



1) Date: November 3, 19 83
 2) Operator's Well No. 852
 3) API Well No. 47 - 013 - 3667
 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 X /
 B (If "Gas", Production X / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: 852.95' 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 X / 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, 5200 feet
- 13) Approximate strata depths: Fresh, _____ feet; salt, _____ feet.
- 14) Approximate coal seam depths: 0 Is coal being mined in the area? Yes _____ No X
- 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		200'	200'	To Surface	<u>By Rule 15.05</u>
Coal									Sizes
Intermediate	7"	J-55	20#	X		1970'	1970'	100 sks	
Production	4 1/2	ERW	10.5#	X			5200'	250 sks	<u>OR AS REQ.</u> <u>By rule 15.01</u>
Tubing									Perforations:
Liners									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-013-3667 Date November 21, 19 83

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: MARKET BOND	Agent: <u>✓</u>	Plat: <u>✓</u>	Casing: <u>✓</u>	Fee: <u>5825</u>
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[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: District: _____ County: _____ Township: _____ Range: _____ Section: _____

2) WELL OPERATOR: Name: _____ Address: _____ City: _____ State: _____ Zip: _____

3) DRILLING CONTRACTOR: Name: _____ Address: _____ City: _____ State: _____ Zip: _____

4) PROPOSED WELL WORK: Depth: _____ ft. (Shallow/Deep) Other physical change in well (specify): _____

5) GEOLOGICAL TARGET FORMATION: _____

6) APPROXIMATE COAL SEAM DEPTH: _____ ft. (Approximate true depth/True)

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

Casing or Tubing Type	Size	Code	Specifications		New	Used	Footage	Feet in Well	Centralizer (Cubic Feet)	Packers
			Weight per Ft.	Grade						
Production	7 1/2"	EW	20#	10.5	X		200'	200'		
Intermediate	5 1/2"	LS	30#	12.5	X		200'	200'		
Coal										
Screen										
Conductor										

OFFICE USE ONLY

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

	Date	Date(s)
Application received		
Well work started		
Completion of the drilling process		
Well Record received		
Reclamation completed		

OTHER INSPECTIONS

Reason: _____

Reason: _____

05/17/2024

1) Date: November 3, 1983
2) Operator's Well No. 852
3) API Well No. 47-013-3667
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. 25276
(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.



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.

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

David M. Gillespie
Notary Public, Kanawha County,
State of West Virginia

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

(See Reverse)

Sent to SAM O. THOMPSON	
Street and No. MILO RT. BOX 17	
P.O., State and ZIP Code LINDEN, W.V. 25276	
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 Beneficiary	
TOTAL Postage and Fees	206
Postmark or Date	

PS Form 3800, Feb. 1982

WESTON W.V.
NOV 4 1983
1035 25301

RECEIVED

NOV 4 - 1983

OIL & GAS DIVISION
DEPT. OF MINES

05/17/2024

RECEIVED
MAY 4 - 1984



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

Date May 1, 1984
Operator's
Well No. 852
Farm Brannon
API No. 47 - 013 - 3667

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 / Underground Storage / Deep / Shallow x /)

LOCATION: Elevation: 852.95 Watershed Beech Fork
District: Washington County Calhoun Quadrangle Tariff 7 1/2'

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 Mild Rt., Box 17, Linden, WV 25276

MINERAL RIGHTS OWNER Ottice Brannon, etal

ADDRESS Box 57 Otto Star Rt. Spencer, WV 25276

OIL AND GAS INSPECTOR FOR THIS WORK Deo
Mace ADDRESS Sandridge, WV. 25274

PERMIT ISSUED November 21, 1983

DRILLING COMMENCED February 16, 1984

DRILLING COMPLETED February 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	264'	264'	95 sks
8 5/8			
7	2019'	2019'	175 sks
5 1/2			
4 1/2		5216'	300 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Brown Shale Depth 5250 feet

Depth of completed well 5250 feet Rotary x / Cable Tools

Water strata depth: Fresh 160 feet; Salt 790 feet

Coal seam depths: NONE Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation Devonian Brown Shale Pay zone depth 3337'-5117' feet

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

Final open flow 277 Mcf/d Final open flow Show Bbl/d

Time of open flow between initial and final tests 8 hours

Static rock pressure 1050 psig (surface measurement) after 48 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

