



1) Date: July 6, 19 84
 2) Operator's Well No. 944
 3) API Well No. 47 - 013 - 3758
 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: 983.71' Watershed: Hog Fork of Barnes Run (LKW16A13)
 District: Lee 2 County: Calhoun Quadrangle: 7.5' Arnoldsburg 219
 6) WELL OPERATOR Sterling Drilling & Prod. Co., Inc. DESIGNATED AGENT Harry L. Berger, Jr.
 Address 360 Madison Ave. Fifth Floor 47550 New York, New York 10017 Address 710 Virginia St., E. 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
 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, 5325 feet
 13) Approximate trata depths: Fresh, _____ feet; salt, _____ feet.
 14) Approximate coal seam depths: 0 Is coal being mined in the area? Yes _____

RECEIVED
 JUL - 9 1984

15) CASING AND TUBING PROGRAM

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		320'	320'	To Surface	by rule 15.05
Coal									Sizes
Intermediate	7"	J-55	20#	X		2220'	2220'	100 sks	
Production	4 1/2	ERW	10.5#	X			5360'	250 sks	Depths set
Tubing								or as req.	by rule 15.0'
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-013-3758 Date July 25, 19 84

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 July 25, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: BLANKET	Agent: <u>LS</u>	Plat: <u>MH</u>	Casing: <u>MH</u>	Fee: <u>7439</u>
----------------------	------------------	-----------------	-------------------	------------------

Margaret J. Dasse
 Administrator, Office of Oil and Gas

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



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

OFFICE USE ONLY

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

1) LOCATION: B (If "Gas", Production) _____ Elevation: _____
 District: _____ County: _____
 2) WELL OPERATOR: _____
 Address: _____
 3) OIL & GAS INSPECTOR TO BE NOTIFIED: _____
 Name: _____ Address: _____
 4) DRILLING CONTRACTOR: _____
 Name: _____ Address: _____
 5) PROPOSED WELL WORK: _____
 Plug off old formation _____
 Redrill _____
 Stimulate _____
 6) GEOLOGICAL TARGET FORMATION: _____
 7) Estimated depth of completed well: _____ feet
 8) Approximate true depth: _____ feet
 9) Approximate coal seam depth: _____ feet
 10) Is coal being mined in the area? Yes _____

Casing or Tubing Type	Size	Grade	Specifications		Footage/Intervals	Cement Bulkup or Sacks (Cubic feet)	Packers
			Weight per Ft.	Wall			
Conductor							
Fresh water							
Coal							
Intermediate							
Production							

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

OTHER INSPECTIONS

Reason:	Agency	Permit	Casing	Fee
Reason: _____				
Reason: _____				

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



IV-9
(Rev 8-81)

DATE 5-28-84

WELL NO. Husk # 944

State of West Virginia
Department of Mines
Oil and Gas Division

API NO. 47 - 013 - 3758

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Sterling Drilling & Prod. CODESIGNATED AGENT Sterling Drilling & Prod.

Address 360 Madison Ave.-NY,NY 10017 Address c/o H.L.Berger - Chas., WV

Telephone (212) 682-0204 Telephone (304) 342-0121

LANDOWNER Randal Brannon 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: 6-18-84 (Date)

Garrett Newton
(SCD Agent)

RECEIVED

JUL -9 1984

ACCESS ROAD

LOCATION

OIL & GAS DIVISION

Structure Culvert (A)

Structure Diversion Ditch DEPT. OF MINES

Size 16"

Material Earthen

Page Ref. Manual 2-8 Table 3

Page Ref. Manual 2-12

Structure Drainage Ditches (B)

Structure Rip-Rap (2)

Location Roadside

Material Rock

Page Ref. Manual 2-12

Page Ref. Manual 2-9

Structure Cross Drains - Pipe (C)

Structure _____ (3)

