



1) Date: July 6, 19 84
 2) Operator's Well No. 943
 3) API Well No. 47 - 013 - 3757
 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: 1087.12' Watershed: Hog Fork of Barnes Run (LKW16A1)
 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 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 / JUL - 9 1984
 Plug off old formation _____ / Perforate new formation _____
 Other physical change in well (specify) _____
 11) GEOLOGICAL TARGET FORMATION, BROWN SHALE OIL & GAS DIVISION
 12) Estimated depth of completed well, 5450 feet DEPT. OF MINE
 13) Approximate strata 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

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		2350'	2350'	100 sks	
Production	4 1/2	ERW	10.5#	X			5490'	250 sks	Depths set
Tubing									as req. by rule 15.01
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-013-3757

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>MLL</u>	Casing: <u>MLL</u>	Fee: <u>7439</u>
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Margaret J. Hasse
 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: _____
 2) WELL OPERATOR: _____
 3) PROPOSED WELL WORK: _____
 4) DRILLING CONTRACTOR: _____

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: _____



IV-9
(Rev 8-81)

DATE 5-28-84

WELL NO. Husk # 943

State of West Virginia API NO. 47 - 013 - 3757

Department of Mines
Oil and Gas Division

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)

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ACCESS ROAD

LOCATION

OIL & GAS DIVISION

DEPT. OF MINES

Structure _____ (A)