CAL. 3667

05/17/2024

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

Perforations

1st Stage: 20 holes from 4617' - 5117'
 2nd Stage: 17 holes from 4040' - 4439'
 3rd Stage: 25 holes from 3337' - 3918'

Treatment

1st Stage: 1000 gals 15% HCl, 1.5 MMSCF N₂
 2nd Stage: 1000 gals 15% HCl, 1.5 MMSCF N₂
 3rd Stage: 1200 gals 15% HCl, 1.7 MMSCF N₂

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 MAY 11 1984
 OIL & GAS DIVISION
 DEPT. OF MINES

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Soil			0	6	
Siltstone and Shale			6	300	Fresh water @ 160'
Sandstone			300	332	
Shale			332	425	
Sandstone			425	490	
Shale			490	574	
Sandstone			574	701	
Shale			701	740	
Sandstone			740	912	Salt water @ 790'
Shale			912	944	
Sandstone			944	1048	
Shale			1048	1080	
Sandstone			1080	1103	
Shale			1103	1210	
Sandstone			1210	1256	
Shale			1256	1364	
Salt Sand			1364	1396	
Shale			1396	1428	
Salt Sand			1428	1511	
Shale			1511	1590	
Sandstone			1590	1598	
Shale			1598	1632	
Sandstone			1632	1645	
Shale			1645	1658	
Maxon			1658	1678	
Shale			1678	1684	
Little Lime			1684	1724	
Pencil Cave			1724	1741	
Big Lime			1741	1890	
Big Injun			1890	1916	
Siltstone and Shale			196	2211	
Sunbury Shale			2211	2230	
Siltstone and Shale			2240	2718	
Shale			2718	4594	Gas Show 3337-3918
Siltstone			4594	4633	4040-4439
Shale			4633	4770	4617-5117
Siltstone			4770	4866	
Shale			4866	5250	TD 5250

(Attach separate sheets as necessary)

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

By: Harry J. Berger, Jr.
 Date: 5-1-84

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

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

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FEB 22 1984

OIL & GAS DIVISION

INSPECTOR'S WELL REPORT DEPT. OF MINES

Permit No. 13-3667

Oil or Gas Well _____
(KIND)

Company Sterling

Address _____

Farm S. Thompson

Well No. 852

District Washington County Cal.

Drilling commenced 2-16-84

Drilling completed _____ Total depth _____

Date shot _____ Depth of shot _____

Initial open flow _____ /10ths Water in _____ Inch

Open flow after tubing _____ /10ths Merc. in _____ Inch

Volume _____ Cu. Ft.

Rock pressure _____ lbs. _____ hrs.

Oil _____ bbls., 1st 24 hrs.

Fresh water _____ feet _____ feet

Salt water _____ feet _____ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
16			Kind of Packer _____
13			
10			Size of _____
8 1/4			
6 5/8			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____

NAME OF SERVICE COMPANY _____

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES

_____ FEET _____ INCHES FEET _____ INCHES

_____ FEET _____ INCHES FEET _____ INCHES

Drillers' Names Hunt & S

Remarks: 264' 9 5/8" casing, 90 SKS cement by Cased 2-17-84.

2-17-84
DATE

Des M... 05/17/2024

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

INSPECTOR'S PLUGGING REPORT

Permit No. _____ Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner	Location	Amount	Packer	Location		
PLUGS USED AND DEPTH PLACED			BRIDGES	CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION	RECOVERED	SIZE	LOST

Drillers' Names _____

Remarks: _____

_____ I hereby certify I visited the above well on this date.

DATE

DISTRICT WELL INSPECTOR
05/17/2024

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

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INSPECTOR'S WELL REPORT

OIL & GAS DIVISION
DEPT. OF MINES

Permit No. 13-3667

Oil or Gas Well _____
(KIND)

