



1) Date: November 3, 19 83
 2) Operator's Well No. 859
 3) API Well No. 47-013-3682
 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: 1089.92' Watershed: Cabin Run
 District: Lee County: Calhoun Quadrangle: 7.5' Arnoldsburg
- 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, 5325 feet
 13) Approximate strata depths: Fresh, _____ feet; salt, _____ feet.
 14) Approximate coal seam depths: 0 Is coal being mined in the area? Yes _____
- 15) CASING AND TUBING PROGRAM

RECEIVED
 DEC 2 - 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		300' 350'	300' 350'	To Surface	by rule 15.05
Coal									Sizes
Intermediate	7"	J-55	20#	X		2550'	2550'	100 sks	
Production	4 1/2	ERW	10.5#	X			5325'	250 sks	Depths set
Tubing									or as req. by rule 15.01
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-013-3682 Date December 19, 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 December 19, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

BLANKET BOND

Bond:	Agent: <u>[Signature]</u>	Plat: <u>MU MID</u>	Casing	Fee <u>3951</u>
-------	---------------------------	---------------------	--------	-----------------

[Signature]
 Administrator, Office of Oil and Gas



OFFICE USE ONLY

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

1) Date: NOVEMBER 3, 1983

2) Operator's Well No. 47-012-3883

3) API Well No. 47-012-3883

4) Well Location: State: _____ County: _____ District: _____

5) Well Operator: _____

6) Oil & Gas Inspector to be notified: _____

7) Proposed Well Work: _____

8) Geological Target Formation: _____

9) Estimated depth of completed well: _____

10) Approximate true depth: _____

11) Approximate coal seam depth: _____

12) Is coal being mined in the area? Yes _____ No _____

RECEIVED
 DEC 2 - 1983
 OIL & GAS DIVISION
 DEPT. OF MINES

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: _____

Reason: _____

05/17/2024

1) Date: November 3, 1983
2) Operator's Well No. 859
3) API Well No. 47-013-3682
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 Doris Lee Price
Address Box 160 - A

(ii) Name Otto Rt. Spencer, W.V. 25276
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.

RECEIVED
DEC 2 - 1983

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.

OIL & GAS DIVISION
DEPT. OF MINES

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 XXX

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

See the reverse side for line item instructions, and for instructions concerning the required copies of the Notice and Application, plat, and Construction and Reclamation Plan.

The truth of the information on the Notice and Application is verified and sworn to and the Notice is signed on behalf of the Well Operator in my County and State by

Harry L. Berger, Jr.

this 3 day of November, 1983.

My commission expires May 10, 1989.

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

WELL

OPERATOR Sterling Drilling & Prod. Co., Inc.

By Harry J. Berger
Its Designated Agent

Address 710 Virginia St., E.
Charleston, W.V 25301

Telephone 342 - 0121

05/17/2024

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

CONCERNING THE LINE ITEMS:

- 1) Date of Notice.
- 2) Your well name and number.
- 3) To be filled out by the Office of Oil & Gas.
- 4) & 5) Use separate sheet if necessary.
- 4) Surface owner(s) of record to be served with Notice and Application. However, see also Code § 22-4-1b(b) if "more than three tenants in common or other co-owners of interest described in subsection (a) of this section hold interests in such lands".
- 5(i) "Coal Operator" means any person, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine.
- 5(ii, iii) See Code § 22-4-20.
- 6) See Code § 22-4-11(c). However, in lieu of filing the lease(s) or other continuing contract(s), the Applicant may fill out the information in the space provided below.
- 7) See Code § 22-4-11(d, e).

CONCERNING THE REQUIRED COPIES FOR FILING AND SERVICE:

Filing. Code § 22-4-1k and Regulation 7.02 provide that the original and required copies of the Notice and Application must be filed with the Administrator, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-1k(d) and the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fees required by Code § 22-4-1a(c) and 22-3-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well on dwelling within 200 feet of the proposed well.

Service. In addition, service must be made on the surface owner(s) and the person(s) with an interest in the coal. See Code § 22-4-1m, 22-4-2, 22-4-2a, and 22-4-2b.