Spacing 200' for 11-15% + 400' for 2-5%

Material _____

Page Ref. Manual 2-8 Table 4

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

Treatment Area II

Lime 2 Tons/acre
or correct to pH 6.5

Lime 2 Tons/acre
or correct to pH 6.5

Fertilizer 500 lbs/acre
(10-20-20 or equivalent)

Fertilizer 500 lbs/acre
(10-20-20 or equivalent)

Mulch Hay or Straw 2 Tons/acre

Mulch Hay or Straw 2 Tons/acre

Seed* Ly-31 40 lbs/acre

Seed* Ly-31 40 lbs/acre

Ladino Clover 4 lbs/acre

Ladino Clover 4 lbs/acre

lbs/acre

lbs/acre

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

12/01/2023

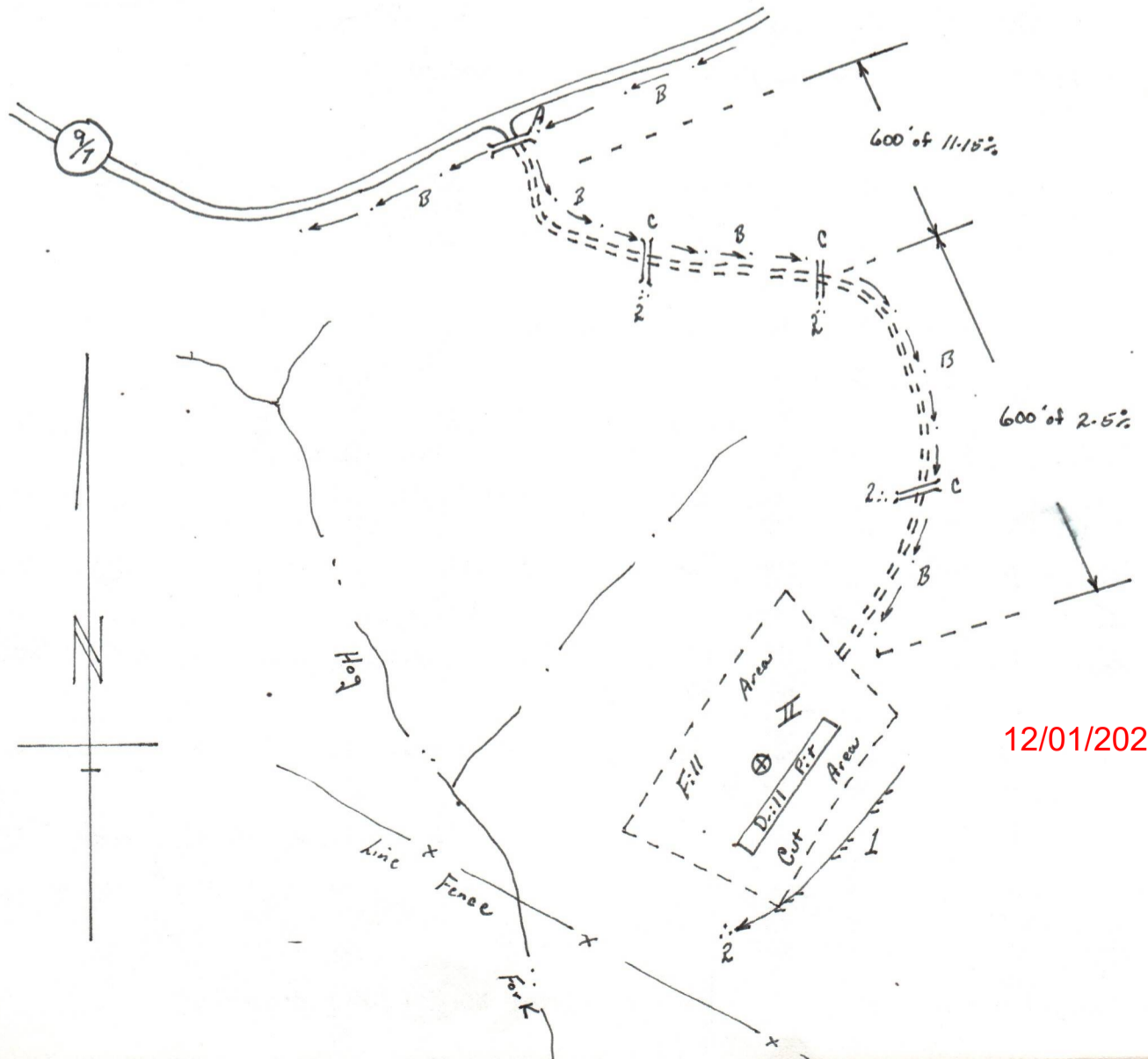
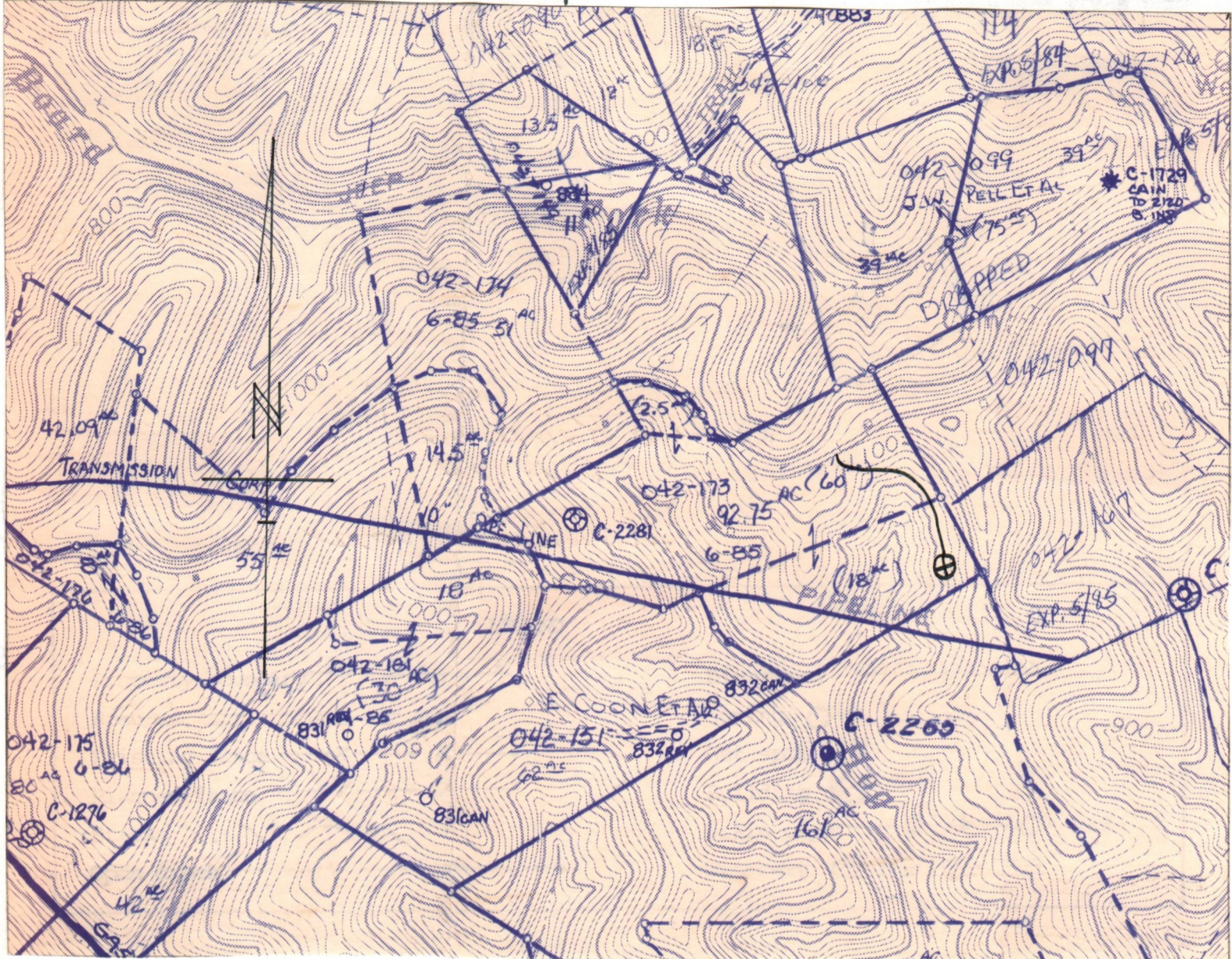
PLAN PREPARED BY Richard X. Campbell

