



1) Date: November 3, 19 83  
 2) Operator's Well No. 853  
 3) API Well No. 47 - 013 - 3668  
 State County Permit

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

- 4) WELL TYPE: A Oil  / Gas  /  
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow  )
- 5) LOCATION: Elevation: 1095.88' Watershed: Beech Fork  
 District: Washington County: Calhoun Quadrangle: 7.5' Tariff
- 6) WELL OPERATOR Sterling Drilling & Prod. Co., Inc. DESIGNATED AGENT Harry L. Berger, Jr.  
 Address 360 Madison Ave. Fifth Floor Address 710 Virginia St., E.  
New York, New York 10017 Charleston, W.V. 25301
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Deo Mace  
 Address Rt. 1 Box 5  
Sandridge, W.V. 25274
- 9) DRILLING CONTRACTOR: Name UNKNOWN AT THIS TIME  
 Address \_\_\_\_\_
- 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate   
 Plug off old formation  / Perforate new formation   
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, BROWN SHALE
- 12) Estimated depth of completed well, 5525 feet
- 13) Approximate trata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.
- 14) Approximate coal seam depths: 0 Is coal being mined in the area? Yes  No
- 15) CASING AND TUBING PROGRAM

RECEIVED  
 NOV 4 - 1983  
 OIL & GAS DIVISION  
 DEPT. OF MINES

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	9 5/8	LS	33#	X		375'	375'	To Surface	by RULE 15.05
Coal									Sizes
Intermediate	7"	J-55	20#	X		2280'	2280'	100 sks	OR AS REG BY DEPT. OF MINES RULE 15.01
Production	4 1/2	ERW	10.5#	X			5525'	250 sks	
Tubing									Depths set
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-013-3668 Date November 21, 1983

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work.** In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires November 21, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

BOND	Agent: <u>[Signature]</u>	Plat: <u>[Signature]</u>	Casing: <u>[Signature]</u>	Fee: <u>5825</u>
------	---------------------------	--------------------------	----------------------------	------------------

[Signature]  
 Administrator, Office of Oil and Gas

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

1) WELL LOCATION: B (If Gas Production) / A (If Oil Production) / C (If Water Production) / D (If Other Production) / E (If Shallow) / F (If Deep)

2) WELL OPERATOR: [Name] / [Address] / [City, State, Zip]

3) DRILLING CONTRACTOR: [Name] / [Address] / [City, State, Zip]

4) PROPOSED WELL WORK: [Type of work]

5) ESTIMATED DEPTH OF COMPLETED WELL: [Depth]

6) APPROXIMATE UASL DEPTH: [Depth]

7) IS COAL BEING MINED IN THE AREA? Yes/No

OFFICE USE ONLY

This part of Form IV-2(b) is to record the dates of certain occurrences and any follow-up inspections.

Application received	Follow-up inspection(s)
Well work started	"
Completion of the drilling process	"
Well Record received	"
Reclamation completed	"

OTHER INSPECTIONS

Reason: \_\_\_\_\_

Reason: \_\_\_\_\_

05/17/2024

NOTE: Keep one copy of this permit posted at the drilling location. See the reverse side of the APPLICANT'S COPY for instructions to the well operator.



1) Date: November 3, 1983  
2) Operator's Well No. 853  
3) API Well No. 47-013-3668  
State County Permit

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OFFICE OF OIL & GAS  
NOTICE OF APPLICATION FOR A WELL WORK PERMIT

4) SURFACE OWNER(S) OF RECORD TO BE SERVED  
(i) Name Sam O. Thompson  
Address Milo Rt. Box 17  
Linden, W.V. 25256  
(ii) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(iii) Name \_\_\_\_\_  
Address \_\_\_\_\_

5(i) COAL OPERATOR UNOPERATED  
Address \_\_\_\_\_  
5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name UNKNOWN  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
5(iii) COAL LESSEE WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:  
(1) The Application for a Well Work Permit on Form IV-2(B) (or Form IV-4 if the well is to be plugged, which sets out the parties involved in the drilling or other work and describes the well and its location and, if applicable, the proposed casing and cementing program;  
(2) The plat (surveyor's map) showing the well location on Form IV-6; and  
(3) The Construction and Reclamation Plan on Form IV-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

RECEIVED  
NOV 4 - 1983

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

OIL & GAS DIVISION  
DEPT. OF MINES

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.