Structure Diversion Ditch

Size _____

Material Earthen

Page Ref. Manual _____

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 250' for 6-10% grade

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* Kj-31 40 lbs/acre

Seed* Kj-31 40 lbs/acre

Madison Clover 4 lbs/acre

Madison 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

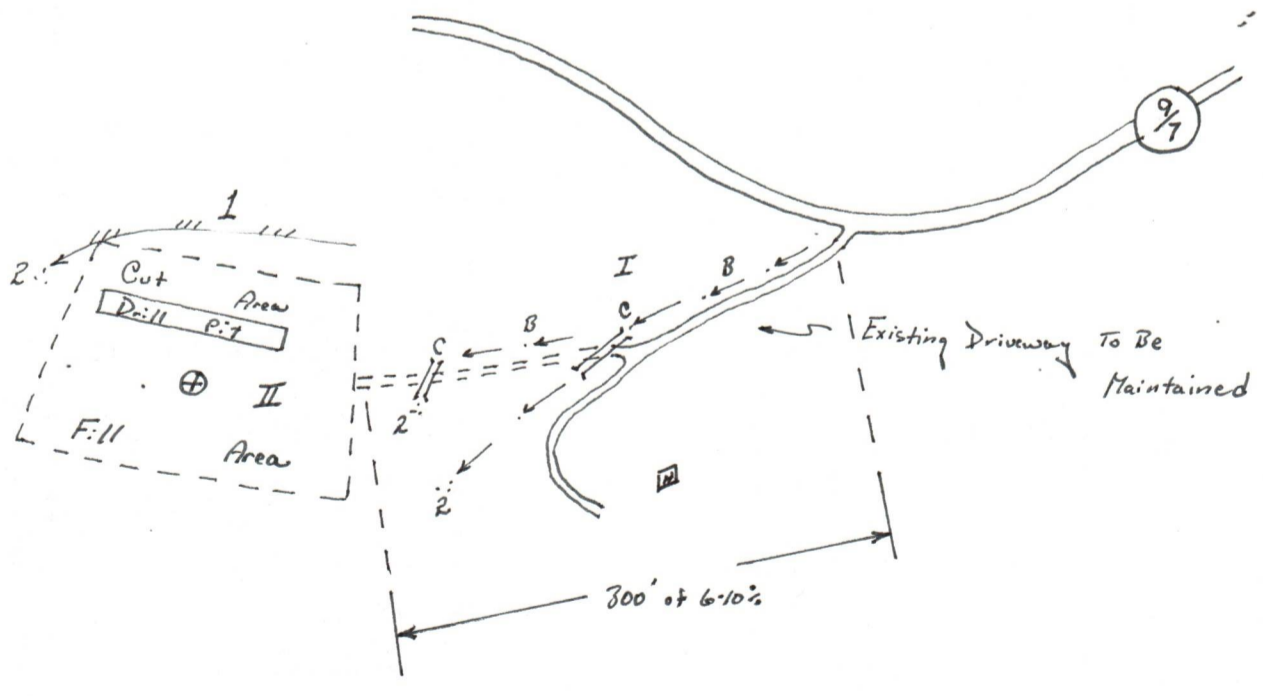
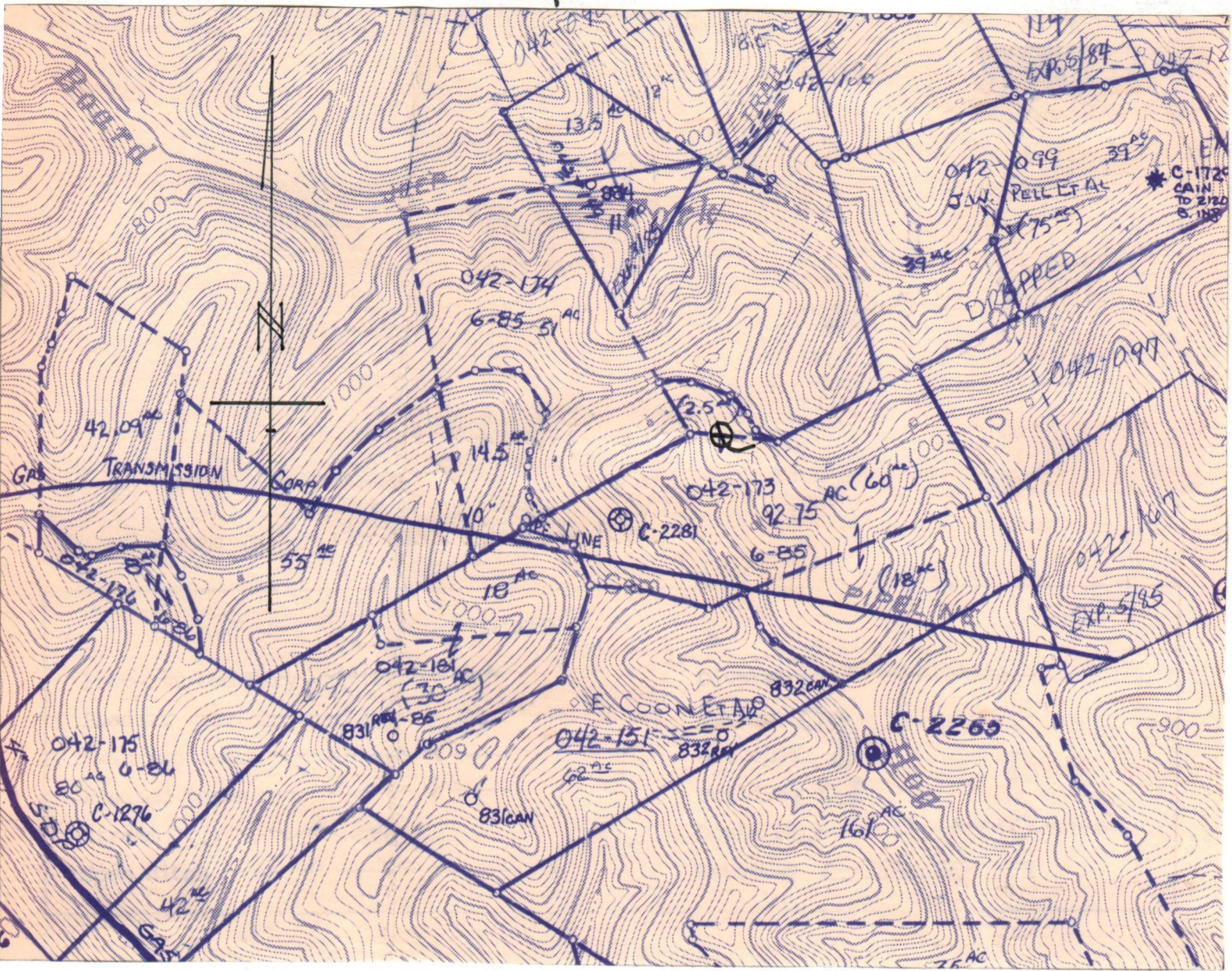
PLAN PREPARED BY Richard V. Langbell

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.