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.



1) Date: July 6, 1984
2) Operator's Well No. 944
3) API Well No. 47-013-3758
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 Randall Brannon
Address General Delivery
Spencer, 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 _____

944
P 377 648 938

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

TO THE PERSON(S) NAME

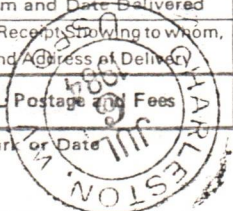
- (1) The Application to be plugged and cemented
- (2) The plat
- (3) The Construction and Reclamation

THE REASON YOU WHICH ARE SUMMARIZED (FORM IV-2(B) OR FORM IV-6) ACTION AT ALL.

Take notice that the operator proposes to drill for a Well Work Permit for a Well Work Permit in the Department of Mines and depicted on attached Construction and Reclamation Plan by hand to the person before the day of

- 6) EXTRACTION RIGHTS
 Included in lease
 I hold the right
 The requirements
- 7) ROYALTY PROVISION
Is the right to compensation for other contracts for compensation to the volume of

Sent to	<u>RANDALL BRANNON</u>
Street and No.	<u>GENERAL DELIVERY</u>
P.O., State and ZIP Code	<u>SPENCER, W.V. 25276</u>
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

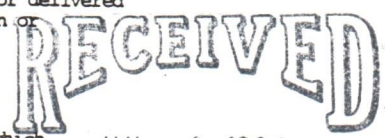


LESSEE WITH DECLARATION ON RECORD:
Name _____
Address _____

and the following documents:
Form IV-4 if the well is drilling or other work, the proposed casing and Form IV-6; and
If the well work is only to determine control and for

COPIES REGARDING THE APPLICATION THE COPY OF THE APPLICATION REQUIRED TO TAKE ANY

the undersigned well operator and accompanying documents to the Department of Mines and Gas, West Virginia as required on attached Application, the plat, and the return receipt for certified mail or delivered (in certain circumstances) on or



JUL - 9 1984

for contracts by which (reverse side for specifics.)

OIL & GAS DIVISION
DEPT. OF MINES
Yes No X

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 6 day of July, 1984.
My commission expires May 10, 1989.
David M. Killipie
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

12/01/2023

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>
Ernest Husk 1320 Broadway Parkersburg, W.V. 26101	Sterling Drilling and Production Co., Inc.	1/8	085/421

Noel & Violet Connolly
Melba & James F. Haught

12/01/2023

SURFACE OWNER'S COPY

RECEIVED

JUL 19 1984



1) Date: July 6, 19 84
 2) Operator's Well No. 944
 3) API Well No. 47 State _____ County _____ Permit _____

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

**OIL & GAS DIVISION
DEPT. OF MINE 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: 983.71' Watershed: Hog Fork of Barnes Run
 District: Lee County: Calhoun Quadrangle: 7.5' Arnoldsburg
- 6) WELL OPERATOR Sterling Drilling & Prod. Co., Inc. 7) 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 9) DRILLING CONTRACTOR:
 Name Deo Mace Name UNKNOWN AT THIS TIME
 Address Rt. 1 Box 5 Address _____
Sandridge, W.V. 25274
- 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, 5325 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