6) EXTRACTION RIGHTS  
Check and provide one of the following:  
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)  
7) ROYALTY PROVISIONS  
Is the right to extract, produce or market the oil or gas based upon a lease or leases or other contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No   
If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit 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 Construction and Reclamation Plan.

The truth of the information on the Notice and Application is verified and sworn to and the Notice is signed on behalf of the Well Operator in my County and State by  
Harry L. Berger, Jr.  
this 3 day of November, 1983.  
My commission expires May 10, 1989.  
David M. Gillespie  
Notary Public, Kanawha County,  
State of West Virginia

WELL  
OPERATOR Sterling Drilling & Prod. Co., Inc.  
By Harry L. Berger  
Its Designated Agent  
Address 710 Virginia St., E.  
Charleston, W.V. 25301  
Telephone 342 - 0121

05/17/2024



I N S T R U C T I O N S T O A P P L I C A N T

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 § 22-4-1k 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 § 22-4-1k(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 § 22-4-1a(c) and 22-3-12a, and (v) if applicable, the consent 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 § 22-4-1m, 22-4-2, 22-4-2a, and 22-4-2b.

---

INFORMATION SUPPLIED UNDER CODE § 22-4-11(d)

IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

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

- (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:

<u>Grantor, lessor, etc.</u>	<u>Grantee, lessee, etc.</u>	<u>Royalty</u>	<u>Book Page</u>
Ottice Brannon Arnoldsburg Rd. Spencer, W.V. 25276	Sterling Drilling & Prod. Co., Inc.	1/8	080/246

Eric R. Brannon  
Sam O. Thompson

05/17/2024



851, 852, 853

P 522

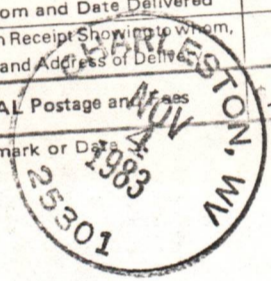
051 894

NEVER FOR RETURN MAIL  
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to <b>SAM O. THOMPSON</b>	
Street and No. <b>MILO RT. BOX 17</b>	
P.O., State and ZIP Code <b>LINDEN, W.V. 25276</b>	
Postage	\$71
Certified Fee	75
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	60
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	206
Postmark or Date	

PS Form 3800, Feb. 1982



RECEIVED

NOV 4 - 1983

OIL & GAS DIVISION  
DEPT. OF MINES

05/17/2024



IV-35  
(Rev 8-81)



RECEIVED  
SEP 10 1984

State of West Virginia  
OIL & GAS DIVISION Department of Mines  
DEPT. OF MINES Oil and Gas Division

Date August 31, 1984  
Operator's Well No. 853  
Farm Ottice Brannon, et. al.  
API No. 47 - 013 - 3668

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

WELL TYPE: Oil \_\_\_ / Gas x / Liquid Injection \_\_\_ / Waste Disposal \_\_\_ /  
(If "Gas," Production x / Underground Storage \_\_\_ / Deep \_\_\_ / Shallow \_\_\_ /)

LOCATION: Elevation: 1095.88' Watershed Beech Fork  
District: Washington County Calhoun Quadrangle 7.5' Tariff

COMPANY Sterling Drilling & Production Co., Inc.

ADDRESS 710 Virginia St., E, Charleston, WV 25301  
DESIGNATED AGENT Harry L. Berger, Jr.