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

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

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

- (1) the tract of land is the same tract described in the Application to which this Notice applies, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

<u>Grantor, lessor, etc.</u>	<u>Grantee, lessee, etc.</u>	<u>Royalty</u>	<u>Book Page</u>
Vernon P. Boone Box 211 Florence, Arizona 85232	Sterling Drilling & Prod. Co., Inc.	1/8	079/498

Geraldine McGinty

05/17/2024



IV-9
(Rev 8-81)

DATE 11-28-83

WELL NO. Boone # 859

State of West Virginia
Department of Mines
Oil and Gas Division

API NO. 47-013-368

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 Doris Lee Price 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: 11-30-83 (Date)

Jarrett Newton
(SCD Agent)

ACCESS ROAD	LOCATION
Structure <u>Culvert</u> (A)	Structure <u>Diversion Ditch</u> (C)
Spacing <u>Size 12"</u>	Material <u>Earthen</u>
Page Ref. Manual <u>2-8</u>	Page Ref. Manual <u>2-12</u>
Structure <u>Drainage Ditches</u> (B)	Structure <u>Rip-Rap</u>
Spacing <u>Roadside</u>	Material <u>Rock</u>
Page Ref. Manual <u>2-12</u>	Page Ref. Manual <u>2-9</u>
Structure <u>Cross Ditches</u> (C)	Structure _____
Spacing <u>150' for 3-5% grades</u>	Material _____
Page Ref. Manual <u>2-4</u>	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 <u>2</u> Tons/acre	or correct to pH <u>6.5</u>
Fertilizer <u>600</u> lbs/acre	(10-20-20 or equivalent)
Mulch <u>Hay</u> 2 Tons/acre	
Seed* <u>Ky-31</u> 40 lbs/acre	
<u>Ladino Clover</u> 4 lbs/acre	
	lbs/acre

Treatment Area II	
Lime <u>2</u> Tons/acre	or correct to pH <u>6.5</u>
Fertilizer <u>600</u> lbs/acre	(10-20-20 or equivalent)
Mulch <u>Hay</u> 2 Tons/acre	
Seed* <u>Ky-31</u> 40 lbs/acre	
<u>Ladino Clover</u> 4 lbs/acre	
	lbs/acre

05/17/2024

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

Moore's Well Services, Inc.

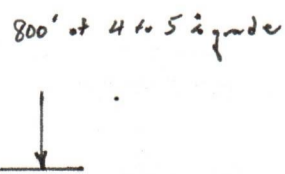
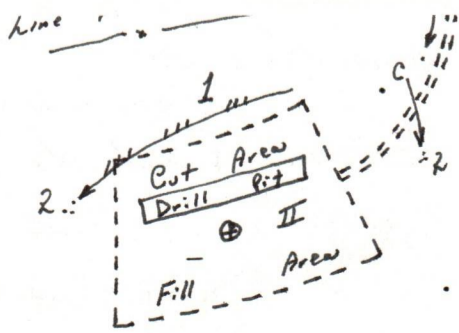
PLAN PREPARED BY Richard X. Campbell

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.



05/17/2024

IV-35
(Rev 8-81)

RECEIVED
JUN 27 1984



OIL & GAS DIVISION
DEPT. OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

Date 6/19/84
Operator's
Well No. 859
Farm Verdon P. Boone, etal
API No. 47 - 013 - 3682

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: 1089.92 Watershed Cabin Run
District: Lee County Calhoun Quadrangle Arnoldsburg 7 1/2'

COMPANY Sterling Drilling & Production Co., Inc.

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

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

SURFACE OWNER Doris Lee Price Carper, etal

ADDRESS Box 160A, Otto Rt, Spencer, WV 25276

MINERAL RIGHTS OWNER Verdon P. Boone, etal

ADDRESS Box 211, Florence, AZ 85232

OIL AND GAS INSPECTOR FOR THIS WORK Deo

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

PERMIT ISSUED 12/19/83

DRILLING COMMENCED 1/17/84

DRILLING COMPLETED 1/23/84

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 I	346'	346'	140 sx
8 5/8			
7 L	2567'	2567'	200 sx
5 1/2			
4 1/2 Q		5300'	280 sx
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 5325 feet

Depth of completed well 5325 feet Rotary X / Cable Tools

Water strata depth: Fresh 92', 245' feet; Salt 1236 feet

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

OPEN FLOW DATA

Producing formation ⁴⁰⁰ Devonian Shale Pay zone depth 2740'-5254' feet

Gas: Initial open flow 0 Mcf/d Oil: Initial open flow --- Bbl/d

Final open flow 332 Mcf/d Final open flow --- Bbl/d

Time of open flow between initial and final tests 6 hours

Static rock pressure 680 psig (surface measurement) after 96 hours shut in

(If applicable due to multiple completion--)

