FORM IV-2					The state of the s		Date: August 1	6 19.83
(Obverse) (6-82)					10 x 1 x	1	2	, 19 <u>05</u>
1/2						5	Well No	
DRILLING CO	NTRACTO	R:				3) /	API Well No. 47 State	O13 3650 County Perm
UNKNO					STATE OF WEST V			County
	IS TIME		-	DEPART	MENT OF MINES, OIL	AND GAS DIVI	SION	
AI III.	13 TIME			OIL A	ND GAS WELL PERMI	T APPLICATIO	<u>N</u>	
4) WELLTS	DE. A O		, ,	V				
4) WELL TY		11 f ''Gas'', P						Y
5) LOCATIO	ON: Ele	vation:	1179.9	7'	Underground s Watershed:	Barnes Run	of Little Kana	/ Shallow X //
	Dis	rict. L	ee		C (alhoun		7 El A
6) WELL OF	ERATOR	SEO Mad	g Dril	ling &	Prod. Co., Inc., fth Floor	1) DESIGNAT	ED AGENT Harry	L. Berger, Jr.
Addres	S	oo maa	13011 A	York :	I CH F 100r	Address	/10 Virgini	a St., E.
7) OIL & GA							charteston,	W.V. 25301
	YOWNER	Effie	Coon,	et al	1	2) COAL OPER	RATORUNOPERA	ATED
Addres	-		Almira and, C		102	Address	CANADA NEW TRANSPORTED	
Acreage		62	unu, c	1110 44			T. M. State of the Control of the Co	
8) SURFACE		Effie	Coon,	et al	1	Name		RATION ON RECORD:
Address		Same			705	Address	- CHILITONIA	
					TIN I	7 111		
Acreage		62		187	() L	Name		and the second
9) FIELD SA Address		DE) TO:		(0)	1)3	Address		
7 1441 055				1	SEP 28 198		E WITH DECLARA	TION 011
10) OIL & GA	SINSPECT	OR TO BE	NOTIFI	ED	SET P	lace	EE WITH DECLARA	TION ON RECORD:
Name	Deo Mace	Box 5			OIL & GAS DI	Alddress		
Address		ridge,	-	527/	OIL OF	latte		
15) PROPOSE		Drill X						The state of the s
is) TROTOSE.	D WORK.			Drill deep	11001112	Fra ew formation	acture or stimulate	
		Other ph	ysical cha	nge in well BROWN	(specify)	ormation		
	CAL TARG			BROWN	SHALE	***************************************	7.	
17) Estima				560			`	
18) Approx				_		alt,	feet.	
19) Approx					Is coal	being mined in the	e area? Yes	/ NoX
20) CASING A	ND LUBING	J PROGR	AM					
CASING OR TUBING TYPE	11	SPI	Weight	NS I	FOOTAGE	INTERVALS	CEMENT FILL-UP	PACKERS
Conductor	Size	Grade	per ft.	New Us	sed For drilling	Left in well	OR SACKS (Cubic feet)	1327 03
Fresh water	9 5/8	LS	33#	X	100/	1 22/		Kinds
Coal	1 0/0		33#	1	400'	400'	To Surface	
Intermediate	7"	J-55	20#	X	2465'	2465'	100 sks	Sizes
Production	4 1/2	ERW	10.5#	X	700	5600'	250 sks	Dep hs set
Tubing			1					Det us set
Liners	-	-	1001 71			. Will Alleger		Perforations:
	1						1	Top Bottom
	1						-	12
) EXTRACTION	ON RIGHTS	3	1978 T 1		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	WAR TO THE REAL PROPERTY.		
Check and p								
X The re	ed is the lea	se or leases	or other	continuing	contract or contracts by	which I hold the	right to extract oil or	gas.
2) ROYALTY	7	. Cour ZZ	4-1-(c) (1)	through (4). (See reverse side for	specifics.)		
Is the right to	extract, pro	duce or ma	rket the o	il or gas bas	ed upon a lease or other	continuing contra	ct or contracts provide	ng for flat well royalty or any
similar provis				ner of the	oil or gas in place which	is not inherently	y related to the volum	ng for flat well royalty or any e of oil or gas so extracted,
					e answer is Yes, you ma			gas so extracted,
, required co	ics (See leve	erse side.)						
Copies of this	Permit App	olication ar	nd the enc	losed plat a	nd reclamation plan hav	e been mailed by	registered mail or deli	ivered by hand to the above
Mines at Cha				lessee on or	before the day of the n	nailing or delivery	of this Permit Applie	vered by hand to the above ation to the Department of
Notary: (4)	avil n	1. Sil	Peshie			Signed:	in IS	enco (/.
My Commissio	n Expires M	lay 10,	1989	,		0	tod Agent	05/17/2024
				• •		Its: <u>Designa</u>	Lea Agent	<u> </u>
					OFFICE USE ON			
rmit number					DRILLING PERM	IIT	Anna Anna	
	1					1	Date	19
is permit coveri	ng the well o	perator an	d well loo	ation show	n below is evidence of p	ermission granted	to drill in accordance	e with the pertinent legal re-
					THE TEVELSE HELEUI. NI - 1181		ven to the District Oil	e with the pertinent legal re- and Gas Inspector, his contractor shall notify the
oper district oil	and gas inspe	ector 24 ho	ours before	e actual per	d pits for any permitted mitted work has comme	mork. In addition	, the well operator or l	his contractor shall notify the
rmit expires				-				rosecuted with due diligence.
Bond:	Agent:	DI	at:	Casin			mai uait and p	LUSCULEU WILD due diligence

Line Item Explanation

- 1) Date of Application
- Your well name and number 2)
- To be filled out by office of oil & gas 3)
- "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced 4A) 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.
- "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of 4B) 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.
 - Where well is located 5)
- 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
- Use separate sheet if necessary
- Present surface owner at time application is filed. 8)
- Optional 9)
- See Reg. 7.01 relating to code §22-4-1k 11)
- "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to 12) or does operate a coal mine. See Note 24
- As per §22-4-20; See Note 24 13 & 14)
 - 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.
 - Anticipated formation for which well will be completed 16)
 - Self explanatory 17)
 - Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in 18) elevation
 - All coal seam depths 19)
 - 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, 20) 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
 - Code 22-4-11(c) In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a 21) 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 fil-23) ed 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.	05/17/2024

who	has recorded a declar	ation under Code	22-4-20, if the	permit is to be i	ssued within f	ifteen (15)	
days	of receipt thereof.					05/17/20	24
			WAIVER				
amined this prop added to the min	ed coal operator losed well location. If he map. The undersign inplied with all applica	a mine map exists ed has no objectio	which covers the n to the work pr	e area of the we oposed to be do	ll location, the	e well location tion, provided,	has been
Date:	, 19		By _		- 44 / 198		

FILE COPY



1)	Date: Sept		, 1983		
2)	Operator's Well No.	831	n 🤏 g		
3)	API Well No.	47	013	3650	
		State	Country	D	