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	<u>9 5/8</u>	<u>LS</u>	<u>33#</u>	<u>X</u>		<u>320'</u>	<u>320'</u>	<u>To Surface</u>	
Coal									Sizes
Intermediate	<u>7"</u>	<u>J-55</u>	<u>20#</u>	<u>X</u>		<u>2220'</u>	<u>2220'</u>	<u>100 sks</u>	
Production	<u>4 1/2</u>	<u>ERW</u>	<u>10.5#</u>	<u>X</u>			<u>5360'</u>	<u>250 sks</u>	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

The law requires a comment period for surface owners. However, the permit can be issued in less than 15 days from the filing of the Application if the surface owner(s) of record sign(s) the following "Voluntary Statement of No Objection" on a facsimile of this surface owner's copy of the Application.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners on the reverse side of this Application for a Well Work Permit, and that I have received copies of (1) a Notice of Application for a Well Work Permit on Form IV-2(A), (2) an Application for a Well Work Permit on Form IV-2(B), (3) a survey plat on Form IV-6, and (4) a Construction and Reclamation Plan on Form IV-9, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued based on those materials.

(For execution by corporation, partnership, etc.)

(For execution by natural persons)

NAME: _____
 By _____
 Its _____ Date _____

Randell Brammer Date: 7-16-84
 (Signature)
 _____ 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.

WR-35

RECEIVED
DEC 16 1985

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY



State of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Rec-50
Date October 22, 1985
Operator's
Well No. 944
Farm Husk
API No. 47 - 013 - 3758

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 X /)

LOCATION: Elevation: 983.71' Watershed Hog Fork of Barnes Run
District: Lee County Calhoun Quadrangle Arnoldsburg 7 1/2'

COMPANY Sterling Drilling & Production Co., Inc.

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

DESIGNATED AGENT William E. Stover

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

SURFACE OWNER Randall Brannon

ADDRESS General Delivery, Spencer, WV 25276

MINERAL RIGHTS OWNER Ernest Husk, et al

ADDRESS 1320 Broadway, Parkersburg, WV 26101

OIL AND GAS INSPECTOR FOR THIS WORK Deo
Mace Rt. 1 Box 5
ADDRESS Sandridge, WV 25274

PERMIT ISSUED July 25, 1984

DRILLING COMMENCED January 18, 1985

DRILLING COMPLETED January 25, 1985

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	345'	345'	130 sks.
8 5/8			
7	2201'	2201'	175 sks.
5 1/2			
4 1/2		5087'	280 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5325' feet

Depth of completed well 5112'KB feet Rotary X / Cable Tools

Water strata depth: Fresh not reported feet; Salt not reported feet

Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 2715'-3930' feet

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

Final open flow 207 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 36 hours

Static rock pressure 875 psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)

Second producing formation Pay zone depth feet 12/01/2023

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

(Continue on reverse side)

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

PERFORATIONS

1st Stage: 25 holes 3498'-3930'
 2nd Stage: 20 holes 2715'-3314'

TREATMENT

1st Stage: 600 gals. 15% HCl; 1,185 MSCF N₂
 2nd Stage: 800 gals. 15% HCl; 1,440 MSCF N₂

WELL LOG
 Husk # 944

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sandstone and Shale			0	1270	All depths from 10'KB
Sandstone			1270	1392	
Shale			1392	1477	
Sandstone			1477	1501	
Siltstone and Shale			1501	1772	
Salt Sand			1772	1883	
Shale			1883	1898	
Sandstone			1898	1912	
Shale			1912	1975	
Little Lime			1975	1983	
Big Lime			1983	2105	
Big Injun			2105	2127	
Silty Shale			2127	2470	
Sunbury Shale			2470	2486	
Siltstone and Shale			2486	2810	
Gordon			2810	2836	
Shale			2836	4850	Top of Java formation @ 4674'
Siltstone and Shale			4850	4932	Top of Angola Shale @ 4880'
Shale			4932	5038	
Siltstone			5038	5080	
Shale			5080	5112	
Total Depth				5112	

(Attach separate sheets as necessary)