Second producing formation Pay zone depth feet

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

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

Time of open flow between initial and final tests hours

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

05/17/2024

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

Perforations: Stage 1: 20 holes 4554' - 5254'
 Stage 2: 26 holes 3596' - 4414'
 Stage 3: 26 holes 2740' - 3425'

Treatment: Stage 1: 800 gal 15% acid, 1664 MSCF N₂, BD 3320#
 Stage 2: 1000 gal 15% acid, 1364 MSCF N₂, BD 2780#
 Stage 3: 1000 gal 15% acid, 1584 MSCF N₂, BD 2280#

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
					All measurements 10' KB
Sandstone and Shale			0	1100	
Salt			1100	1290	
Shale			1290	1320	
Sand			1320	1355	
Sandy Shale			1355	1660	
Maxon			1660	1830	
Shale			1830	1877	
Little Lime and Sand			1877	1960	
Pencil Cave			1960	1965	
Big Lime			1965	2111	
Big Injun			2111	2130	
Siltstone and Sahle			2130	2443	
Sunbury Shale			2443	2467	
Berea			2467	2470	
Sandy Siltstone and Shale			2470	2780	
Gordon			2780	2809	
Silty Shale			2809	4805	
Grey Sandy Siltstone			4805	4838	
Grey Shale			4838	4978	
Grey Coarse Siltstone			4978	5051	
Grey Shale			5051	5325	TD 5325' KB

(Attach separate sheets as necessary)

Sterling Drilling and Production Co., Inc.
 Well Operator

By: Harry J. Berger 05/17/2024
 Date: 6-19-84

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 coal, encountered in the drilling of a well."

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

RECEIVED

JAN 26 1984

OIL & GAS DIVISION
DEPT. OF MINES

INSPECTOR'S WELL REPORT

Permit No. 13-3682

Oil or Gas Well _____
(KIND)

Company Stirling

Address _____

Farm Boone

Well No. 859

District Lee County Cal.

Drilling commenced 1-17-84

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 &

Remarks:
Dawell cemented 9 5/8" 1-18-84
was not notified.

1-18-84

DATE

Wes Moore 05/17/2024

DISTRICT WELL INSPECTOR



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

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT
July 25, 1984

RECEIVED
OCT 23 1984
OIL & GAS DIVISION
DEPT. OF MINES

COMPANY Sterling Drilling & Production
710 Virginia Street, East
Charleston, West Virginia 25301

PERMIT NO 013-3682
FARM & WELL NO Doris Lee Price #859
DIST. & COUNTY Lee/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 *D. L. Mace*
DATE 10-18-84

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

T. L. v. B.
Administrator-Oil & Gas Division

December 20, 1984
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 - 3682 -		
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.)	5325 feet		JUN 27 1984
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. GAS DIVISION 018084 Name 710 Virginia St. East, Arcade Building DEPT. OF M 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.) (b) For OCS wells:	Lee District Field Name Calhoun County State WV Zip Code Area Name Block Number Date of Lease: Mo. Dev Yr. OCS Lease Number Boone #859		
(c) Name and identification number of this well: (35 letters and digits maximum.) (d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	UNDEDICATED Name Buyer Code		
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.) (b) Date of the contract: (c) Estimated total annual production from the well:	9.9 Million Cubic Feet		
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	(a) Base Price S/MMBTU 5 . 7 9 8	(b) Tax	(c) All Other Prices (Indicate (+) or (-).)
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU 5 . 7 9 8
9.0 Person responsible for this application:	Harry L. Berger, Jr. Name Designated Agent Signature Title June 19, 1984 Date Application is Completed 304-342-0121 Phone Number		

RECEIVED

Agency Use Only
 Date Received by Jurisdictional Agency
JUN 27 1984
 Date Received by FERC

FERC-171 (2-82)

05/17/2024

PARTICIPANTS:

DATE: JUL 13 1984

BUYER-SELLER

WELL OPERATOR:

Sterling Drilling & Production Co.