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

', ''222	PE: A O	il W G	/ Ga	s X	107	ONS (IF ANY)	NED CONDIT	DIPLOATIONS	MA TIMETA
	В (І	f "Gas",	Production	1	X	_/ Underground	storage	/ Deep	_/ Shallow X
5) LOCATIO	ON: Ele	vation: _	1179.9	7'		_ Watershed: _	Barnes Run c	f Little Kana	
			Lee		and A.	_ County: Co	lhoun	Quadrangle: 7	1.5' Arnoldsburg
6) WELL OF	PERATOR	Sterl	ing Dr	illi	ng & I	Prod. Co.,	nc DESIGNATE		L. Berger, Jr.
Addres						th Floor	Address		ginia St., E.
		New Y	ork, N	ew Y	ork	10017			ton, W.V. 25301
8) OIL & GA	AS INSPEC						9) DRILLING C		
	Deo Mac							NOWN AT THI S	TIME
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0) PROPOS	ED WELL	WORK:			_/ Drill		Redrill	/ Stimulate	
						/ Perfor	ate new formation	4002	
						well (specify)	SFP 2 (1983	
1) GEOLOG				FC	OO SI		Car. 12		
	nated depth o				00	feet		- DIVISION	
13) Appr	oximate trata	a depths:	Fresh, _		^	feet; salt	OIL a	S Difeet.	
14) Appr	oximate coal	seam dep	ths:		0	Is co	al being mined in th	area VYes	/ NoX/
5) CASING	AND TUBI	NG PROC	GRAM				DEL.		
CASING OR		SPEC	CIFICATIONS		- 1	FOOTAGE I	NTERVALS	CEMENT FILL-UP	PACKERS
TUBING TYPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	OR SACKS (Cubic feet)	
Conductor	4								Kinds
Fresh water	9 5/8	LS	33#	X		5 00'	.5 00'	To Surface	By Rule 15-05
Coal		\$100 year					Name and the		Sizes
Intermediate	7"	J-55	20#	X	35.	2465'	2465'	100 sks	
Production	4 1/2	ERW	10.5#	X		L103	5600'	250 sks	Depths set
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				locatio				Dat	r 19 19 83
his permit cov	vering the we	ell operato	or and well		on shown	below is evidence	of permission grant	Dat ed to drill in accordan	r 19 19 83
This permit covuirements subj	vering the we ject to the co	ell operato onditions o	or and well contained h	nerein a	on shown and on the	below is evidence of reverse hereof. No	of permission grant tification must be g . In addition, the w	Dat ed to drill in accordan iven to the District Oil	r 19 19 83 e ce with the pertinent legal re-
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See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

Reason:

Reason: _





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STATE OF WEST VIRGINIA OFFICE USE ONLY

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

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gipia St. 1 E	will lift			ATELLOVA			A	
tons 1.V. 25301				LinoY W				
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		NameUllis						
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			well (specify)					
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		OFFIC	E USE ONLY				a cida	
Perforationers a				P - Elec				
This part of Form IV-2(b) is to record the	e dates of certain	n occurrences a	nd any follo	w-up inspections.			
		Date			Date(s)			
Application received			Follow-ur	inspection((s)			
		Y JV						
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prosecuted with due diligence,					ober 19. 1985		erseit expi	
OTHER INSPECTION						2011 2011		
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see the vevere side of the APPLICANT'S COPY for instructions to the well operators

COAL OWNER'S COPY



1)	Date: Sen	2 7		, 19 00
2)	Operator's Well No.	831		
3)	API Well No.	47	012	2650
-		State	County	Permit

Coal Owner

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

4) W	ELL TY			Production			/ Underground	storage	/ Deep	_/ Shallow _	X_/)
5) L	OCATIO	N: El	evation: _	1179.	971				of Little Kan	AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	
			strict:						Quadrangle:		
6) W			Ster	ling U	rill	ing &	Prod. Co.,		DAGENT		
	Address						Fth Floor	Address	710 Vii		
8) 0	II & CA	SINSDEC		BE NOTI		YOFK	10017	0) DRILLING C	Charles	ston, W.Y.	25301
		loo Ma		DE NOTE	ILD			9) DRILLING C	KNOWN AT THE	C T7160	
	Address	A 80 80 A 144 A	Dt. 1	Roy K				Address	ANUMIN AL ING	P	
			A STATE OF THE PARTY OF THE PAR	dge. W	V	25274		radicos			
10) P	ROPOSE	D WELL				_/ Drill	deeper	/ Redrill	/ Stimulate	,	
								rate new formation			
11) G	EOLOGI	CAL TAR	GET FOR	MATION							
12) Estima	ted depth	of complet	ed well,	5	500	feet				
13								,			
14) Approx	ximate coa	l seam dep	oths:		0	Is co	al being mined in the	e area? Yes	/ No	X
15) C	ASING A	ND TUBI	ING PRO	GRAM							
CASIN	G OR G TYPE		SPEC	UFICATIONS Weight			FOOTAGE	NTERVALS	CEMENT FILL-UP OR SACKS	PACKER	S
		Size	Grade	per ft.	New	Used	For drilling	Left in well	(Cubic feet)	*	
Conduct		m == 10	1.0	0.0.0			3			Kinds	
Fresh wa	ter	9 5/8	LS	33#	X		200'	70031	To Surface	Ly Xuli	1 11
Coal		Mar a n								Sizes	
Intermed Production		7"	J-55	20#	X		2465'	2465	100 sks		
Tubing	on	4 1/2	ERW	10.5	X			5600'	250 sks	Depths set	
Liners											
Liners										Perforations:	
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				INIC	EDILO	FIONG'T	O COLL OPERIA				
								OR, OWNER, OR			
		The r	named coa	l operator,	coal o	wner(s), a	and coal lessee are h	ereby notified that	any objection they wish	to make or	
		of this Ar	onlication l	by the Dep	artmer	must be	filed with the Depar	tment of Mines with	in fifteen (15) days afte		
		47	-013-5	63.0c 2 cb					Octobe	r 19	83
			The follow	wing waive	r must	be comp	leted by the coal op	erator and by any o	coal owner or coal lesse	ee	
			who has r	ecorded a le filing of	the A	tion unde	er Code §22-4-20, if	the permit is to be	issued within fifteen (1	5)	
			days of th	ic ming of	the Ap	opiication					
							WAIVER				
The u	ndersigne	d coal ope	rator			/ owner		/ lessee	/ of the co	oal under this well	location has
xamine	ed this pro	posed wel	location.	If a mine	map ex	ists which	covers the area of	the well location, the	e well location has been	added to the min	e man The
indersig	gned has r	10 objection	on to the w	ork propo	sed to	be done a	t this location, prov	ided, the well opera	tor has complied with a	all applicable requ	irements of
iic wes	t viigiiiia	Code and	i the gover	illing regul	ations.						
		1	9	Carlot Carlot	3	CARTIN AND AND AND AND AND AND AND AND AND AN	1		and the second	1	
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Date:				, 19			Е	y	of his	D	
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										05/17/2	2024

FORM IV-2(B) (Obverse) 7-83

Its .