Sterling Drilling and Production Co., Inc.
 Well Operator

By: William E. Stone

12/01/2023

Date: November 6, 1985

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

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

DEPARTMENT OF MINES ENERGY
OIL AND GAS WELLS DIVISION

APR 23 1986

INSPECTOR'S WELL REPORT

Permit No. 13-3758 (7-25-84)

Oil or Gas Well _____
(KIND)

Company <u>Sterling D & P</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>Randall Brannon</u>	16			Kind of Packer _____
Well No. <u>944</u>	13			
District <u>Lee</u> County <u>Cal</u>	10			Size of _____
Drilling commenced _____	8 1/4			
Drilling completed _____ Total depth _____	6 3/4			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 _____

Remarks:
Release Reclamation

4-19-86

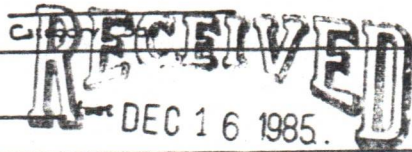
DATE

D. W. Mace

12/01/2023
DISTRICT WELL INSPECTOR

**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 - 3758 -			
2.0 Type of determination being sought: (Use the code found on the front of this form.)	107 Section of NGPA			
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	5,112			
4.0 Name, address and code number of applicant: (25 letters per line maximum. If code number not available, leave blank.)	Sterling Drilling and Production Co., Inc. Name 710 Virginia St. East, Arcade Building Street Charleston, WV 25301 City State Zip Code			
5.0 Location of this well: (Complete (a) or (b).) (a) For onshore wells (25 letters maximum for field name.) (b) For OCS wells:	Lee Field Name Calhoun County State WV			
(c) Name and identification number of this well: (25 letters and digits maximum.) (d) If code 4 or 5 in 2.0 above, name of the reservoir: (25 letters maximum.)	Husk # 944 Date of Lease: _____ Mo. Day Yr. OCS Lease Number			
6.0 (a) Name and code number of the purchaser: (25 letters and digits maximum. If code number not available, leave blank.) (b) Date of the contract:	Brooklyn Union Gas Name Buyer Code _____ Mo. Day Yr.			
(c) Estimated total annual production from the well:	6.21 Million Cubic Feet			
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	(a) Base Price 6.076	(b) Tax -----	(c) All Other Prices (Indicate (+) or (-).) -----
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	6.076	-----	-----
9.0 Person responsible for this application:	William E. Stover Name Designated Agent _____ Signature Title <i>William E. Stover</i> November 6, 1985 Date Application is Completed 304-342-0121 Phone Number			



Agency Use Only
 Date Received by Juris. Agency
DEC 16 1985
 Date Received by PERC

12/01/2023

JAN 15 1986

COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

Date: November 6, 19 85 47550

Applicant's Name: Sterling Drilling & Production Co.

Address: 710 Virginia St., E., Arcade Bldg.
Charleston, WV 25301

Gas Purchaser Contract No. _____

Date of Contract _____
 (Month, day and year)

AGENCY USE ONLY

Inc. WELL DETERMINATION FILE NUMBER

851216 -1073-013-3758

Use Above File Number on all
 Communications Relating to This Well

SDP # 944

First Purchaser: Brooklyn Union Gas P630

Address: 195 Montague Street
 (Street or P.O. Box)
Brooklyn, NY 11201
 (City) (State) (Zip Code)

FERC Seller Code _____

Designated Agent: William E. Stover

Address: 710 Virginia St., E, Arcade Bldg
Charleston, WV 25301

FERC Buyer Code _____

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

Name: William E. Stover Vice President/Drilling Supervi
 (Print) (Title)

Signature: *William E. Stover*

Address: 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
- 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
 - 107-3 Devonian Shale
 - 107-5 Production enhancement
 - 107-6 New Tight Formation
 - 107-7 Recompletion Tight Formation

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

AGENCY USE ONLY

QUALIFIED

12/01/2023

RECEIVED

DEC 16 1985

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date Received

Determination Date

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. Agent: William E. Stover

Type Determination being sought - 107 (Devonian Shale)