Company <u> Sterling </u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
	Size			
Address _____	16			Kind of Packer _____
Farm <u> Thompson Brannon </u>	13			
Well No. <u> 852 </u>	10			Size of _____
District <u> Wash </u> County <u> Cal. </u>	8 1/4			
Drilling commenced _____	6 5/8			Depth set _____
Drilling completed _____ Total depth _____	5 3/16			
Date shot _____ Depth of shot _____	3			Perf. top _____
Initial open flow _____ /10ths Water in _____ Inch	2			Perf. bottom _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	Liners Used _____			Perf. top _____
Volume _____ Cu. Ft.				Perf. bottom _____
Rock pressure _____ lbs. _____ hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Oil _____ bbls., 1st 24 hrs.	NAME OF SERVICE COMPANY _____			
Fresh water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
Salt water _____ feet _____ feet	_____ FEET _____ INCHES FEET _____ INCHES			
	_____ FEET _____ INCHES FEET _____ INCHES			

Drillers' Names Hunt 8

Remarks:
 T. D. 5250' 2.23.84
 Rig moving away today.

2.24.84
DATE

W. Mace
DATE

05/17/2024
July 3, 1985
DATE

Form 26
2/16/82

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

RECEIVED

HISTORICAL PLUGGING REPORT

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 - 013 - 3667 -

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

3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.) 5250 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 (25 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 #852

(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
(b) Date of the contract: _____
Buyer Code _____
(c) Estimated total annual production from the well: _____
Mo. Day Yr. 8 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>5.778</u>	_____	_____	_____
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU <u>5.778</u>	_____	_____	_____

9.0 Person responsible for this application:
Agency Use Only
Date Received by Juris. Agency MAY - 4 1984
Date Received by FERC _____
Name Harry L. Berger, Jr. Designated Agent
Signature Harry L. Berger, Jr. Title _____
Date Application is Completed May 2, 1984 Phone No. 304-342-0121

(7) Avg. Daily Gas from Annual Production: _____

(8) Avg. Daily Gas from 90-day ending w/1-120 days _____

(6) Line Pressure: _____ PSIG from Daily _____

(5) Oil Production: _____ From Completion Report _____

10-17. Does lease inventory indicate enhanced recovery being done? _____

10-17. Is affidavit signed? _____ Notarized? _____

Does official well record with the Department confirm the submitted information? _____

Additional information _____ Does computer program confirm? _____

Was Determination Objected to _____ By Whom? _____

05/17/2024

APPLICATION FOR DETERMINATION OF THE

05/17/2024

DEPARTMENT OF MINES OIL AND GAS DIVISION

Operator's
Well No. Brannon #852

API Well No.

47 - 013 - 3667
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 852.95

WELL OPERATOR Sterling Drilling and Production Watershed Beech Fork

ADDRESS 710 Virginia St., East Co., Inc.
Charleston, WV 25301 Dist. Washington County Calhoun Quad. Tariff 7½'

Gas Purchase

Contract No. _____

GAS PURCHASER UNDEDICATED

Meter Chart Code _____

ADDRESS _____

Date of Contract _____

* * * * *

Date surface drilling began: February 16, 1984

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

Bottom Hole Pressure. PSIA -- Pf = Pwe XLGS

$$t = 60 + (0.0075 \times 5250) + 459.67 = 559. X = \frac{1}{53.34} \times 559 = .0000335$$

$$Pf = 1050 \times 2.7183 \times .0000335 \times 4227 \times .690 \times 1.08 = 1167 \text{ PSIA}$$

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)(i) or (3)(ii)(A) has been filed, or as indicated by the report described in subparagraph (3)(ii)(B); I have demonstrated that the percentage of potentially disqualifying non-shale footage is equal to or less than five (5) percent of the gross Devonian age interval; and I have no knowledge of any information not described in the application which is inconsistent with a conclusion that the well qualifies as a high-cost natural gas well.

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 2nd day of May, 19 84, has acknowledged the same before me, in my county aforesaid.

05/17/2024

Given under my hand and official seal this 2nd day of May, 19 84.
My term of office expires on the 27 day of October, 19 91.

(NOTARIAL SEAL)

JoAnn K. Brooks
Notary Public

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

Date May 2, 1984

Operator's Well # Brannon #852

API Well No. 013 - 3667
State County Permit

STATE APPLICATION FOR WELL CLASSIFICATION

Previous File No. _____
(If Applicable)

WELL OPERATOR Sterling Drilling and Production

ADDRESS 710 Virginia St., East
Charleston, WV 25301

DESIGNATED AGENT Harry L. Berger, Jr.