SURFACE OWNER'S COPY



)	Date: Sont 7		, 19_93
)	Operator's	831	

Well No. 47
State

County		Permit
013	36	50

OCT 11 1983

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

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4) V	VELL TY	EPTO	il OF	MIN	- bx	1					
		B (I	f "Gas"	Production	n /		Undergr	ound s	torage	_/ Deep	_/ Shallow/)
5) L	OCATIO			1179.9					arnes Run of		
3, 1	CATIC			Lee					Thoun	Quadrangle: 7	
6) 11	VELL OF		A STATE OF THE PARTY OF THE PAR	NAME OF TAXABLE PARTY.	4774	en 8 Dan			7) DESIGNATED		THE RESERVE AND THE PERSON NAMED IN COLUMN 2 IN COLUMN
0) V						Fifth					cinia St., F.
	Addres					ork 10			Address	Charles	
						FK 10	111/				EURS M. F. 20301
		S INSPEC		BE NOTI	FIED				9) DRILLING CO		TIME
N		len Mac						M.		OWN AT THI S	TAME
	Addres	STATE STATE OF THE PARTY OF THE	1.18	THE RESIDENCE OF THE PARTY OF T			4 17	Tel.	Address		
		S	andrid	ge, W.	V 25	276					
10) P	ROPOSE	D WELL	WORK:	Drill_		/ Drill	deeper		/ Redrill	/ Stimulate	
				Plug of	f old fo	ormation	/ F	Perfora	te new formation_	/	
				Other p	hysical c	change in w	ell (specify)			
11) C	EOLOG	CAL TAR	GET FOR	MATION	BRC	DWN SHA	LE				
12) Estim	ated depth o	of complet	ed well.	560	00		feet			
	Charles College College	ximate trat					feet;	salt,		feet.	
		ximate coa				1			l being mined in the a		/ No X /
		AND TUBI						_15 COa	n being inned in the a	ilca: Ics	
		IIID TOBI									
CASIN	G OR		SPEC	Weight			FOOT	AGE IN	TERVALS	CEMENT FILL-UP OR SACKS	PACKERS
		Size	Grade	per ft.	New	Used	For drilling		Left in well	(Cubic feet)	
Conduct	or										Kinds
Fresh wa	ater	9 5/8	LS	33∉	X		400'		400'	To Surface	
Coal								2			Sizes
Intermed	liate	7"	J-55	20#	X		2465'	P. P.	2465'	100 sks	
Producti	on	4 1/2	ERW	10.54	X				5600'	250 sks	Depths set
Tubing		2/4/2									
Liners											Perforations:
								P			Top Bottom
											Top Bottom
	-			THE ST 9 P.	8 S2 C 0 7 C 1						
						II .					
		- T									
										e issued in less than	
						copy of the			the following volum	ntary Statement of No	Objection
					OWIICI 3	copy of the	Applicant)II.		A-4-3	10 92
		4/-	013-36	130	VOL	UNTARY	STATEME	NT O	F NO OBJECTION	October	19 83
Il	ereby sta	te that I hav	ve read the	e instructio	ns to sur	rface owner	s on the rev	verse si	de of this Applicatio	n for a Well Work Po	ermit, and that I have received
											Form IV-2(B), (3) a survey plat
	A CANADA STATE OF THE STATE OF										as described therein.
		te that I ha	ve no obje	ection to th	e planne	ed work des	cribed in th	iese ma	iterials, and I have n	o objection to a perm	it being issued based on those
materia	us.										
(For ex	ecution b	y corporati	on, partn	ership etc	5			(For	execution by natural	persons)	
TOI CA	Courton t	Corporati	on, partin	cionip, etc				(101	O o d	persons	
NAME	: _								CH.	man 1	Date: 9/30/8
								N	The C	gnature)	Date:
	By								00 (31	gnature)	

Date

Date:

(Signature)

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.

FILE COPY



1) Date: April 19 , 19 84

2) Operator's Well No. 831 - Rev.

3) API Well No. 47 - 013 - 3650-REV
State County Permit

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

Formerly 47 - 013 - 3650

					<u>A</u>	PPLICA	TION FOR A W	ELL WORK PERMIT		
4)	WELL TY	PE: A O	ile // o	/ G	as	X /		AND CONDUCTO	DIFICACIONS	RERMIT NO
7)	LLL							d storage		
5)	LOCATIO							Laurel Rur		
										7.5' Arnoldsburg
6)	WELL OF	ERATOR_	Sterl	ing Dr	illi	ng &	Prod. Co.,	INC DESIGNATE	AGENT Harry	L. Berger, Jr.
	Addres	s 360	Madis	on Ave	, F	ifth	Floor	Address	710 Virginia	St., E.
		New	York,	New Y	ork	1001	7		Charleston,	W.V. 25301
8)	OIL & GA			BE NOTI	FIED			9) DRILLING CO		
	Name	The same of the sa						Name	UNKNOWN AT	THIS TIME
	Addres		1 Box		050	7.0		Address		THE PROPERTY OF THE PARTY OF TH
				e, W.V.						- CBUVIA
10)	PROPOSI	ED WELL	WORK:					/ Redrill		4
								orate new formation		APR 2 4 1984
										71 11 21 1 1 1007
11)	GEOLOG	ICAL TAR	GET FOR	MATION	5/	75	I SHALE fe			OIL & GAS DIVISIO
								alt,	fact T	DEPT. OF MIN
								coal being mined in the	a area? Ves	No Y
15)	CASING						18	coar being innied in the	alea: les	/ NO/
	SING OR	II		CIFICATION	S		H FOOTAG	E INTERVALS	CEMENT FILL-UP	PACKERS
	BING TYPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	OR SACKS (Cubic feet)	I ACKERS
Conc	ductor	Size	Grade	per rt.	New	Oseu	Tor urining	Left in weil	(Cubic leet)	Kinds
	n water	9 5/8	LS	33#	X	100	325'	325'	To Surface	
Coal	340	3 370	LJ	10011	^		523	525	10 Surrace	Sizes
	mediate	7"	J-55	20#	Χ		2355'	2355'	100 sks	
Prod	luction	4 1/2		10.5#	X			5475'	250 sks	Depths set
Tubi	ng	1					USE ONLY	BOISTIO.	OR AS I	Eq. BY RULE 15.1
Line	rs									Perforations:
			Janie	enzai em	pollo	r vos 1	contronder an	dates of certain o	ils to recordeful	Top Bottom
				100						
	*	STOCK)ate		7 5 5 5 5 5 5
				+	(c)po	drag and	Se Palloway			<u>a policulión received:</u>
				14.00			OFFICE USE			
							DRILLING P	ERMIT		Veil work started
Pern	nit number_	47-	-013-3	650-Re	v				May 14,	19 84
									Dat	enthabean to considera
										ce with the pertinent legal re-
										and Gas Inspector, (Refer to
							work has commen		en operator or his con	tractor shall notify the proper
The	nermitted w	ork is as de	scribed in	the Notic	e and A	polication	on plat and recla	mation plan subject t	o any modifications a	nd conditions specified on the
	rse hereof.				o una 7	ppnean	on, plat, and recia	mation plan, subject t	o any mounications a	na conditions specifica on the
Pern	nit expires	May	7 14,	1986	y 17/2		unless w	ell work is commenced	prior to that date and	prosecuted with due diligence.
										THER INSPECTIONS
Be	OHE WKE	Agent	://	Plat:	Casin	ig	Fee			
	PINA	//	2 1	2/1	m	11 -	7122			Regont,

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



OFFICE USE ONLY

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

		Date						Date	(s)
This part of Form IV-2(b) is to record the	dates of certain	occurrences an	nd any fo	ollow	-up insp	ections		
La By PINE Kal	1 1/AR AS 1	OFFIC	E USE ONLY					La se	E gar gato
- 192 Billion I	5 (2) 10 (10) T	L tavia				#8.00		ENI P	anstagus
	Luga exe	19368						1775	
N/S/FF									
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PACKERS	CEMEN FILLIUS ORNACES (Cabin test)	TAPRITA		650		FICATIONS Weight par fit		sue	V BENC LASE
V ₂₀₀ 574		all being mines in the							14 Approx
DIFF. OF MINES									
			1001						
OIL & GAS BIVISION									
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We the								widdaw C	eruyuni
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GIANNING ELL									
	MTRACTOR								OIL & GAS
W.V. Seath									

DRIMING PERMIT

Set the reverse side of the APPUICANT'S COPY for instructions to the well operator

done to the augulations of roads towarions were pit fifth any secretary word. In addition, the well

Application received Follow-up inspection(s)

Well work started

Completion of the drilling process pro

Well Record received

Reclamation completed and solution and reclamation plan, subject to any modifications and bedraced as a skill with failure and reclamation completed.