ADDRESS 710 Va. St., E. Charleston, WV 25301

SURFACE OWNER Sam O. Thompson

ADDRESS

MINERAL RIGHTS OWNER Ottice Brannon, et. al.

ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK Deo Mace

ADDRESS Rt. 1, Box 5, Sandridge, WV 25274

PERMIT ISSUED November 21, 1983

DRILLING COMMENCED March 16, 1984

DRILLING COMPLETED March 22, 1984

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8	378'	378'	Surface
8 5/8			
7	2270'	2270'	200 sks
5 1/2			
4 1/2		5474'	320 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5525 feet

Depth of completed well 5541' KB feet Rotary x / Cable Tools

Water strata depth: Fresh 112 feet; Salt 1430 feet

Coal seam depths: Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3630' - 5453' feet

Gas: Initial open flow --- Mcf/d Oil: Initial open flow --- Bbl/d

Final open flow 746 Mcf/d Final open flow --- Bbl/d

Time of open flow between initial and final tests 6 hours

Static rock pressure 1200 psig (surface measurement) after 96 hours shut in

(If applicable due to multiple completion--)

Second producing formation Pay zone depth feet

Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d

Final open flow Mcf/d Oil: Final open flow Bbl/d

Time of open flow between initial and final tests hours

Static rock pressure psig (surface measurement) after hours shut in

05/17/2024

CAL - 3668



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

Perforations: Stage One: 28 holes 4816' - 5453'  
 Stage Two: 24 holes 4309' - 4698'  
 Stage Three: 26 holes 3630' - 4180'

Treatment: Stage One: 24 bbls 15% HCL; 1780 MSCF N<sub>2</sub>; BD 4000#  
 Stage Two: 24 bbls 15% HCL; 1760 MSCF N<sub>2</sub>; BD 3300#  
 Stage Three: 24 bbls 15% HCL; 1780 MSCF N<sub>2</sub>; BD 2840#

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all free gas and salt water, coal, oil and c
					All measurements 10'KB
Sandstone and Shale			0	1410	
Salt Sand			1410	1462	
Shale			1462	1560	
Sand			1560	1594	
Shale			1594	1640	
Salt Sand			1640	1743	
Sandy Shale			1743	1805	
Maxon Sandstone			1805	1850	
Shale			1850	1890	
Little Lime			1890	1927	
Pencil Cave			1927	1941	
Big Lime			1941	2093	
Big Injun			2093	2116	
Siltstone and Shale			2166	2424	
Sunbury Shale			2424	2446	
Sandy Siltstone and Shale			2446	2787	
Grey Silty Shale			2787	4558	
Grey Sandy Siltstone			4558	4569	
Grey Shale			4569	4812	
Grey Siltstone			4812	4852	
Grey Shale			4852	4982	
Grey Siltstone			4982	5084	
Grey Shale			5084	5541	
					KB - 5541'

(Attach separate sheets as necessary)

Sterling Drilling and Production Co., Inc. 05/17/2024  
 Well Operator

By: *Harry J. Berger*  
 Date: 9-4-84

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



RECEIVED

MAR 20 1984

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

OIL & GAS DIVISION

OIL AND GAS WELLS DIVISION

DEPT. OF MINES

INSPECTOR'S WELL REPORT

Permit No. 13-3668

Oil or Gas Well (KIND)

Company <u>Stirling</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>Brannon / Thompson</u>	16			Kind of Packer _____
Well No. _____	13			
District _____ County _____	10			Size of _____
Drilling commenced _____	8 1/4			
Drilling completed _____ Total depth _____	6 5/8			Depth set _____
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom _____
Volume _____ Cu. Ft.	Liners Used			Perf. top _____
Rock pressure _____ lbs. _____ hrs.				Perf. bottom _____
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY _____			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names Hunt & Casto

Remarks: Bob Reel - Stirling

378' 9 5/8" casing, Dowell 5K5 cement, 3-17-84  
no circulation at all. Ran two baskets at approx 200'  
& at approx. 60'.  
Rig crew will mix cement & fill from top.