12/01/2023

1) Date: July 6, 19 84
2) Operator's Well No. 943
3) API Well No. 47-013-3757
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 _____
Name _____
Address _____
Name _____
Address _____

943
P 377 648 937
RECEIPT FOR CERTIFIED MAIL

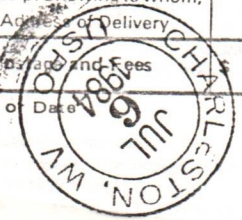
NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL
(See Reverse)

TO THE PERSON(S)
(1) The App to be p and des cementi
(2) The pla
(3) The Cor plug a reclama
THE REASON WHICH ARE SUMMA (FORM IV-2(B) OF ACTION AT ALL.

Take notice erator proposes for a Well Work Department of M and depicted on Construction ar by hand to the before the day

6) EXTRACTION F
 Check and pr
 Included I hold
 The requ
7) ROYALTY PRO
Is the right

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 of Date	



orm and the following documents:
) (or Form IV-4 if the well is the drilling or other work, cable, the proposed casing and
n Form IV-6; and
nless the well work is only to sediment control and for

RIGHTS REGARDING THE APPLICATION OF THE COPY OF THE APPLICATION NOT REQUIRED TO TAKE ANY

de, the undersigned well op- on and accompanying documents Oil and Gas, West Virginia scribed on attached Application e Application, the plat, and the ad or certified mail or delivered tain circumstances) on or

RECEIVED

JUL - 9 1984

ract or contracts by which reverse side for specifics.)

OIL & GAS DIVISION
DEPT. OF MINES

used upon a lease or leases 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 XX
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. Gillaspie
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



1) Date: July 6, 19 88
 2) Operator's Well No. 943
 3) API Well No. 47 State _____ County _____ Permit _____

OIL & GAS DIVISION
DEPT. OF MINES
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: 1087.12' Watershed: Hoo 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 Name Deo Macw
 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, 5450 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>375'</u>	<u>375'</u>	<u>To Surface</u>		
Coal										Sizes
Intermediate	<u>7"</u>	<u>J-55</u>	<u>20#</u>	<u>X</u>		<u>2350'</u>	<u>2350'</u>	<u>100 sks</u>		
Production	<u>4 1/2</u>	<u>FRM</u>	<u>10.5#</u>	<u>X</u>			<u>5490'</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: _____

Randall Brammer Date: 7-15-89
 (Signature)

By _____

 (Signature) Date: _____

Its _____ Date _____

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

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

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

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

Where to file comments and obtain additional information:

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

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

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

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

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

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

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

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

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

WR-35

RECEIVED
DEC 16 1985
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY



State of West Virginia
DEPARTMENT OF ENERGY
Oil and Gas Division

Date October 22, 1985
Operator's
Well No. 943
Farm Husk
API No. 47 - 013 - 3757

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: 1087.12' Watershed Hog Fork of Barnes Run
District: Lee County Calhoun Quadrangle Arnoldsburg 7½'

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 ADDRESS Rt. 1 Box 5
Sandridge, WV 25274

PERMIT ISSUED July 25, 1984

DRILLING COMMENCED January 10, 1985

DRILLING COMPLETED January 16, 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	397'	397'	150 sks.
8 5/8			
7	2358'	2358'	190 sks.
5 1/2			
4 1/2		5113	270 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5450' feet