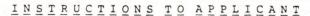
OTHER INSPECTIONS

Reason:

Reason:

BUNNELL

FORM IV-2 (A	A)	1) Date: April 19 ,1984
Obverse		2) Operator's
[8-83]		Well No. 831 - Rev.
		3) API Well No. 47-013-3650-Rev.
	CULTURE OF LITE	State County Permit
		OFFICE OF OIL & GAS Formerly 47 - 013 - 3650
	NOTICE OF APPLICATION	FOR A WELL WORK PERMIT
4) SURFACE	OWNER(S) OF RECORD TO BE SERVED	5(i) COAL OPERATOR UNOPERATED
(i) Name	Emmett Johnson	Address
Addre		
	Grantsville, W.V. 26147	5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
(ii) Name		NameUNKNOWN
Addre	ess	Address
		Name
(iii) Name		Address
Addre	255	Caraca at the caraca and the caraca
		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:
		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.
	cementing program;	ocation and, if applicable, the proposed casing and
	(2) The plat (surveyor's map) showing (3) The Construction and Reclamation	the well location on Form IV-6; and 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 acce	
	WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS"	ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION U. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY
		the West Vissis Cala the sale in 1 11
	erator proposes to file or has filed this	the West Virginia Code, the undersigned well op- Notice and Application and accompanying documents
	Department of Mines, with respect to a well	tor of the Office of Oil and Gas, West Virginia
	and depicted on attached form IV-6. Copie	s of this Notice, the Application, the plat and the
	by hand to the person(s) named above (or b	n mailed by registered or certified mail or delivered y publication in certain circumstances) on or
	before the day of mailing or delivery to t	he Administrator.
	6) EXTRACTION RIGHTS TO ATTMOST LABOUR TWO	mand the southern being to Lett to 1015 CETIVIETO
	Check and provide one of the following:	- I DO BE OF THE OPEN REQUIRED TO MAKE THE VERTILITY
	i hold the right to extract oil or	ther continuing contract or contracts by which
	The requirement of Code 22-4-1-(c)(1)	through (4). (See reverse side for specifics.) APR 2 4 1984
	7) ROYALTY PROVISIONS	Land Service and And Control Services
	or other contract or contracts providing	g for flat well royalty or any similar provisions.
	for compensation to the owner of the oil to the volume of oil or gas so extracted	or gas in place which is not inherently related. T. OF MINES. I, produced or marketed? Yes NXXX
	you may use Affidavit Form IV-60.	ing additional is needed. If the answer is Yes,
	See the reverse side for line item	instructions, and for instructions concerning
	the required copies of the Notice a Reclamation Plan.	and Application, plat, and Construction and
The truth	of the information on the	WELL
Notice and	d Application is verified	OPERATOR Sterling Drilling & Prod. Co., Inc
	to and the Notice is	11 10
	behalf of the Well Operator	By Harry d. Derger
in my Cou	nty and State by	Its Designated Agent
+h; = 10 -	Harry L. Berger, Jr.	Address 710 Virginia St., E.
this 19 day		Charleston, W.V. 25301
LIA COUR	mission expires May 10, 1989.	Telephone 342 - 0121
_ to	un M. Kalespie	05/47/0004
	Public, Kanawha County,	05/17/2024
State	of West Virginia	



CONCEPNING 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 § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fees required by Code § 22-4-8a 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, 22-4-2a, 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.	Royalty	Book Page
Donald Gunn	Sterling Drilling and		
General Delivery	Production Co., Inc.		
Mt. Zion, W.V. 26151	Section of the sectio	1/8	086/161

1) Date: August 16

2) Operator's

Well No. 3) API Well No.

State

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

NOTICE OF APPLICATION	FOR A	WELL	WORK	PERMIT	
-----------------------	-------	------	------	--------	--

	1	and the second second	The state of the s	OR A MELL	WURK PE	EMI.I.	
	Name	NER(S) OF REC	ORD TO BE SERVED	5(i)	COAL C	PERATOR_	UNOPERATED
(<u>ii</u>)	Address Name Address	Cleveland	ira Ave. 1. Ohio 44102	5(ii)	COAL O	UN	ITH DECLARATION ON RECORD
(<u>iii)</u>	Name Address				Name_ Addr	ess	A control of the cont
		E ₁ ,		5(iii)	COAL LI Name Addre		H DECLARATION ON RECORD:
TO TE	to and cerr (2) The (3) The plu	be plugged, we leave the plugged, we leave the plugged to be the plat (survey construction of a well), who	for a Well Work Per which sets out the p he well and its loca m; for's map) showing to and Reclamation Plants of the plants of t	mit on For arties inv tion and, he well lo	m IV-20 volved i if appl cation	(B) (or Form I	
		5001 1001	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 sworm to and the Notice is signed on behalf of the Well Operator in my County and State by

Harry L Berger, this 16day of August 198 My commission expires May , 1989 Notary Public, Kanawha State of West Virginia

OPERATOR

Designated Address Arcade Bldg

Virginia

6) EXTRACTION RIGHTS

Check and provide one of the following:

☐ Included is the lease or leases or other continuing contract or contracts by which The requirement of Code 22-4-1-(c)(1) through (4). (See reverse side for specifics.) To MINES

ROYALTY PROVISIONS

Is the right to

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.

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 22-3-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the counter 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 coverse 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 Lind 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 Pace
Effie Coon			
Mary L. Coon Etta Coon	Sterling Drilling and Production Co., Inc.	1/8	078 / 536

200

IV-35 (Rev 8-81)



OIL & GAS DIVISION
DEPT. OF MINES



State of West Wirginia

Department of Mines Gil und Gas Division

Date Augus	t 28, 19	84
Operator's Well No.		
Farm	Gunn	The state of the s
API No. 47	- 013	-3650-Rev

WELL OPERATOR'S REPORT

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

LOCATION: Elevation: 1066.99' Watershed Laur	el Run of	Little Ka	nawha Riv	er
District: Lee County Calhou	ın ,	Quadrangle	27.5' Arn	oldsburg
	:			
TOMPANY Charling Duilling A Duil in A				
COMPANY Sterling Drilling & Production Co., Inc.				Coment
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			
SURFACE OWNER Emmett Johnson	20-16 Cond.			1
ADDRESS Grantsville, WV 26147	13-10"			
MINERAL RIGHTS OWNER Donald Gunn	9 5/8	352'	352'	135 sks
ADDRESS General Del., Mt. Zion, WV 26151	8 5/8			The state of the s
OIL AND GAS INSPECTOR FOR THIS WORK Deo Mace	7	22/01	22/01	
ADDRESSRt. 1, Box 5, Sandridge, WV	5 1/2	2349'	2349'	175 sks
PERMIT ISSUED May 14, 1984 25274			5446'	200 -1
DRILLING COMMENCED June 23, 1984	4 1/2		3446	300 sks
DRILLING COMPLETED June 29, 1984		-		
IF APPLICABLE: PLUGGING OF DRY HOLE ON	2	-		
CONTINUOUS PROGRESSION FROM DRILLING OR	Liners			
REWORKING. VERBAL PERMISSION OBTAINED ON	used			
GEOLOGICAL TARGET FORMATION Devonian Shale	2	Don	Lh 5/.75	Foot
		Dep	th 5475	feet
	otow. V		- Moole	
Depth of completed well 5463 feet R	.5	/ Cable		
Depth of completed well 5463 feet Rowaler strata depth: Fresh 250 feet;	Salt 18	/ Cable		
Depth of completed well 5463 feet R	Salt 18	/ Cable		e area? _{No}
Depth of completed well 5463 feet Rowater strata depth: Fresh 250 feet; Coal seam depths: None	Salt 18	/ Cable		
Depth of completed well 5463 feet Rowater strata depth: Fresh 250 feet; Coal seam depths: None	Salt 18	_/ Cable 80 feet being mine	ed in the	e area? _{No}
Depth of completed well 5463 feet Row Water strata depth: Fresh 250 feet; Coal seam depths: None OPEN FLOW DATA Producing formation Devonian Shale	Salt 18 Is coal Pay	/ Cable 80 feet being mine zone dep	ed in the	area? _{No}
Depth of completed well 5463 feet Row Water strata depth: Fresh 250 feet; Coal seam depths: None OPEN FLOW DATA Producing formation Devonian Shale Gas: Initial open flow Show Mcf/d	Salt 18 Is coal Pay Oil: Ini	_/ Cable 80 feet being mine zone dep	ed in the	area? _{No} 5367 feet Bbl/d
Depth of completed well 5463 feet Row Water strata depth: Fresh 250 feet; Coal seam depths: None OPEN FLOW DATA Producing formation Devonian Shale Gas: Initial open flow Show Mcf/d Final open flow 432 Mcf/d	Salt 18 Is coal Pay Oil: Ini	/ Cable 80feet being min v zone dep tial open nal open f	ed in the	5367 feet Bbl/d
Depth of completed well 5463 feet Row Water strata depth: Fresh 250 feet; Coal seam depths: None OPEN FLOW DATA Producing formation Devonian Shale Gas: Initial open flow Show Mcf/d Final open flow 432 Mcf/d Time of open flow between initial	Is coal Pay Oil: Ini Fir	/ Cable 80 feet being min v zone dep tial open nal open f	th 2861 - flow low 05)	5367 feet Bbl/d Bbl/d
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Depth of completed well 5463 feet Row Water strata depth: Fresh 250 feet; Coal seam depths: None DPEN FLOW DATA Producing formation Devonian Shale Gas: Initial open flow Show Mcf/d Final open flow 432 Mcf/d Time of open flow between initial Static rock pressure 900 psig(surface) (If applicable due to multiple completion-	Is coal Pay Oil: Ini Fir al and fi	/ Cable 80feet being min 2 zone dep tial open hal open f hal tests ment) after	th 2861 - flow low 05) r_72 hou	s area? _{No} 5367 feet Bbl/d Bbl/d Bbl/d ry/2024 ars shut in
Depth of completed well 5463 feet R Water strata depth: Fresh 250 feet; Coal seam depths: None OPEN FLOW DATA Producing formation Devonian Shale Gas: Initial open flow Show Mcf/d Final open flow 432 Mcf/d Time of open flow between initial Static rock pressure 900 psig(surface) (If applicable due to multiple completion— Second producing formation	Salt 18 Is coal Pay Oil: Ini Fir al and fi measurem	_/ Cable 80 feet being min 7 zone dep 1 tial open 1 al open f 1 nal tests 1 ment) afte	th 2861 - flow low r_72 hou	area? _{No} 5367 feet Bbl/d Bbl/d Bbl/d rs shut in
Depth of completed well 5463 feet R Water strata depth: Fresh 250 feet; Coal seam depths: None OPEN FLOW DATA Producing formation Devonian Shale Gas: Initial open flow Show Mcf/d Final open flow 432 Mcf/d Time of open flow between initial Static rock pressure 900 psig(surface) (If applicable due to multiple completion-	Salt 18 Is coal Pay Oil: Ini Fir al and fir measurem -) Pay Oil: Ini	/ Cable 80 feet being min zone dep tial open nal open f nal tests ment) afte zone dep	th 2861 - flow - low 050 r_72 hou	5367 feet Bbl/d Bbl/d Bbl/d rs shut in feet Bbl/d