3-17-84

DATE

Des Moore 05/17/2024









State of West Virginia  
Department of Mines  
Oil and Gas Division  
Charleston 25305

FINAL INSPECTION REPORT  
INSPECTORS COMPLIANCE REPORT  
September 24, 1984



COMPANY Sterling Drilling & Prod. Co.  
710 Virginia Street, East  
Charleston, West Virginia 25301

PERMIT NO 013-3668 (11-21-83)  
FARM & WELL NO Sam O. Thompson #853  
DIST. & COUNTY Washington/Calhoun

RULE	DESCRIPTION	IN COMPLIANCE	
		YES	NO
23.06	Notification Prior to Starting Work	_____	_____
25.04	Prepared before Drilling to Prevent Waste	_____	_____
25.03	High-Pressure Drilling	_____	_____
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 Waste	_____	_____
23.04	Reclaimed Drilling Pits	_____	_____
23.05	No Surface or Underground Pollution	_____	_____
23.07	Requirements for Production & Gathering Pipelines	_____	_____
16.01	Well Records on Site	_____	_____
16.02	Well Records Filed	_____	_____
7.05	Identification Markings	_____	_____

I HAVE INSPECTED THE ABOVE CAPTIONED WELL AND RECOMMEND THAT IT BE RELEASED:

SIGNED *Deer Mae*

DATE 6-27-85

Your well record was received and reclamation requirements approved. In accordance with Chapter 22, Article 4, Section 2, the above well will remain under bond coverage for the life of the well.

*T. L. ...*  
Administrator-Oil & Gas Division

July 3, 1985  
DATE

05/17/2024



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

1.0 API well number:  
(If not assigned, leave blank. 14 digits.) 47 - ~~113~~ <sup>013</sup> - 3668 -

2.0 Type of determination being sought:  
(Use the codes found on the front of this form.)  
Section of NGPA 107 Category Code \_\_\_\_\_

3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)  
5541 feet

4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)  
Name Sterling Drilling and Production Co. Inc. 018084  
Street 710 Virginia St. East, Arcade Building Seller Code  
City Charleston, WV 25301 State \_\_\_\_\_ Zip Code \_\_\_\_\_

5.0 Location of this well: (Complete (a) or (b).)  
(a) For onshore wells (35 letters maximum for field name.)  
Field Name Washington District  
County Calhoun State WV  
(b) For OCS wells:  
Area Name \_\_\_\_\_ Block Number \_\_\_\_\_  
Date of Lease: \_\_\_\_\_  
Mo. Day Yr. OCS Lease Number \_\_\_\_\_

(c) Name and identification number of this well: (35 letters and digits maximum.)  
Brannon 853

(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)  
\_\_\_\_\_

6.0 (a) Name and code number of the purchaser. (35 letters and digits maximum. If code number not available, leave blank.)  
Name Undedicated Buyer Code \_\_\_\_\_  
(b) Date of the contract:  
Mo. Day Yr. \_\_\_\_\_

(c) Estimated total annual production from the well:  
22 Million Cubic Feet

	(a) Base Price	(b) Tax	(c) All Other Prices (Indicate (+) or (-).)	(d) Total of (a), (b) and (c)
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	S/MMBTU <u>5 . 8 3 4</u>	_____	_____	_____
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU _____	_____	_____	_____

9.0 Person responsible for this application:

Agency Use Only  
Date Received by Juris. Agency SFP 10 1984  
Date Received by FERC \_\_\_\_\_

Name Harry L. Berger, Jr. Designated Agent  
Signature Harry L. Berger Jr Title  
9-4-84  
Date Application is Completed  
304-342-0121 05/17/2024  
Phone Number



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 Buyer/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

Use the codes in the table below for type of determination in item 2.