Depth of completed well 5158'KB feet Rotary x / Cable Tools

Water strata depth: Fresh ^{not} reported feet; Salt 1898' feet

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

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 2824'-4110' feet

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

Final open flow 516 Mcf/d Final open flow show Bbl/d

Time of open flow between initial and final tests 28 hours

Static rock pressure 950 psig (surface measurement) after 72 hours shut in

(If applicable due to multiple completion--)

12/01/2023

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

(Continue on reverse side)

CAL 3757

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

PERFORATIONS

1st Stage: 21 holes 3536'-4110'
 2nd Stage: 20 holes 2824'-3344'

TREATMENT

1st Stage: 700 gals. 15% HCl; 1,211 MSCF N₂.
 2nd Stage: 700 gals. 15% HCl; 1,343 MSCF N₂

WELL LOG
 Husk # 943

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fres and salt water, coal, oil and ga
Sandstone and Shale			0	1366	All depths from 10'KB
Sandstone			1366	1476	
Shale			1476	1539	
Sandstone			1539	1615	
Silty Shale			1615	1764	
Sandstone			1764	1827	
Shale			1827	1880	
Salt Sand			1880	1983	Salt water @ 1898'
Shale			1983	2000	
Sandstone			2000	2020	
Shale			2020	2090	
Little Lime			2090	2100	
Pencil Cave			2100	2107	
Big Lime			2107	2221	
Big Injun			2221	2238	
Silty Shale			2238	2577	
Sunbury Shale			2577	2593	
Berea			2593	2596	
Siltstone and Shale			2596	2918	
Gordon			2918	2946	
Shale			2946	4968	Top of Java formation @ 4786'
Siltstone and Shale			4968	5051	Top of Angola Shale @ 4996'
Shale			5051	5158	
Total Depth				5158KB	

(Attach separate sheets as necessary)

Sterling Drilling & Production Co., Inc.

Well Operator

By: William E. Shover

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
OIL AND GAS WELLS DIVISION

RECEIVED
JAN 17 1985

INSPECTOR'S WELL REPORT OIL & GAS DIVISION
DEPT. OF MINES

Permit No. 13-3757

Oil or Gas Well _____
(KIND)

Company <u>Stearley</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>Husk</u>	16			Kind of Packer _____
Well No. <u>943</u>	13			
District <u>Sherman</u> ^{L.E.F.} County <u>Cal</u>	10			Size of _____
Drilling commenced <u>1-10-85</u>	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 1

Remarks:
397' of 9 5/8" casing, 150 sks cement, Dowell, 1-11-85
good cement circulation

1-11-85
DATE

D. Demore 12/01/2023
DISTRICT WELL INSPECTOR

Form 26
2/16/82

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: _____

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

12/01/2023

DISTRICT WELL INSPECTOR

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

APR 23 1986

INSPECTOR'S WELL REPORT

Permit No. 13-3757

7-25-84

Oil or Gas Well _____
(KIND)

Company _____ Address _____ Farm <u>Randall Brannon</u> Well No. <u>943</u> District <u>See</u> County <u>Cal</u> Drilling commenced _____ 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			Kind of Packer _____
	16			
	13			Size of _____
	10			
	8 1/4			Depth set _____
	6 3/4			
	5 3/16			Perf. top _____
	3			Perf. bottom _____
	2			Perf. top _____
	Liners Used			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 _____

Remarks: Release Reclamation

4-19-86

DATE

D. W. Mac

12/01/2023
DISTRICT WELL INSPECTOR

Form 26
2/16/82

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: _____

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

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 - 3757

2.0 Type of determination being sought:
(Use the codes 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.) 5158

4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)

RECEIVED
DEC 16 1985
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY 018084
Seller Code

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 (35 letters maximum for field name.)
Lee
Field Name
Calhoun
County 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.)
Husk # 943

(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.)
Brooklyn Union Gas
Name Buyer Code

(b) Date of the contract:
Mo. Day Yr.