ADDRESS Sterling Drilling & Production Co., Inc.
Arcade Building, Charleston, WV. 25301

Gas Purchase Contract No. _____ and Date _____
Meter Chart Code _____
(Month, day and year)

Name of First Purchaser _____
UNDEDICATED

(Street or P. O. Box)

(City) _____ (State) _____ (Zip Code)

FERC Seller Code 018084 FERC Buyer Code _____

TYPE OF DETERMINATION BEING SOUGHT:

- (1) Initial determination (See FERC Form 121.) Section of NGPA 107 Category Code _____
- (2) Determination that increased production is the result of enhanced recovery technology.
- (3) Determination of a seasonally affected well.

Harry L. Berger, Jr. Agent
Name (Print) _____ Title _____
Harry L. Berger Signature
Sterling Drilling & Production Co., Inc.
Street or P. O. Box _____
Arcade Bldg., Charleston, WV 25301
City _____ State _____ (Zip Code) _____
(304) 342-0121
Area Code Phone Number

(Certificate of Proof of Service to Purchaser)

(All of the above to be completed by the Operator/Applicant)

(To be completed by Jurisdictional Agency: Executed copy to be returned to Operator/Applicant and purchaser, if known)

The Department of Mines has received a request, for certification of the above described well as meeting the requirements of Section _____ under the Natural Gas Policy Act of 1974, (NGPA); or for determination that increased production is the result of enhanced recovery technology under Section 108 of (NGPA); or for determination of a seasonally affected well under Section 108 of (NGPA).

All interested parties are hereby notified that on the _____ day of _____, 19____, at the office of the Oil and Gas Division in Charleston, West Virginia, or as soon thereafter as it may be heard, there will be a public hearing, if requested, or if objection is filed.

This Application is assigned File No. _____

Initial review of information submitted indicates the well is, is not entitled to certification as claimed under the Natural Gas Policy Act (NGPA). A review of this evidence and any additional evidence will be made at the time appointed for a public hearing or as soon thereafter as the matter may be heard.

Unless objections are timely filed or a request for a hearing is made within fifteen (15) days, a hearing will not be held except on ex parte motion of the department and the matter will go to determination.

WEST VIRGINIA DEPARTMENT OF MINES

MAY - 4 1984

05/17/2024

Date received by Jurisdictional Agency: _____

By _____
Title _____

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

Operator: _____ Agent: _____
 Type Determination being sought - 107 (Devonian Shale)
 API Well No.: 47-013-3667 Well Name: Brunnon #852
 West Virginia Office of Oil and Gas County: Calhoun
 References: SJA File No. _____

Vol. _____ Page _____ Line _____

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

II. Gamma Ray elevation indices:

A. Shale Base Line (API Units)

1. GR Value at Base Line = 180 * API Units
2. Remarks: _____

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

1. GR Value = 126 * API Units
2. Calculation: $\frac{0.7 \text{ (GR Value at Base Line)}}{0.7 \text{ (180 *)}} = \underline{126}$ 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***		
<u>2240</u>	<u>5241</u>	<u>3001</u>	<u>84</u>