AC - 3650

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

Stage One: 27 holes - 4552' to 5367'
Stage Two: 27 holes - 3724' to 4421'
Stage Three: 20 holes - 2861' to 3436' Perforations:

Treatment:

Stage One: 1000 gals. 15% HCL; 1,090 MSCF N₂
Stage Two: 1000 gals. 15% HCL; 1,190 MSCF N₂
Stage Three: 1000 gals. 15% HCL; 1,144 MSCF N₂

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all free and salt water, coal, oil and ga
Soil	0	3	
Sandstone and Shale	3	1347	Fresh water @ 250'
Sandstone	1347	1562	
Shale	1562	1716	We will be the controlled the second
Condetone	1716	1780	No. 1 Albert Bright Street
Shale	1780	1818	and the second s
Salt Sand	1818	1995	Salt water @ 1880'
Shale	1995	2030	To the second second
Little Lime	2030	2045	
Pencil Cave	2045	2055	
Big Lime	2055	2193	
Big Injun	2193	2213	
Siltstone and Shale	2213	2551	
Sunbury Shale	2551	2569	
Berea	2569	2573	
Siltstone and Shale	2573	3080	Gas show 2861' - 3436'
Shale	3080	4945	3724' - 4421'
Siltstone	4945	4955	4552' - 5367'
Shale	4955	5135	
Siltstone	5135	5177	
Shale	5177	5463	
	5 4		TD - 5463'
			A STATE OF THE STA
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(Attach separate sheets as necessary)

Sterling	Drilling and Pro	duction co. 05/17.	/2024
Well	//	/ / /	
y:	tany 2. 1.	Derger h	
Date:	8-132-84		

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed coolegical record of all fermations in a line."

Attach separate sheets as necessary for comments.



DATE 8-27-83
WELL NO. Coon # 831

State of Mest Hirginia API NO. 47-013 -3650

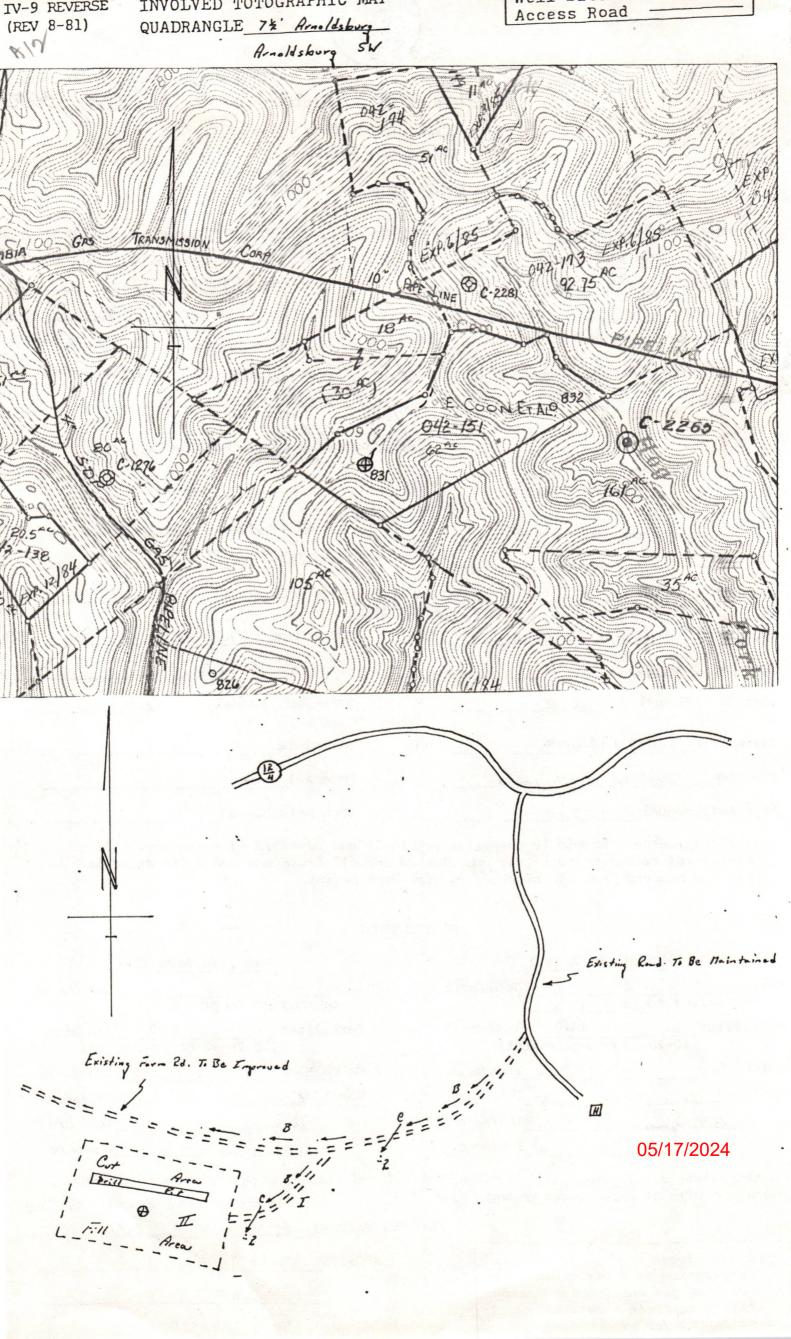
Beparlment of Mines Gil und Gas Bivision

