OF MINES

Permit No. 13 3724			Oil or	Gas Well
Company Starling	CASING AND TUBING	USED IN DRILLING	LEFT IN	PACKERS
Address	Size			
Farm Wagener	16			Kind of Packer
Well No. 920	13			Size of
District Lee County Call	81/4			5126 01
Drilling commenced 7-7-85	6%			Depth set
Drilling completedTotal depth	5 3/16			Parf to
Date shotDepth of shot	2			Perf. bottom
Initial open flow/10ths Water inInch	Liners Used			Perf. top
Open flow after tubing/10ths Merc. inInch				Perf. bottom
VolumeCu. Ft.	CASING CEME	NTED	SIZE	No. FTDate
Rock pressurelbshrs.	NAME OF SEF	RVICE COMPA	ANY	
Oilbbls., 1st 24 hrs.	COAL WAS EN	COUNTERED	AT	_FEETINCHES
Fresh waterfeetfeet	FEET_	INCI	HES	_FEETINCHES
Salt water feet feet	FEET	INCI	HES	_FEETINCHES
Drillers' Names Hunt 8				
294' of 95/8" Cashy,	110 seen	les Cema	et, De	well, 7-8-8
Good Corneil				

7-8-85

4 108/2023

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

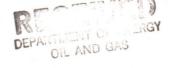
OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

•			We	I No	
		ADDRESS			
	DISTRICT.		OUNTY		
eation	Amount	Packer	Location		
ND DEPTH PLACED		BRIDGES	CASIN	G AND TU	BING
WOOD-SIZE	LEAD	CONSTRUCTION-LUCATION	RECOVERED	SIZE	LOST
		A Company of the Comp			2 2
·					-
. 2.43.450	2007202			-	
				-	
en den de l'ordre de medicales		1892	Market Comment		
hereby certify I vi	sited the above	well on this date			
	ation ND DEPTH PLACED WOOD-SIZE	Amount ND DEPTH PLACED WOOD-GIZE LEAD	ADDRESS DISTRICT Amount Packer Packer BRIDGES WOOD-SIZE LEAD CONSTRUCTION-LOCATION	ADDRESS DISTRICT COUNTY action Amount Packer Location ND DEPTH PLACED BRIDGES CASIN WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED	ADDRESS DISTRICT COUNTY ation Amount Packer Location ND DEPTH PLACED BRIDGES CASING AND TU WOOD-SIZE LEAD CONSTRUCTION-LOCATION RECOVERED SIZE ONE of the control of t

DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA



DEPARTMENT OF MINES OIL AND GAS WELLS DIVISION

5-9-84

INSPECTOR'S WELL REPORT APR 1 5 1986

ermit No. 13-3724	 Oil or Gas Well

Company Sterling	048	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKE	ERS
Address		Size				
Farm Melva C	Vagoner	16			Kind of Pack	er
Well No. 920		13			Size of	
District Lee	County_Cal	81/4		-		
Drilling commenced		6%			Depth set	
Drilling completed	Total depth	3			Perf. top	
Date shot	Depth of shot	2			Perf. bottom.	×
Initial open flow	/10ths Water inInch	Liners Used			Perf. top	
Open flow after tubing	/10ths Merc. inInch				Perf. bottom.	
Volume	Cu. Ft.	CASING CEME	NTED	SIZE	No. FT	Date
Rock pressure	lbshrs.	NAME OF SEE	RVICE COMPA	NY		
Oil	bbls., 1st 24 hrs.	COAL WAS EN	NCOUNTERED	AT	_FEET	_INCHES
Fresh water	feetfeet	FEET.	INCE	IES	_FEET	_INCHES
Salt water	feetfeet	FEET	INCH	IES	_FEET	_INCHES
Drillers' Names						
Remarks:	Reclamateir.					
The second distribution of the second distributi	reched to the contract of the					