API Well No.: 47-013-3758 Well Name: Husk (944)

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

Vol. Page Line

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

II. Gamma Ray elevation indices:

A. Shale Base Line (API Units)

1. GR Value at Base Line = 165 * API Units
2. Remarks:

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

1. GR Value = 115.5 * API Units
2. Calculation: $\frac{0.7 \text{ (GR Value at Base Line)}}{0.7 \text{ (} \underline{165} \text{ *)} = \underline{115.5} \text{ API Units}$

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***		
2486	5084	2598	94

Total Devonian Interval 2598

Total Less Than 0.7 (Shale Base) 94

% Less Than 0.7 (Shale Base Line) = $\frac{0.0361}{1} \times 100 = \underline{3.6} \%$

12/01/2023

*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 ENERGY, OIL AND GAS DIVISION

Operator's Well No. 944

API Well No.

47 - 013 - 3758
State County Permit

WELL CLASSIFICATION FORM
HIGH COST GAS WELL - DEVONIAN SHALE
NGPA Section 107

DESIGNATED AGENT William E. Stover

ADDRESS 710 Virginia St., E., Arcade Bldg.
Charleston, WV 25301

LOCATION Elevation 983.71'
Watershed Hog Fork of Barnes Run

WELL OPERATOR Sterling Drilling & Prod. Co., Inc.
ADDRESS 710 Virginia St., E., Arcade Bldg.
Charleston, WV 25301

Dist. Lee County Calhoun Quad. Arnoldsburg

Gas Purchase Contract No. _____

GAS PURCHASER Brooklyn Union Gas
ADDRESS 195 Montague Street
Brooklyn, NY 11201

Meter Chart Code _____

Date of Contract _____

* * * * *

Date surface drilling began: January 18, 1985

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

Bottom Hole Pressure. PSIA -- Pf = Pwe XLGS

$$t = 60 + (0.0075 \times 5112) + 459.67 = 558.01 \cdot X = \frac{1}{53.34'} / \frac{558.01}{3322.5} = 0.00003360$$

$$Pf \ 875 \times 2.7183 \ 0.00003360 \times 0.690 \times 1.08 \times 3322.5 = 950.9 \text{ PSIA}$$

AFFIDAVIT

I, William E. Stover, 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)(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.

William E. Stover

STATE OF WEST VIRGINIA

COUNTY OF Kanawha, TO-WIT:

I, Mary Jo Stowers, a Notary Public in and for the state and county aforesaid, do certify that William E. Stover, whose name is signed to the writing above, bearing date the 6th day of November, 1985, has acknowledged the same before me, in my county aforesaid.