CONSTRUCTION AND RECLAMATION PLAN

Address 360 Madison Ave NY. NY	10017 Address c/o H.L. Berger - Chars.
	Telephone (304) 342-0121
LANDOWNER Effic Coon	SOIL CONS. DISTRICT Little Longrapher SC
	rling Drilling & Prod. CoH.L. Bergesent
	He Kanawha son. All corrections
and additions become a part of this plan:	
	(Date)
Y	arrett Newton
ACCESS ROAD TE CETT	GD LOCATION
Structure (A)	Structure None needed (
Spacing . SEP 28 198	Material
Page Ref. Manual OIL & GAS DIV	
Structure Drainage Ditches (B)	
Spacing Poods: de	Material Rock
Page Ref. Manual 2-12	Page Ref. Manual 2-9
Structure Cross Ditches . (C)	Structure(
Spacing 200' for 2.4 is grades	Material
Page Ref. Manual 2-4	Page Ref. Manual
All structures should be inspected regularized commercial timber is to be cut and stacked cut and removed from the site before dirt	ed and all brush and small timber to be
REVEGE	TATION
Treatment Area I	Treatment Area II
ine 2 Tons/acre	Lime 2 Tons/acre
or correct to pH 6.5	or correct to pH 6.5
ertilizer 600 lbs/acre (10-20-20 or equivalent)	Fertilizer 600 lbs/acre (10-20-20 or equivalent)
ulch Hay 2 Tons/acre	Mulch Hay 2 Tons/acre
cest 1, 51 30 lbs/acre	
Orchardynes 10 lbs/acre	Seed* Ky-31 30 lbs/acre Ochardyness 10 lbs/acre 10/17/2004
Ladino Clover 4 lbs/acre	Ladine Clover 05/1742024 e
*Inoculate all legumes such as vetch, tref noculate with 3% recommended amount.	
	Moore's Well Services, Inc PREPARED BY Pilad X. Campbell
. 221/1	frakard A. Campbell
	V. V.
NOTES: Please request landowners' cooperation to protect new seedling for one growing season.	Duck, WV 25063

PHONE NO.

(304) 364-5780



STATE OF WEST VIRGINIA

PART PETERS AND DESCRIPTION OF THE PARTY.

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION



OIL & GAS DIVISION

DISTRICT WELL INSPECTOR

INSPECTOR'S WELL REPORTEDT OF MINES

1-	CASING AND	USED IN			7-18-0-1
mpany Sterling	TUBING	DRILLING	WELL		KERS
dress	Size				
m Gunn	16		en e	Kind of Pac	ker
11 No. 831	13				V
rick See County Cal	81/4			Size of	9
ing commenced 6. 22-84	65%			Depth set_	
	5 3/16	, a since we have a second			1.0
g completedTotal depth	3	. Taponino de la compansión de la compan	and the Wall FE W	Perf. top	
shot Depth of shot	_ 2	2	Av. all of our	Perf. bottom	
l open flow/10ths Water inIn	Liners Used			Perf. top	
flow after tubing /10ths Merc. in Inc.				Perf. bottom	
	-n				
neCu. F	t. CASING CEMEN	TED	SIZE	No. FT.	Da
pressurelbshr	s. NAME OF SERV	ICE COMPAN	Y	9 5 9 1 905 1 8 1 1	
bbls., 1st 24 hr	S. COAL WAS ENC	Olivepen			0 8
Water of the same with the same and the same					
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terfeetfee	t FEET_	INCHE	S	FEET	_INCHE
s' Names Huit 7					
Names					
is:					
352' of 9 %" casting	, 135 SKS C	ement,	Down	ll, 6.	23-0
water circulated, no ce,	mero a vil	er Con	5010	VAL CHOUSE	

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

COMPANY				ADDRESS				
FARMCOUNTY							V. (
Filling Material U	sed	**************************************						
Liner	Lo	cation	Amount	Packer	Location			
PLUG	S USED	AND DEPTH PLACED		BRIDGES	CASIN	CASING AND TUBING		
CEMENT-THICK	HESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST	
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rillers' Names								
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	A. W. C. C.			age a consistence will be fore				

DISTR @5/47/2024

B4 06.11

Permit No. 13-3630

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

JUL 1 0 1984

OIL AND GAS WELLS DIVISION

INSPECTOR'S WELL REPORT

OIL & GAS DIVISION
DEPT. OF MINES
Oil or Gas Well
(KIND)

Company Sterling	CASING AND TUBING	USED IN DRILLING	LEFT IN	PAC	KERS
Address	Size				
Farm Gunn	16			Kind of Pac	ker
Well No. 83/	13				
District Tee County Cal	10			Size of	A.C. 100 100 100 100
	8 ½ 65%				
Drilling commenced	5 3/16			_ Depth set	
Drilling completed Total depth	3		1000 000000	Perf. top	
Date shotDepth of shot	2		a second a second of	1	
Initial open flow/10ths Water inIn	ach Liners Used			Perf. top	
Open flow after tubing/10ths Merc. inIn	ch			Perf. bottom	
VolumeCu. I		TED	SIZE	No ET	The same
Rock pressurelbsh	1			No. F1	Date
bbls., 1st 24 hr	s. COAL WAS ENG	COUNTERED	AT	FEET	INCHES
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alt waterfeetfee					
	et FEET_	INCHE	S	FEET	_INCHES
rillers' Names Hunt 7					
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7-2-84

Uso Ma05/17/2024

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL AND GAS WELLS DIVISION

INSPECTOR'S PLUGGING REPORT

COMPANY			ADDRESS				
FARM							
Filling Material Used				OUNTY			
Liner L	ocation	Amount	Packer	Location			
PLUGS USED	AND DEPTH PLACED		BRIDGES		G AND T	101110	
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE		
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rillers' Names	4.9/10/20						
Timers Names				-			
emarks:	A CONTRACTOR OF THE CONTRACTOR OF THE						
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g a g can he way 30	p a gathwell to a record						
ingin in the space with the	" arms to see 1 1 1 1 1						
DATE	I hereby certify I visi	ited the above	well on this data				

DISTRICT 142024





OIL & GAS DIVISION

DEPT. of MINES

State of West Virginia

Department of Mines Gil and Gas Division Charleston 25305

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT

	September 2	4, 1984			
COMPANY	Sterling Drilling & Prod. Co.	PERMIT NO	013-36	50-REV	
710 Vi	rginia Street, East	FARM & WELL N	Emmett	Johnson	#831
Charle	ston, West Virginia 25301	DIST. & COUNT	Y Lee/Ca	lhoun	
		I	N COMPLIA	ANCE	
RULE	DESCRIPTION	Y	ES	NO	
23.06	Notification Prior to Starting Work				
25.04	Prepared before Drilling to Prevent	Waste			
25.03	High-Pressure Drilling	and the same of th			
16.01	Required Permits at Wellsite				
15.03	Adequate Fresh Water Casing				
15.02	Adequate Coal Casing				
15.01	Adequate Production Casing				
15.04	Adequate Cement Strenght	-			
15.05	Cement Type				
23.02	Maintained Access Roads				
25.01	Necessary Equipment to Prevent Wast				
23.04	Reclaimed Drilling Pits				
23.05	No Surface or Underground Pollution				
23.07	Requirements for Production & Gathe	ering Pipelines			
16.01	Well Records on Site	-			
16.02	Well Records Filed				
7.05	Identification Markings				
I HAVE I	NSPECTED THE ABOVE CAPTIONED WELL AN	ND RECOMMEND THAT	IT BE RE	LEASED:	
		SIGNED 1	18 M	Pace	
		DATE 5	3/-	83.	• •
with Cha	Il record was received and reclamation apter 22, Article 4, Section 2, the age for the life of the well.	on requirements apabove well will real	main und	er bond	5
		Jun	e 10, 19	85	
		DA	TE		