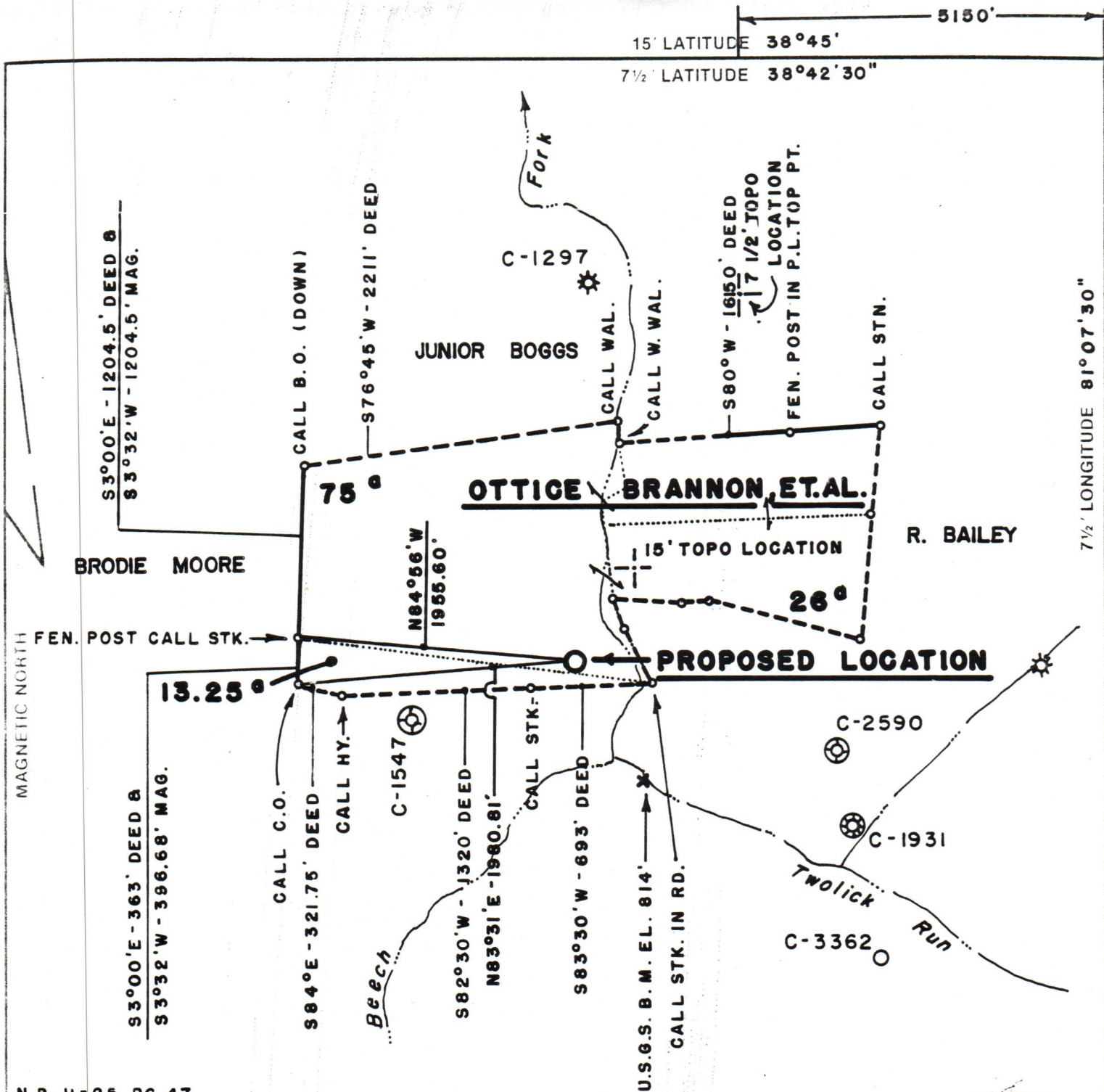
Total Devonian Interval 3001

Total Less Than 0.7 (Shale Base) 84

% Less Than 0.7 (Shale Base Line) = $\frac{0.0279}{1} \times 100 = \underline{2.8\%}$

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.

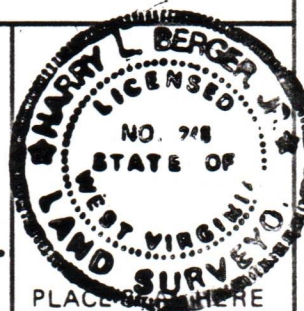


N.B. H-25, PG. 47

FILE NO 045-032 NO. 2
 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, 1983
 OPERATOR'S WELL NO. 852
 API WELL NO. 47-013-3667
 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 832.95' WATER SHED BEECH FORK
 DISTRICT WASHINGTON COUNTY CALHOUN
 QUADRANGLE 7 1/2' TARIFF (OTTER N.W.)