(c) Estimated total annual production from the well:
15.48 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>6.076</u>	---	---	---
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU <u>6.076</u>	---	---	---

9.0 Person responsible for this application:

William E. Stover Designated Agent
Name Title
William E. Stover
Signature
November 6, 1985
Date Application is Completed
304-342-0121
Phone Number

Agency Use Only
Date Received by JWSL Agency
DEC 16 1985
Date Received by FERC

12/01/2023

STATE OF WEST VIRGINIA

DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

32689 - 70

JAN 15 1986

COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

Date: November 6, 19 85

47550

AGENCY USE ONLY

Applicant's Name: Sterling Drilling & Production Co.

Inc. WELL DETERMINATION FILE NUMBER

Address: 710 Virginia St., E., Arcade Bldg.

851216 -1073-013-3757

Charleston, WV 25301

Use Above File Number on all Communications Relating to This Well

Gas Purchaser Contract No. _____

SDP #943

Date of Contract _____
(Month, day and year)

First Purchaser: Brooklyn Union Gas P630

Designated Agent: William E. Stover

Address: 195 Montague Street

Address: 710 Virginia St., E., Arcade B

(Street or P.O. Box)
Brooklyn NY 11201

Charleston, WV 25301

(City) (State) (Zip Code)

FERC Seller Code _____

FERC Buyer Code _____

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

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

Signature: William E. Stover

Address: 710 Virginia St., E., Arcade Bldg.
(Street or P.O. Box)
Charleston, WV 25301

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
 - x 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 Buil

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.: 47-013-3757 Well Name: Husk (943)

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 = 160 * API Units
 2. Remarks: .

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

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

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

<u>Interval</u>		<u>Thickness of Interval Feet</u>	<u>Feet of less than* 0.7 (Shale Base Line) Feet</u>
<u>From**</u>	<u>To***</u>		
2590	5148	2558	42

Total Devonian Interval 2558

Total Less Than 0.7 (Shale Base) 42

% Less Than 0.7 (Shale Base Line) = $\frac{0.0164}{1} \times 100 = \underline{1.6} \%$

*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.

12/01/2023

DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

Operator's Well No. 943

API Well No.

47 - 013 - 3757
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 1087.12'

WELL OPERATOR Sterling Drilling & Prod. Co., Inc. Watershed Hog Fork of Barnes Run

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

Dist. Lee County Calhoun Quad. Arnoldsbur

Gas Purchase Contract No. _____

GAS PURCHASER Brooklyn Union Gas

Meter Chart Code _____

ADDRESS 195 Montague Street
Brooklyn, NY 11201

Date of Contract _____

* * * * *

Date surface drilling began: January 10, 1985

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

Bottom Hole Pressure. PSIA -- Pf = Pwe XLGS

$$t = 60 + (0.0075 \times 5158') + 459.67 = 558.35 \text{ . } X = \frac{1}{53.34'} / \frac{558.35}{1} = 0.000033$$

$$Pf \text{ } 950 \text{ } \times 2.7183 \text{ } \frac{0.00003358}{1} \times 0.690 \text{ } \times 1.08 \text{ } \times 3467 = 1,036 \text{ PSI}$$

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)