Section of NGPA (a)	Category Code (b)	Description (c)
102	1	New OCS lease
102	2	New onshore well (2.5 mile test)
102	3	New onshore well (1000 feet deeper test)
102	4	New 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 enhancement gas
107	6	New tight formation gas
107	7	Recompletion tight formation gas
108	0	Stripper well
108	1	Stripper well - seasonally affected
108	2	Stripper well - enhanced recovery
108	3	Stripper well - temporary pressure buildup
108	4	Stripper well - protest procedure

Enter the appropriate information regarding other Purchasers/Contracts.

Contract Date (Mo, Da, Yr) (a)	Purchaser (b)	Buyer Code (c)

Remarks:



STATE OF WEST VIRGINIA

DEPARTMENT OF MINES, OIL AND GAS DIVISION

SEP 27 1984

COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

Date: August 31, 19 84

AGENCY USE ONLY

Applicant's Name: Sterling Drilling & Production Co., Inc.

WELL DETERMINATION FILE NUMBER

Address: 710 Virginia Street, E. Arcade Bldg

Charleston, WV 25301

840910 - 107 013 - 3668

Gas Purchaser Contract No.

Use Above File Number on all Communications Relating to This Well

Date of Contract (Month, day and year)

First Purchaser:

Designated Agent: Harry L. Berger, Jr.

Address: (Street or P.O. Box)

Address: Sterling Drilling & Prod. Co., Inc. 710 Virginia St., E. Arcade Bldg. Charleston, WV 25301

(City) (State) (Zip Code)

FERC Seller Code 018084

FERC Buyer Code

NAME AND TITLE OF PERSON TO WHOM QUESTIONS CONCERNING THIS APPLICATION SHALL BE ADDRESSED:

Name: Harry L. Berger, Jr. Agent (Print) (Title)

Signature: Harry L. Berger, Jr.

Address: Sterling Drilling & Prod. Co., Inc. 710 Virginia St., E., Arcade Bldg. (Street or P.O. Box)

Charleston, WV 25301 (City) (State) (Zip Code)

Telephone: 304 342-0121 (Area Code) (Phone Number)

(Certificate of Proof of Service to Purchaser)

NGPA Category Applied For

NGPA SECTION/SUBSECTION

- 102 New Natural Gas
102-2 2.5 Mile Test
102-3 1000 Foot Deeper Test
102-4 New Onshore Reservoir

- 108 Stripper Well Natural Gas
108- Stripper Well
108-1 Seasonally Affected
108-2 Enhanced Recovery
108-3 Temporary Pressure Buildup

- 103 New Onshore Production Well
103 New Onshore Production Well

- 107 High Cost Natural Gas
107-0 Deep (more than 15,000 feet)
107-1 Geopressured Brine
107-2 Coal Seams
X 107-3 Devonian Shale
107-5 Production enhancement
107-6 New Tight Formation
107-7 Recompletion Tight Formation

AGENCY USE ONLY

APPROVED

OCT -3 1984 05/17/2024

RECEIVED

SEP 10 1984

OIL & GAS DIV. DEPT. OF MINES



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

Operator: Sterling Drilling & Production Co., Inc.

Agent: H.L. Berger

Type Determination being sought - 107 (Devonian Shale)

API Well No.: 47-013-3668

Well Name: Brannon #053

West Virginia Office of Oil and Gas  
 References: SJA File No.

County: Calhoun

Vol.      Page      Line     

I. NOTE: A Gamma Ray Log has been marked with the (a) Shale Base Line, (b) a line representing 0.7 x (Shale Base Line), (c) intervals with Gamma Ray units less than 0.7 x (Shale Base Line) and that log is included with this analysis.