SURFACE OWNER SAM O. THOMPSON ACREAGE 134 TOTAL 05/17/2024
 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 5200'
 OPERATOR STERLING DRILLING & PRODUCTION CO. INC. AGENT HARRY L. BERGER
 ADDRESS 360 MADISON AVE. - 5TH FLOOR ADDRESS 710 VIRGINIA ST., E.
NEW YORK, N.Y. 10017 CHARLESTON, WV 25301



IV-9
(Rev 8-81)

DATE 10-11-83
WELL NO. Brannon # 852
API NO. 47-013-3667

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. Co
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

Jarrett Newton
(SCD Agent)

RECEIVED

NOV 4 - 1983

ACCESS ROAD
Structure Colverts (A)
Spacing Size 16" x Temporary low water 26" x 4
Page Ref. Manual 2-8
Structure Drainage Ditches (B)
Spacing Road side
Page Ref. Manual 2-12
Structure Cross Ditches (C)
Spacing 135' for 5 1/2 grade
Page Ref. Manual 2-4

LOCATION
Structure Diversion Ditch (1)
Material Earthen
Page Ref. Manual 2-12
Structure Rip-Rap (2)
Material Rock
Page Ref. Manual 2-9
Structure _____ (3)
Material _____
Page Ref. Manual _____

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 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
Ladino Clover 4 lbs/acre
_____ lbs/acre

Treatment Area II
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
Ladino Clover 4 lbs/acre
_____ lbs/acre