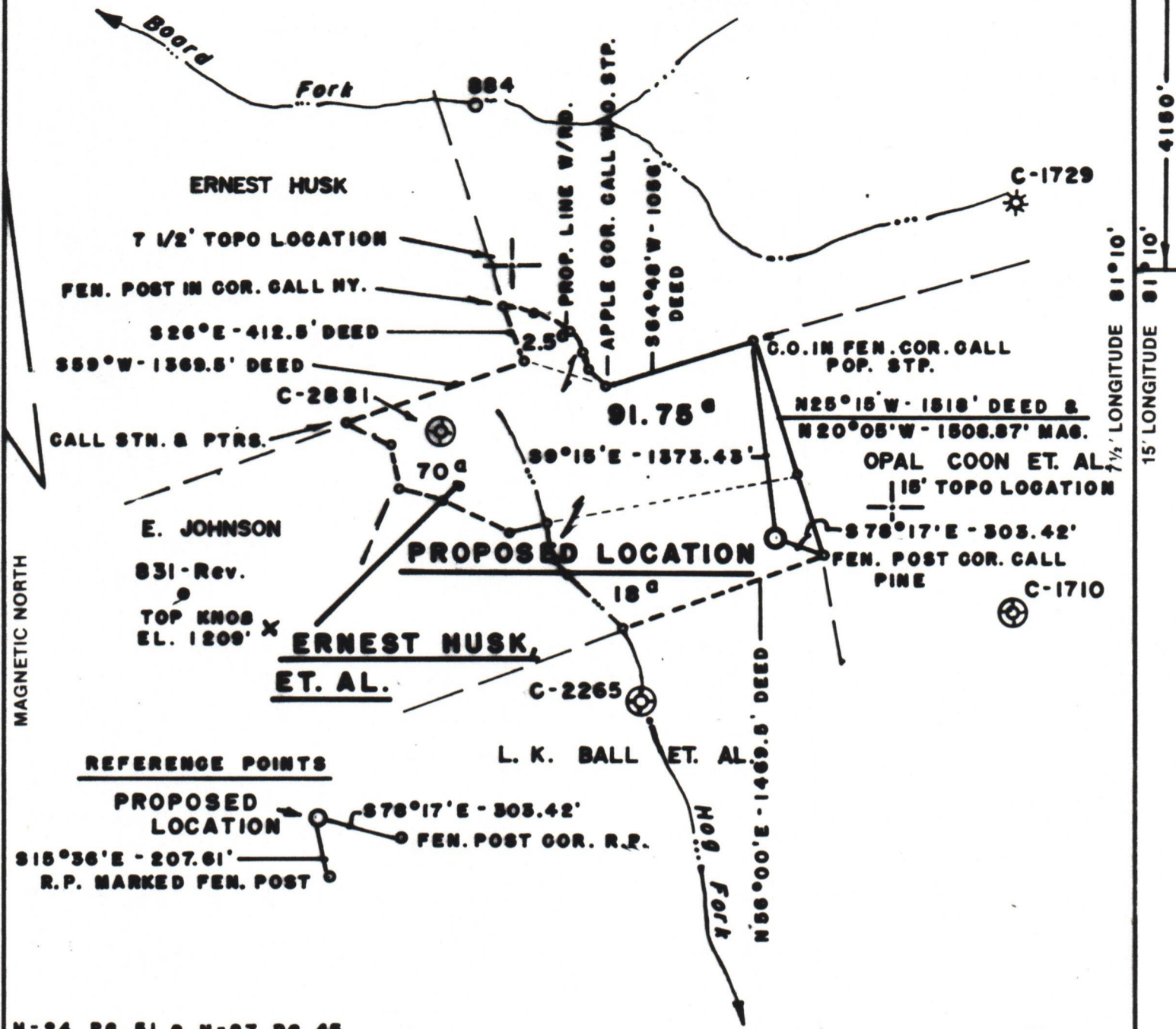
Given under my hand and official seal this 6th day of November, 1985.
My term of office expires on the 7th day of August, 1995.

(NOTARIAL SEAL) OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA MARY JO STOWERS Sterling Drilling & Production Co., Inc. 710 Va. St. E. Charleston, WV

Mary Jo Stowers
Notary Public

7/24/87

8500' 15' LATITUDE 38°55' 7 1/2' LATITUDE 38°52'30'



H-24 PG. 51 & H-27, PG. 45

FILE NO. 042-173 NO. 2
 MAP NO. 88-C
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION U.S.G.S. DATA TOP KNOB SHOWN EL. 1200'

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 JULY 5, 1984
 OPERATOR'S WELL NO. 944
 API WELL NO. 47-013-3758
 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 ___ STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 983.71' WATER SHED HOG FORK OF BARNES RUN
 DISTRICT LEE COUNTY GALHOUN
 QUADRANGLE 7 1/2' ARNOLDSBURG (ARNOLDSBURG S.W.)
 SURFACE OWNER RANDAL BRANNON ACREAGE 70-18-2
 OIL & GAS ROYALTY OWNER ERNEST HUSK, ET AL. LEASE ACREAGE 91.75 12/01/2023
 LEASE NO. 042-173

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 5325'
 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