4-12.86 DATE

Des Mace

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

Permit Ne Well Ne							
COMPANY			ADDRESS	eryaleters of the entire of the			
FARM	FARMDISTRICTCOUNTY						
Filling Material Used							
Liner Loc	cation	Amount	Packer	Location			
PLUGS USED A	ND DEPTH PLACED		BRIDGES	1	CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LUCATION	RECOVERED	SIZE	LOST	
7			un de grande de ante				
			1 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1	×			
-	182187			. avi			
				1			
Orillers' Names		g suprementation of the					
Remarks:				-	,		
BAYE	hereby certify I vi	sited the abov	e well on this date.				
					2/08/2	023	

DISTRICT WELL INSPECTOR

APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA) 1.0 API well number: 47 - 013 - 3724 (If not essigned, leave blank, 14 digits.) 20 Type of ceremination being sought: I'lls the coose found on the from 107 of this form. Section of NGPA CHAPPACE 10 Depth of the crepest completion location: (Only needed if sections 103 4805 DIVISION OF OIL & GAS or 107 in 20 above) Sterling Drilling and Production Co. Inc. DEPARTMENT OF ENERGY 018084 4.0 Name, address and code number of applicant (25 letters per line meximum. If code number not Seller Coo Name 710 Virginia St. East, Arcade Building mailable, leme blank. Charleston,, WV 25301 State Zio Cooe CIV 5.0 Location of the west: [Complete la) or fold . Lee (a) For onehore wells Field Name (25 learns meximum for field Calhoun Lames State VIV County IDI FOR OCS ---Area Name Block Number Dete of Laure: 1 1 1 1 Dav Yr. OCS Luce Number les Name and identification number of this west: 135 letters and cligits * Wagoner #920 Loumason (a) If come 4 or 5 in 2.0 above, name of the reservoir: (35 letters Lmumusen 6.D (a) Name and code number of the d-0- .. purchase. (35 letters and digres meximum. If code number not Undedicated aveilable, larve blank.) Buve Coce (b) Care of the contract: Mo. Cay Yr. (c) Emmerted total annual procuesion from the west: 15.93 _Million Cube Fre Id All Ome (d) Total of (a). (a) Em Price (b) Tax Prices (Indicate (b) and (d) (+) or (-1.) 7.0 Commer once: (As of filling cere. Complete to 3 I SIMMBTU 6.076 בשסמש משכשו BIST lunwal mumical 0.8 (As of filling care. Compare to 3 SMMBTU 6.076 CECTE DISCEL 9.0 המושבת השבטות המושבת ה Designated Agent William E. Stover

Scarue

10/14/85

Cate Application is Completed

Agency Use Only

OCT 16 1985

SALE RESERVED BY FERC

Title

Pone Number

304-342-0121

STATE OF WEST VIRGINIA 32511 - 5/

DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

NOV 15 1985

COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

Date: October 14,19 85	47550	A	GENCY USE ONLY
Applicant's Name: Sterling Drilling	& Production Co.	Inc. WELL DET	ERMINATION FILE NUMBER
Address: 710 Virginia St., E., Arcad	ie Bldg.	851011	-1.89 410 0001
Charleston, WV 25301		05/016	-1073 - 013 - 3724
Gas Purchaser Contract No.		Use Above F Communicati	ile Number on all ons Relating to This Well
Date of Contract (Month, day and	year)	SDP #920	
First Purchaser: Undedicated	9629	Designated Age	ent: William E. Stover
Address:		Address: 710 V	irginia St., E, Arcade Blo
(Street or P.O. Box)		Charl	eston, WV 25301
(City) (State) FERC Seller Code	(Zip Code)	FERC Buyer Co	d e
NAME AND TITLE OF PERSON TO WHOM QU BE ADDRESSED:	ESTIONS CONCERNI	NG THIS APPLIC	ATION SHALL
Name: William E. Stove (Print). Signature:	er E. Store		President/Drilling Superv
Address: 710 Virgin (Street Charleston (City) Telephone: 304	or P.O. Box) n, WV 25301 (State)	de Bldg. (Zip Code)	
(Certificate of Proof of Se		•	
	GPA Catagory App		
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 We	or '	108- 108-1 108-2	
107 High Cost Natural Gas 107-0 Deep (more than 15,000) 107-1 Geopressured Brine) feet)	AG	ENCY USE ONLY
107-2 Coal Seams 107-3 Devonian Shale 107-5 Production enhancement			
107-6 New Tight Formation 107-7 Recompletion Tight For			QUALIFIED
RECLEIN EU			12/08/2023
DIVISION OF OIL & GAS DEPARTMENT OF ENERGY			