II. Gamma Ray elevation indices:

A. Shale Base Line (API Units)

1. GR Value at Base Line = 160 \* API Units

2. Remarks:

*Gamma Ray Scale = 0 → 200 API Units*

B. Gamma Ray Log Value at 0.7 x Value at Base Line

1. GR Value = 160 \* API Units

2. Calculation:  $\frac{0.7 \text{ (GR Value at Base Line)}}{0.7 \text{ (160 *)}} = \underline{112}$  API Units

III. Intervals with GR index less than 0.7 x (Value at Base Line):

Interval		Thickness of Interval Feet	Feet of less than* 0.7 (Shale Base Line) Feet
From**	To***		
2446'	5541'		

Total Devonian Interval 3095'

Total Less Than 0.7 (Shale Base)

9'

% Less Than 0.7 (Shale Base Line) =  $\frac{0.003}{3095} \times 100 = \underline{0.3}$  %

05/17/2024

\*Marked on log included with analysis.

\*\*Top of Devonian Section Recorded on First Interval in this Column.

\*\*\*Lesser of TD or Bottom of Devonian Section Recorded as last Interval in this Column.



DEPARTMENT OF MINES OIL AND GAS DIVISION

Operator's  
Well No. Brannon 853

API Well No.  
47 - 013 - 3668  
State County Permit

WELL CLASSIFICATION FORM

HIGH COST GAS WELL - DEVONIAN SHALE

NGPA Section 107

DESIGNATED AGENT Harry L. Berger, Jr.

ADDRESS Arcade Building; 710 Virginia St., E.  
Charleston, WV 25301

LOCATION Elevation 1095.88'

WELL OPERATOR Sterling Drilling and Production Watershed Beech Fork  
Co., Inc.  
ADDRESS 710 Virginia St., East Dist. Washington County Calhoun Quad. 7.5 Tariff  
Charleston, WV 25301

Gas Purchase  
Contract No. \_\_\_\_\_

GAS PURCHASER \_\_\_\_\_  
ADDRESS \_\_\_\_\_

Meter Chart Code \_\_\_\_\_

Date of Contract \_\_\_\_\_

\* \* \* \* \*

Date surface drilling began: March 16, 1984

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

Bottom Hole Pressure. PSIA -- Pf = Pwe XLGS

$$t = 60 + (0.0075 \times 5541) + 459.67 = 561 \quad X = \frac{1}{53.34} \times 561 = .0000334$$

$$Pf = 1200 \times 2.7183 \times .0000334 \times 4542 \times .690 \times 1.09 = 1345 \text{ PSIA}$$

AFFIDAVIT

I, Harry L. Berger, Jr., having been first sworn according to law, state that I have calculated the percentage of footage of the producing interval which is not Devonian Shale as indicated by a Gamma Ray index of less than 0.7 if a Gamma Ray log described in subparagraph (3)(1) or (3)(11)(A) has been filed, or as indicated by the report described in subparagraph (3)(11)(B); I have demonstrated that the percentage of potentially disqualifying non-shale footage is equal to or less than five (5) percent of the gross Devonian age interval; and I have no knowledge of any information not described in the application which is inconsistent with a conclusion that the well qualifies as a high-cost natural gas well.

Harry L. Berger, Jr.

STATE OF WEST VIRGINIA

COUNTY OF Kanawha, TO-WIT:

I, JoAnn K Brooks, a Notary Public in and for the state and county aforesaid, do certify that Harry L. Berger, Jr., whose name is signed to the writing above, bearing date the 31<sup>st</sup> day of August, 1984, has acknowledged the same before me, in my county aforesaid.

05/17/2024

Given under my hand and official seal this 31<sup>st</sup> day of August, 1984.  
My term of office expires on the 27 day of October, 1991.