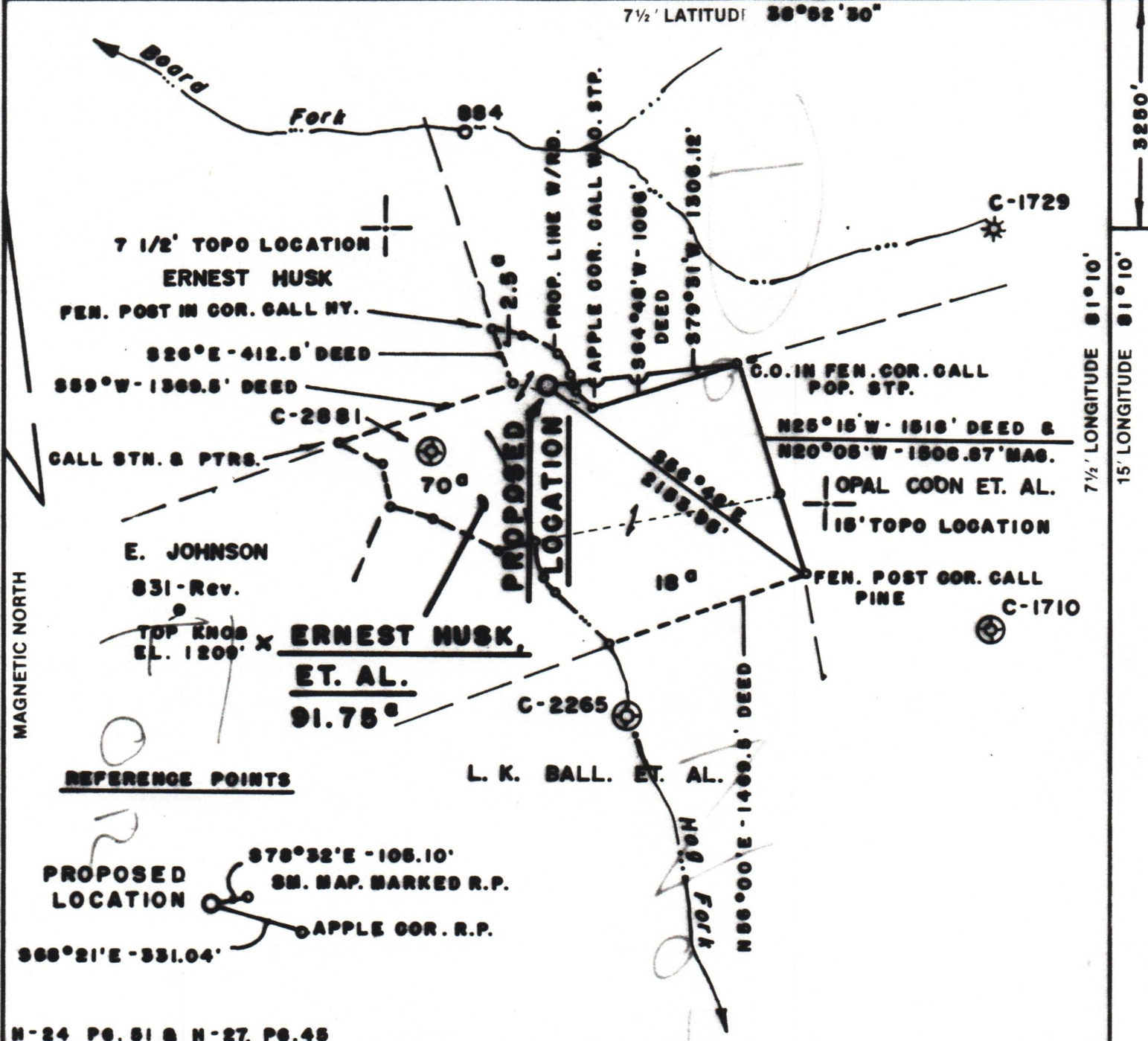


OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
MARY JO STOWERS
Sterling Drilling & Production Co., Inc.
710 Va. St. E. Charleston, WV 25301

Mary Jo Stowers
Notary Public

MW 7/24/84

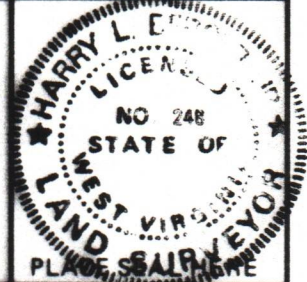
10,200'
15' LATITUDE 38°55'
7 1/2' LATITUDE 38°52'30"



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

FILE NO. 042-173 NO. 1
 MAP NO. 58-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 W-6 (8-78)



DATE JULY 5, 1984
 OPERATOR'S WELL NO. 943
 API WELL NO. 47-013-3757
 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 1007.12' WATER SHED NOS FORK OF BARNES RUN
 DISTRICT LEE COUNTY CALHOUN
 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 LEASE NO. 042-173 12/01/2023
 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 5450'
 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