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

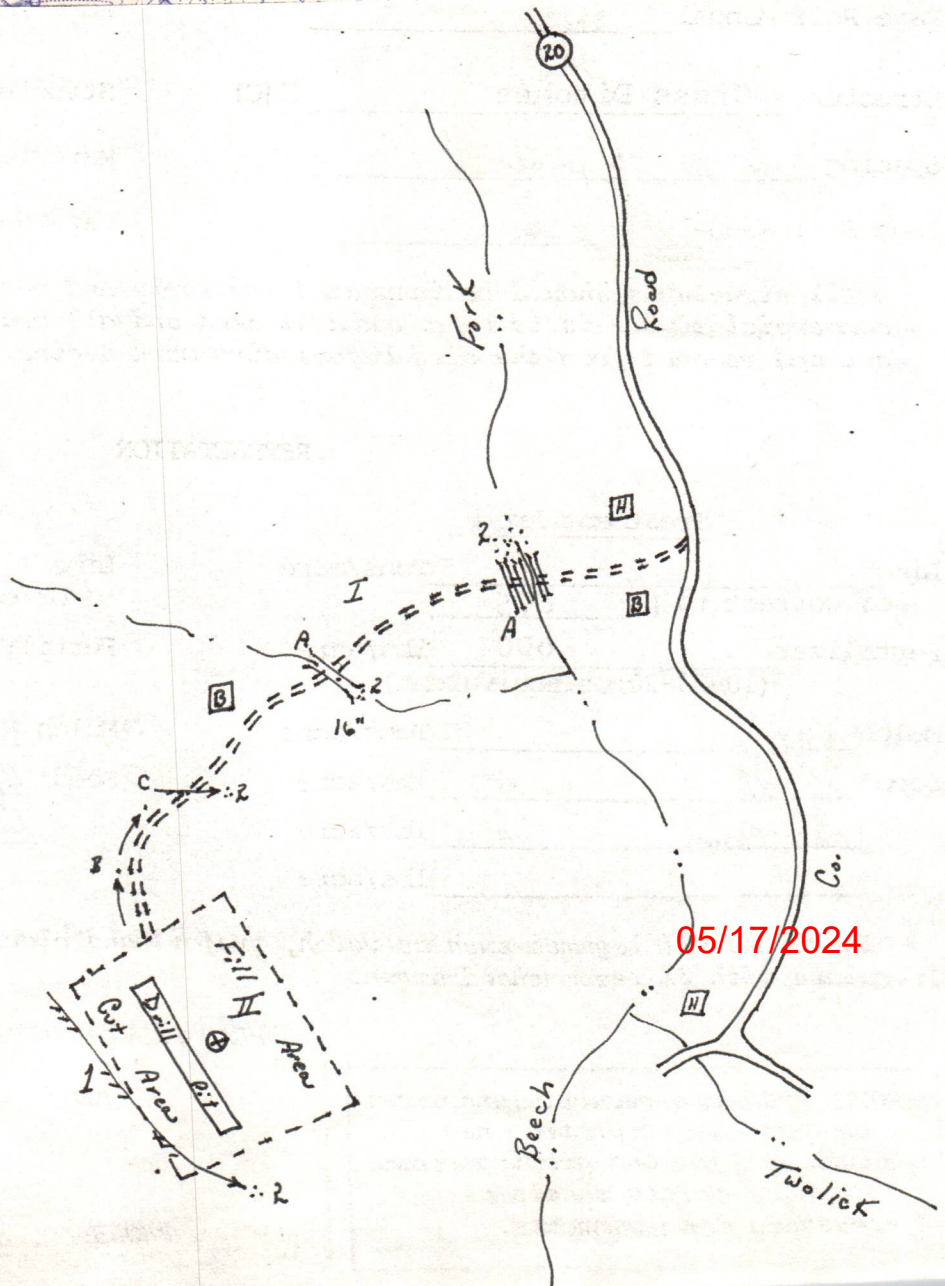
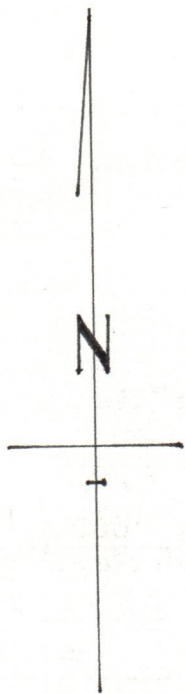
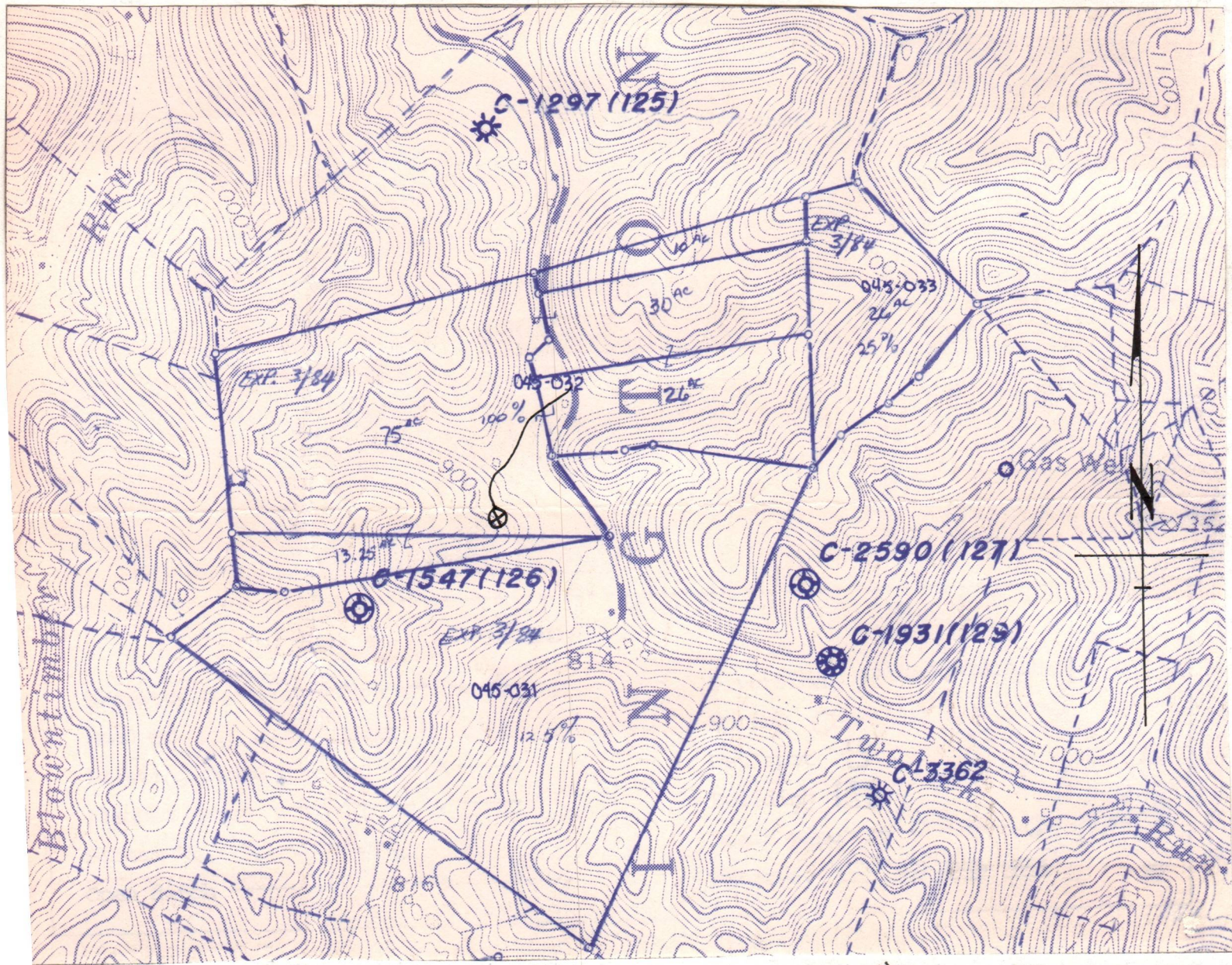
PLAN PREPARED BY Richard A. Campbell