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

1.0 API well number:	I	HE NATURAL GA		security and a second	
(If not assigned, leave blank, 14 digits.)	1	47 -	013 - 3030	Kev	
2.9 Type of determination being sought: (Use the codes found on the front of this form.)	To the second of	45 JITTERSAND	107 on of NGPA	Category Code	
3.0 Depth of the decost completion locations (Only needed if sections 103 or 107 in 2.0 above.)			5463	foot	
4.0 Name, address and code number of applicant: (35 letters per line resimum. If code number not available, leave blank.)	Norma 710 \	ling Drilling a	st, Arcade Bu		0 <u>18084</u> Seller Cad
5.0 Location of this well: (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name.)	Field N	District houn	St	ate V!V	
(b) For OCS wells:					4.5
	Area Na	Dece	of Lesse:	Block Num	bod .
(c) Name and identification number of this well: (35 letters and digits maximum.)	Gunn	831–Rev			•
(d) if code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	-				-25°
6.0 (a) Name and code number of the purchaser. (35 letters and digits maximum. If code number not available, leave blank.)	Und	edicated			Suver Coo
(b) Date of the contract:			Ma. Dav	Yr.	
(c) Estimated total annual production from the well:	1	and the contract of the contra	12	Million Cub	c Feat
		(a) Base Price	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a (b) and (c)
7.0 Commerce price: (As of filling date. Complete to 3 decimal places.)	I S/MMBTU	5 8 3 4		materials & materials describe designate	
(As of filing date. Complete to 3 decimal places.)	S/MMBTU		*****		
Agency Use Only Care Received by Juris 2001 SEP 1 0 1984		V/L. Berger, Jr	eigen	<u>Designat</u>	ted Agent
SEP 1 0 1904 Sate Received by FERC FERC-171 (8-87)	Signature		/	304-342-0	

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

OM8 No. 1902-90 (Expires 12/31/84)

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

GENERAL INSTRUCTIONS

Complete this form if you are applying for price classification under sections 102, 103, 107 or 108 of the NGPA.

Complete each appropriate item on the reverse side of this page. The code numbers used in items 4 and 6 can be obtained from the Buver/Seller Code Book. If there is more than one purchaser or contract, identify the additional information in the space below. Also enter any additional remarks in the space below. The data reported on this form are not considered to be confidential and will not be treated as such.

Submit the completed application to the appropriate Jurisdictional Agency as listed in title 18 of the CFR, part 274.501. If there are any questions, call (202) 357-8585.

SPECIFIC INSTRUCTIONS

Section of	Category	Description		
NGPA_	Cocse	(e)		
102	1	New OCS lease		
102	2	New onshore well (2.5 mile test)		
102	3	New onshore well (1000 feet desper test)		
102	4	Hew onshore reservoir		
102	5	New reservoir on old OCS lease		
103		New onshore production well		
107	0	Deep (more than 15,000 feet) high-cost gas		
107	1	Gas produced from geopressured brine		
107	2	Gas produced from coal seams		
107	3	Gas produced from Devonian shale		
107	5	Production ennancement gas		
107	5	New tight formation-gas		
107	7	Recompletion tight formation gas		
108	ŋ	Stripper well		
108	1	Stripper well — sessonally affected		
108	2	Stripper well — enhanced recovery		
109	3	Stripper well — temporary pressure buildup		
108 i	4	Stripper well - grotest procedure		

Contract Date
(Mo, Da, Yr)
(a)
(b)
(b)
(c)

ernarks:

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES, OIL AND GAS DIVISION

SEP 27 1984

COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

ate: August 28,19 84	AGENCY USE ONLY
pplicant's Name: Sterling Drilling & Production Co.	, Inc. WELL DETERMINATION FILE NUMBER
ddress: 710 Virginia Street, E. Arcade Bldg Charleston, WV 25301	840910 - 107 - 013 3650
as Purchaser Contract No.	Use Above File Number on all Communications Relating to This Well
(Month, day and year)	
irst Purchaser:	Designated Agent: Harry L. Berger, Jr.
ddress: (Street or P.O. Box)	Address: Sterling Drilling & Prod. Co., Ir '710 Virginia St., E. Arcade Bldg. Charleston, WV 25301
(City) (State) (Zip Code) ERC Seller Code 018084	FERC Buyer Code
AME AND TITLE OF PERSON TO WHOM QUESTIONS CONCERNI	
Name: Harry L. Berger, Jr. (Print) Signature: Address: Sterling Dyilling & Prød. (Sterling St., E., Arcade (Street or P.O. Box) Charleston, WV (City) (State) Telephone: 304 342-0121 (Area Code) (Phone No. 1986)	25301 (Zip Code)
(Certificate of Proof of Service to Purcha	ser)
NGPA Catagory App GPA SECTION/SUBSECTION	lied For
D2 New Natural Gas 102-2 2.5 Mile Test 102-3 1000 Foot Deeper Test 102-4 New Onshore Reservoir D3 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 Buildup
77 High Cost Natural Gas 107-0 Deep (more than 15,000 feet) 107-1 Geopressured Brine	AGENCY USE ONLY
107-2 Coal Seams X 107-3 Devonian Shale 107-5 Production enhancement 107-6 New Tight Formation 107-7 Recompletion Tight Formation RECEIVED SEP 1 0 1984	APPROVED 05/17/2024 0CT -3 1984
OIL & GAS DIV. DEPT. OF MINES	

ate Received

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

O	perator:
Ty	pe Determination being south 107
AP	The Determination being sought - 107 (Devonian Shale)
We	VI Well No.: 47-013-3650 - Rev. Well Name: Gunn # 831-Rev.
	st Virginia Office of Oil and Gas County: Colhoun
	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. Gamma Ray elevation indices:
	A. Shale Base Line (API Units)
	1. GR Value at Base Line = 165 * API Units 2. Remarks:
•	
	B. Gamma Ray Log Value at 0 7
	B. Gamma Ray Log Value at 0.7 x Value at Base Line 1. GR Value = 1/5.5 * API Units 2. Calculation: 0.7 (GR Value at Base Line) 0.7 (165 *) = 1/5.6 API VI
III.	Intervals with GR index less than 0.7 x (Value at Base Line): Interval
	Thickness of Interval 0.7 (Shale Base Line) Feet 2883 Thickness of Interval 0.7 (Shale Base Line) Feet 84
T 1	Total Devonial Interval 2883
Total	Less Than 0.7 (Shale Base)
4 Less	Than 0.7 (Shale Base Line) = $0.0291 \times 100 = 2.9.7 \times 05/17/2024$
*Marl	sed on log de in

^{*}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

STATE OF WEST VIRGINIA

Date August 28, 1984

DEPARTMENT OF MINES OIL AND GAS DIVISION

Operator's Well No. Gunn 831-Rev

API Well No.