(NOTARIAL SEAL)

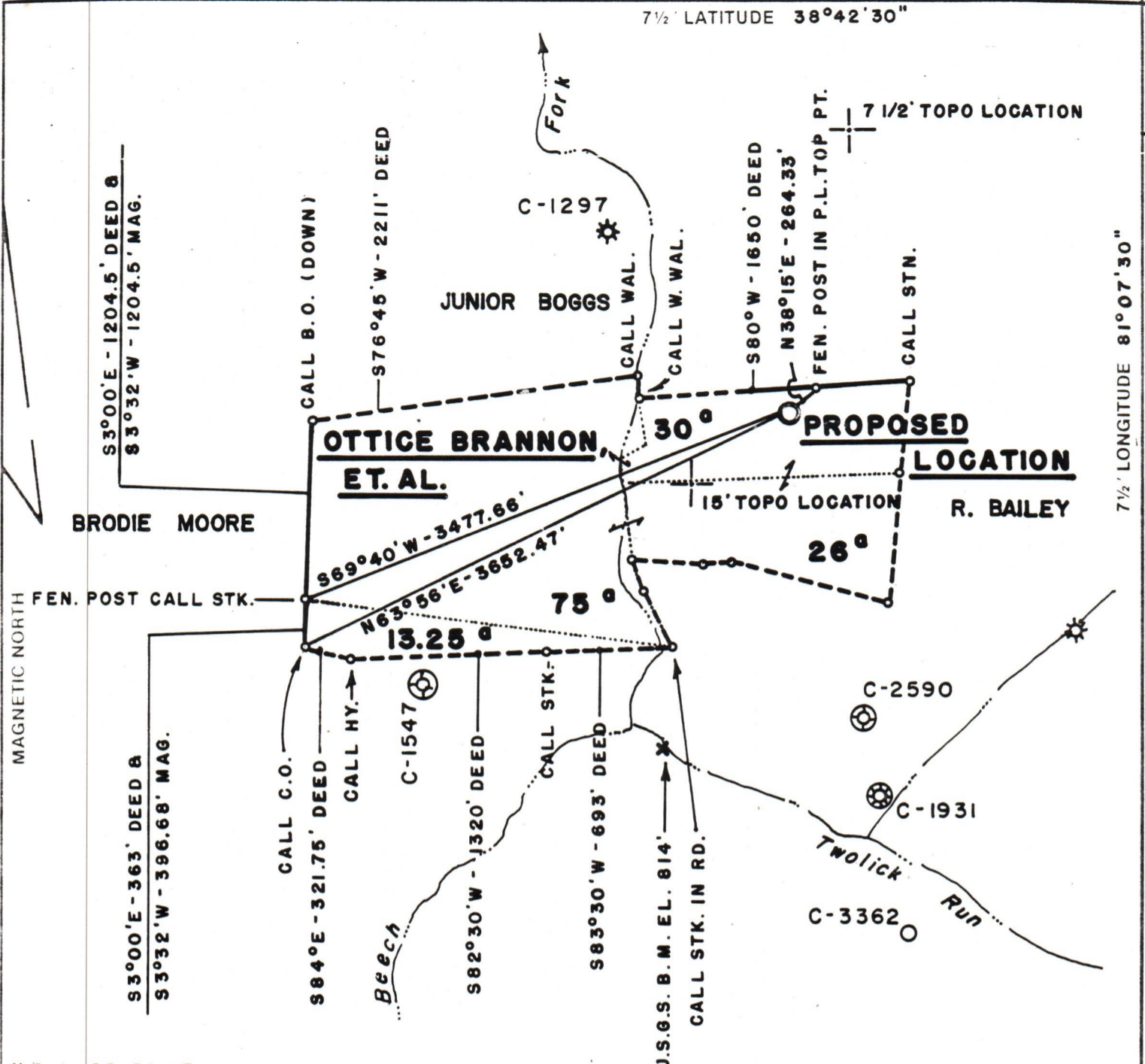
JoAnn K Brooks  
Notary Public



15' LATITUDE 38°45'

4050'

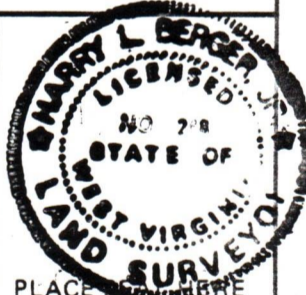
7 1/2' LATITUDE 38°42'30"