Date Received

Determination Date

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

Operator: Sterling Drilling & Production Co. Agent: William E. Stover
Type Determination being sought - 107 (Devonian Shale)
API Well No.: 47-013-3724 Well Name: Wagoner #920
West Virginia Office of Oil and Gas County: Calhoun 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 = 165 * API Units 2. Remarks: Note: From 2472' - 2532' all gamma ray readings are thru 7" casing and cement. However baseline was not corrected. B. Gamma Ray Log Value at 0.7 x Value at Base Line
1. GR Value = $\frac{116}{116}$ * API Units 2. Calculation: 0.7 (GR Value at Base Line) 0.7 ($\frac{165}{165}$ *) = $\frac{116}{116}$ 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*** Feet Feet
2472 4794 2322 112
Total Devonial Interval 2322
Total Less Than 0.7 (Shale Base)
% Less Than 0.7 (Shale Base Line) =0.0482 x 100 = 4.8 %
. 200 = 4.0 %

*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.

%

STATE OF WEST VIRGINIA Date October 14, 1985

DEPAREMENT OF ENERGY, OIL AND GAS DIVISION

Operator's Well No. 920

API Well No.

47 - 013 - 3724 State County Permit

WELL CLASSIFICATION FORM HIGH COST GAS WELL - DEVONIAN SHALE

NGPA Sect	ion 107
	DESIGNATED AGENT William E. Stover
	ADDRESS 710 Virginia St., E., Arcade Bldg.
	Charleston, WV 25301
	LOCATION Elevation 1062.06'
WELL OPERATORSterling Drilling & Prod. Co.,	Inc.Watershed Mushroom Run of Lt. Kanawha
ADDRESS 710 Virginia St., E, Arcade Bldg.	Dist. Lee County Calhoun Quad Arnoldsburg
Charleston, WV 25301	Cas Purchase
.GAS PURCHASER <u>Undedicated</u>	Meter Chart Code
ADDRESS	
* * * *	Date of Contract
* * * * Date surface drilling began: July 8, 1985	* * * *
Indicate the bottom hole pressure of the we	ell and explain how this was calculated.
Bottom Hole Pressure. PSIA Pf = Pwe XLGS	
t = 60 + (0.0075 x 4805) + 459.67 = 555	$X = \frac{1}{53.34} / \frac{555.70}{53.34} = 0.00003374$
Pf580 x 2.7183 x	
. 21/103	= 628.8 PSIA
AFFT	DAVIT
I, William E. Stover, having been for I have calculated the percentage of footage Devonian Shale as indicated by a Garma Ray described in subparagraph (3)(i) or (3)(ii) report described in subparagraph (3)(ii)(B) of potentially disqualifying non-shale foot percent of the gross Devonian age interval; not described in the application which is inqualifies as a high-cost natural gas well.	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 age is equal to or less than five (5) and I have no knowledge of any information nconsistent with a conclusion that the well
	williams. Slover
STATE OF WEST VIRGINIA	
COUNTY OF Kanawha , TO-WIT:	
I, Mary Jo Stowers , a Notary	Public in and for the state and county
aforesaid, do certify that William E. Stove	·
the writing above, bearing date the 14th date acknowledged the same before me, in my coun	ay ofOctober , 1985 12/08/2023
Given under my hand and official seal this 1	4th day of October , 1985 .
My term of office expires on the 7th day	
(NOTARIAL SEAL) OFFICIAL SEAL NOTARY PUBL STATE OF WEST VIR MARY JO STOV Started Durling & Prod. 19	OIC Way Jo Stowers Notery Public