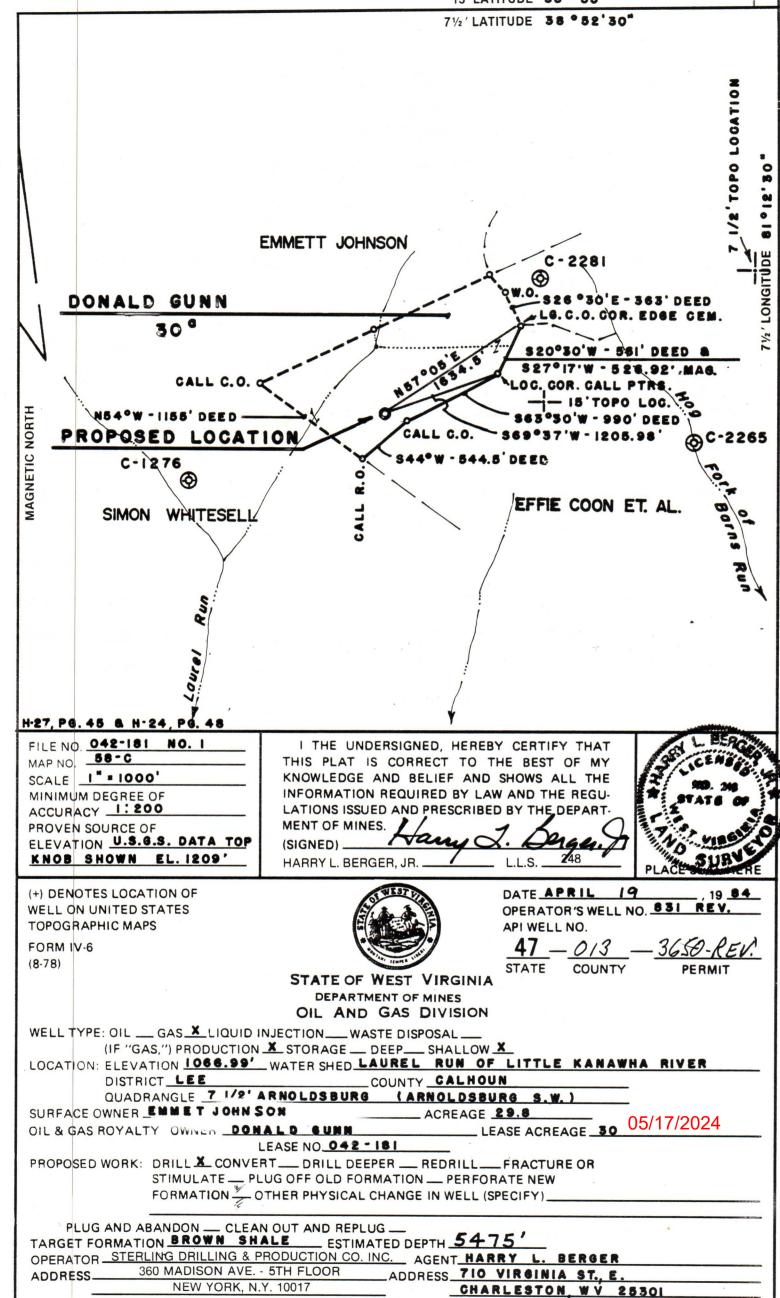
47 - 013 - 3650-Rev State County Permit

	WELL CLASSIF	ICATION FORM				
	HIGH COST GAS WELL - DEVONIAN SHALE					
	NGPA Sect	ion 107				
* *	,	DESIGNATED AGENT Harr	ry L. Berger, Jr.			
		ADDRESS Arcade Buildi	ing; 710 Virginia St., E.			
		Charleston, V	WV 25301			
		LOCATION Elevation 1	1066.99			
WELL OP	ERATOR Sterling Drilling and Product	ion Watershed Laurel Rr	/Little Kanawha River			
	710 Virginia St., East	Inc. Dist. Lee County	Calhoun Quad. 7.5 Anldbg			
	Charleston, WV 25301	Gas Purchase Contract No.	i and			
GAS PUR	CHASER	Meter Chart Code				
ADDRESS		meter chart code				
	,	Date of Contract				
	* * * *	* * * *	*			
Date su	rface drilling began: June 23, 19	984				
	e the bottom hole pressure of the w	vell and explain how t	his was calculated.			
Indicat	e the bottom hole pressure of the	CII and enperiment	, **			
			And the second s			
Bottom	Hole Pressure. PSIA Pf = Pwe	.GS				
	+ (0.0075 x <u>5463</u>) + 459.67 = <u>5</u>		561 = ,0000334			
£ = 00		() () ()	sc - 998 psta			
Pf =	900 x 2.7183 10000334 x 4/14	_ x 1690 x 1.0	$\frac{1}{10} = \frac{1}{10} = \frac{1}{10}$			
	AFI	FIDAVIT				
		first some sometime	to law state that			
T 1	calculated the percentage of footage	ge of the producing in	itelval willen 13 not			
Darranda	an Chale as indicated by a Gamma Ray	y index of less than U	1./ 11 a Gamma Ray 10g			
1000-11	ad in subparagraph (3)(1) or (3)(1)	i)(A) has been filed,	or as indicated by the			
report	described in subparagraph (3)(ii)(entially disqualifying non-shale for	otage is equal to or 1	less than five (5)			
nercent	of the gross Devonian age interva	1: and I have no know!	ledge of any information			
not des	scribed in the application which is	inconsistent with a c	conclusion that the well			
qualifi	les as a high-cost natural gas well	• ,/ ,	1 ()			
		Ham, X	1. Berger In			
STATE	OF WEST VIRGINIA					
COUNTY	OF Kanawka, TO-WIT:					
Ι,	John K Brooks, a Notar	y Public in and for th	he state and county			
		· · ·	oce name is signed to			
the wr	aid, do certify that Harry L. Berg iting above, bearing date the 29	day of August	, 1984 , has			
		aforacald				

Civen under my hand and official seal this 29 day of Au

(NOTARIAL SEAL)

My term of office expires on the 27 day of October Notary Publ



LEGEND INVOLVED TOTOGRAPHIC MAP Well Site IV-9 REVERSE Access Road QUADRANGLE 72 Arnoldsburg Arnoldsburg SW (FEV 6-E1) 042-174 042-173 AC 66 TRANSMISSION Ø €-2281 18 042-151-35-30 Abandoned Co. Road To Be Haintained 1200 of 6-10% CEM B 05/17/2024 Line

P 522 051 886

013-3650

EFFIE COON	
Street and No. 800 Z ALMIRA	AUE.
P.O., State and ZIP Code CLEVELAND, OHIO	44102
Postage	\$
Certified Fee	
Special Delivery Fee	review .
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	-
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Female	\$2.00
Postmark or	



DEPT. OF MINES

IV-9 (Rev 8-81)



DATE 4-17-84

WEIL NO. Gunn * 831 Rev

State of Mest Hirginia API NO. 47 - 013 -3650-Rev

Beparlment of Mines Gil und Gas Bivision

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Sterling Drilling & P	rod. CoD	ESIGNATED AGENT Sterling Drilling & I'm		
Address 360 Madison AveNY, N	Y 10017	Address c/o H.L.Berger - Chas., WV Telephone (304) 342-0121		
	Telephone (212) 682-0204			
LANDOWNER Emmett H. Clarenson		SOIL CONS. DISTRICT Little Kanawha SCD		
Revegetation to be carried out by S	Sterling	Drilling & Prod. CoH.L.Berg (Agent)		
This plan has been reviewed by /	, ++/e +	Sco. All corrections		
and additions become a part of this plant	an:	4-18-84		
and activities and a second and	(.)	rett Newton CEIVE		
	yar	(SCD Agent)		
	0	APR 2 4 1984		
ACCESS ROAD		LOCATION OIL & GAS DIVISION		
Structure	(A)	Structure Diversion Dirak of MINES		
Size _		Material Earthen		
		Page Ref. Manual 2-12		
Page Ref. Manual	•	The same of the sa		
Structure Drainage Ditches	(B)	Structure Rip-Rap (2)		
Location Zondside		Material Rock		
		Page Ref. Manual 2-9		
Page Ref. Manual 2-12	•			
Structure Cross Drains Pipe	(C)	Structure(3)		
		Material		
Spacing 250' for 6-10's grade		Page Ref. Manual		
Page Ref. Manual 2.8 Table 4				
All structures should be inspected commercial timber is to be cut and	d regularl	y and repaired if necessary. All d all brush and small timber to be		
cut and removed from the site befor	e dirt wor	k begins.		
	REVEGETATI	ON		
Treatment Area I		Treatment Area II		
Lime 2 Tons/ac	re	Lime 2 Tons/acre or correct to pH 6.5		
or correct to pH 6.5		Fortilizer 500 lbs/acre		
Fertilizer 500 lbs/acr	е	Fertilizer 500 lbs/acre (10-20-20 or equivalent)		
Mulch Hay or Straw 2 Tons/ac	re	Mulch Hay or Straw 2 Tons/acre		
Seed* 4,-31 40 lbs/acr		Seed* Kg-31 40 lbs/acre		
Andrian Clover 4 1bs/acm		Ladia o Clover 4 1bs/acre		
lbs/acr	e	lbs/acre		
*Translate all legumes such as vete	h, trefoil	and clovers with the proper protection.		
Inoculate with 3X recommended amount.				
	PLAN PR	EPARED BY Poland S. Complell		
NOTES: Please request landowners'.		ADDRESS Route 1, Box 30		
cooperation to protect new		Duck, WV 25063		
seedling for one growing season. Attach separate sheets as		1.7%		
necessary for comments.	P	PHONE NO. (304) 364-5780		