N.B. H-25, PG. 47

FILE NO 045-032 NO. 3  
 MAP NO 74-A  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION U.S.G.S. DATA B.M. SHOWN EL. 814'

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.  
 (SIGNED) *Harry L. Berger, Jr.*  
 HARRY L. BERGER, JR. L.L.S. 248



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE OCT. 3, 19 83  
 OPERATOR'S WELL NO. 853  
 API WELL NO. 47-013-3668  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1095.88' WATER SHED BEECH FORK  
 DISTRICT WASHINGTON COUNTY CALHOUN  
 QUADRANGLE 7 1/2' TARIFF (OTTER N.W.)  
 SURFACE OWNER SAM O. THOMPSON ACREAGE 134 TOTAL 134  
 OIL & GAS ROYALTY OWNER OTTICE BRANNON, ET. AL. LEASE ACREAGE 134  
 LEASE NO. 045-032  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION BROWN SHALE ESTIMATED DEPTH 5525'  
 OPERATOR STERLING DRILLING & PRODUCTION CO. INC. AGENT HARRY L. BERGER  
 ADDRESS 360 MADISON AVE. - 5TH FLOOR ADDRESS 710 VIRGINIA ST., E. CHARLESTON, WV 25301

05/17/2024





DATE 10-11-83

WELL NO. Brannon # 853

API NO. 47-013-3668

State of West Virginia  
Department of Mines  
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Sterling Drilling & Prod. Co WELL OPERATOR Sterling Drilling & Prod  
Address 360 Madison Ave.- NY, NY 10017 Address c/o H.L. Berger - Chars., WV  
Telephone (212) 949-9100 Telephone (304) 342-0121

LANDOWNER Sam O. Thompson

SOIL CONS. DISTRICT Little Kanawha SCD

Revegetation to be carried out by Sterling Drilling & Prod. Co.-H.L. Berger (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan: 10-12-83 (Date)

Jarrett Newton  
(SCD Agent)

RECEIVED

LOCATION

NOV 4 - 1983 (1)

ACCESS ROAD

Structure Culvert (A)

Spacing Size 16"

Page Ref. Manual 2-8

Structure Drainage Ditches (B)

Spacing Roadside

Page Ref. Manual 2-12

Structure Cross Ditches (C)

Spacing 100' spacing for 8-10% grades

Page Ref. Manual 2-4

Structure \_\_\_\_\_

Material \_\_\_\_\_

Page Ref. Manual \_\_\_\_\_

Structure Rip-Rap (2)

Material Rock

Page Ref. Manual 2-9

Structure \_\_\_\_\_ (3)

Material \_\_\_\_\_

Page Ref. Manual \_\_\_\_\_

OIL & GAS DIVISION  
DEPT. OF MINES

All structures should be inspected regularly and repaired if necessary. All commercial timber is to be cut and stacked and all brush and small timber to be cut and removed from the site before dirt work begins.

REVEGETATION

Treatment Area II

Treatment Area I

Lime 2 Tons/acre

or correct to pH 6.5

Fertilizer 600 lbs/acre  
(10-20-20 or equivalent)

Mulch Hay 2 Tons/acre

Seed\* Ky-31 35 lbs/acre

Maduro Clover 4 lbs/acre

\_\_\_\_\_ lbs/acre

Lime 2 Tons/acre

or correct to pH 6.5

Fertilizer 600 lbs/acre  
(10-20-20 or equivalent)

Mulch Hay 2 Tons/acre

Seed\* Ky-31 35 lbs/acre

Maduro Clover 4 lbs/acre

\_\_\_\_\_ lbs/acre

\*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

Moore's Well Services, Inc. 05/17/2024  
PLAN PREPARED BY Richard A. Campbell

ADDRESS Route 1 Box 30

Duck, WV 25063

PHONE NO. (304) 364-5780

NOTES: Please request landowners' cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.