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.

05/17/2024

Moore's Well Services, Inc





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

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT
May 16, 1984

COMPANY Sterling Drilling & Production PERMIT NO 013-3667 (11-21-83)
710 Virginia Street, East FARM & WELL NO Brannon #852
Charleston, West Virginia 25301 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 W. C. Maco

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. H. ...

Administrator-Oil & Gas Division

July 3, 1985

DATE

**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 - 013 - 3667 -

2.0 Type of determination being sought:
(Use the codes found on the front of this form.) 107
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.) 5250 feet

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

5.0 Location of this well: (Complete (a) or (b).)
(a) For onshore wells (35 letters maximum for field name.)
Washington District
Field Name
Calhoun
County State WV
(b) For OCS wells:
Area Name Block Number
Date of Lease:
Mo. Day Yr. OCS Lease Number
Brannon #852

(c) Name and identification number of this well: (35 letters and digits maximum.)
UNDEDICATED
Name Buyer Code
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)
Mo. Day Yr. Million Cubic Feet
8

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

(c) Estimated total annual production from the well:
8 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>5.778</u>	---	---	---
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU <u>5.778</u>	---	---	---

9.0 Person responsible for this application:

Agency Use Only
Date Received by Juris. Agency
MAY - 4 1984
Date Received by FERC

Harry L. Berger, Jr.
Name Harry L. Berger, Jr. Designated Agent
Signature Harry L. Berger, Jr. Title **05/17/2024**
Date Application is Completed May 2, 1984
304-342-0121

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

UNDEDICATED

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:

05/17/2024

PARTICIPANTS:

DATE: MAY 30 1984

BUYER-SELLER COU

WELL OPERATOR: Sterling Drilling and Production Co.

FIRST PURCHASER: Uncommitted

OTHER: _____

W. Va. Department of Mines, Oil & Gas Division
 WELL DETERMINATION FILE NUMBER
840.504 - 107-013 = 3667
 Use Above File Number on all Communications
 Relating to Determination of this Well

APPROVED

MAY 10 1984

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121 _____ Items not completed - Line No. _____
- 2. IV-1 Agent _____
- 3. IV-2 Well Permit _____
- 4. IV-6 Well Plat _____
- 5. IV-35 Well Record _____ Drilling _____ Deepening _____
- 6. IV-36 Gas-Oil Test: Gas Only _____ Was Oil Produced? _____ Ratio _____
- 7. IV-39 Annual Production _____ years
- 8. IV-40 90 day Production _____ Days off line: _____
- 9. IV-48 Application for certification. Complete? _____
- 10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? _____ Affidavit Signed _____
- 18-28. Other: Survey _____ Logs _____ Geological Charts _____
 Structure Map _____ 1: 4000 Map _____ Well Tabulations _____
 Gas Analyses _____
- (5) Date commenced: _____ Date completed _____ Deepened _____
- (5) Production Depth: _____
- (5) Production Formation: _____
- (5) Final Open Flow: _____
- (5) After Frac. R. P. _____
- (6) Other Gas Test: _____
- (7) Avg. Daily Gas from Annual Production: _____
- (8) Avg. Daily Gas from 90-day ending w/1-120 days _____
- (8) Line Pressure: _____ PSIG from Daily _____
- (8) Oil Production: _____ From Completion Report _____
- 10-17. Does lease inventory indicate enhanced recovery being done _____
- 10-17. Is affidavit signed? _____ Notarized? _____
- Does official well record with the Department confirm the submitted information? _____
- Additional information _____ Does computer program confirm? _____
- Was Determination Objected to _____ By Whom? _____

05/17/2024