FIRST PURCHASER:

Uncommitted

OTHER:

W. Va. Department of Mines, Oil & Gas Division

WELL DETERMINATION FILE NUMBER

840627-107-013-3682

Use Above File Number on all Communications
Relating to Determination of this Well

QUALIFIED

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-4E Application for certification. Complete? _____
- 10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? _____ Affidavit Sign _____
- 18-2E. 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: _____
- (8) Oil Production: _____ From Completion _____
- 10-17. Does lease agreement indicate enhanced recovery being done? 05/17/2024
- 10-17. Is affidavit signed? _____ Notarized? _____
- Does official well record with the Department confirm the submitted information? _____
- Additional information _____ Does computer program confirm? _____
- Was data matter checked to _____ By whom? _____

DEPARTMENT OF MINES OIL AND GAS DIVISION

Operator's Well No. Boone #859

API Well No. 47 - 013 - 3682
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 1089.92

WELL OPERATOR Sterling Drilling and Production Watershed Cabin Run Co., Inc.
ADDRESS 710 Virginia St., East Charleston, WV 25301
Dist. Lee County Calhoun Quad. Arnlbg 7 1/2'

GAS PURCHASER UNDEDICATED
ADDRESS _____
Gas Purchase Contract No. _____
Meter Chart Code _____
Date of Contract _____

* * * * *

Date surface drilling began: 1/17/84

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 x 5325) + 459.67 = 560 . X = 1 / 53.34 x 560 = .0000335

Pf = 680 x 2.7183 .0000335 x 3997 x .690 x 1.08 = 751 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 19th day of June, 1984, has acknowledged the same before me, in my county aforesaid.

05/17/2024

Given under my hand and official seal this 19th day of June, 1984.
My term of office expires on the 27th day of October, 1991.

(NOTARIAL SEAL)

JoAnn K Brooks
Notary Public

Date June 19, 1984

Operator's Well No. Boone #859

API Well No. 47 - 013 - 3682
State County Permit

STATE APPLICATION FOR WELL CLASSIFICATION

Previous File No. _____
(If Applicable)

WELL OPERATOR Sterling Drilling and Production

DESIGNATED AGENT Harry L. Berger, Jr.

ADDRESS 710 Virginia St., East
Charleston, WV 25301

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.) 107 Section of NGPA _____ 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, Jr.
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 1976. (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

JUN 27 1984

Date received by
Jurisdictional Agency

By [Signature] Director 05/17/2024
Title _____

Checklist of minimum Forms and Information needed to apply for each well classification. Each is identified by an "Item No." The "Items" required are listed beneath each well classification.

FOR NEW ONSHORE WELL - Sec. 102 NGPA - More than 2.5 miles from a marker well.
Items - 1, 2, 3, 4, 5, 6, 9, 10, 22, 23 - (18 & 19 Qualified)

FOR NEW ONSHORE WELL - Sec. 102 NGPA - More than 1,000 feet deeper than a marker well,
Items - 1, 2, 3, 4, 5, 6, 9, 11, 22, 23 - (18 & 19 Qualified)

FOR NEW ONSHORE RESERVOIR WELL - Sec. 102 NGPA
Items - 1, 2, 3, 4, 5, 6, 9, 12, 20, 21, 24 - (18 & 19 Qualified)

FOR NEW ONSHORE PRODUCTION WELL - Sec. 103 NGPA
Items - 1, 2, 3, 4, 5, 6, 9, 13

FOR HIGH COST GAS - Sec. 107 NGPA
Items - 1, 2, 3, 4, 5, 6, 9, 14, 19 - (18 Qualified)

FOR STRIPPER WELLS - Sec. 108 NGPA
Items - 1, 2, 3, 4, 5, 6, 7, 8, 9, 15 (28 if Available)

FOR STRIPPER WELLS - Sec. 108 NGPA - Enhanced Recovery
Items - 9, 16

FOR STRIPPER WELLS - Sec. 108 NGPA - Seasonally Affected
Items - 9, 17, 28

<u>ITEM NOS.</u>	<u>FORM NO.</u>	<u>DESCRIPTION</u>
1.	FERC 121	
2.	IV-1	Operator Agent Certification
3.	IV-2	Well Permit Application
4.	IV-6	Well Plat
5.	IV-35	Well Operator's Drilling Report
6.	IV-36	Gas/Oil Ratio Test Report
7.	IV-39	Report of Annual Production
8.	IV-40	Ninety (90) Day Production Report
9.	IV-48WC	State Application for Well Classification
10.	IV-51WC	Wells drilled more than 2.5 miles from a marker well
11.	IV-52WC	Wells drilled more than 1,000 feet deeper than a marker well
12.	IV-53WC	New Onshore Reservoir Well
13.	IV-54WC	New Onshore Production Well
14.	IV-55WC	High Cost Natural Gas Well
15.	IV-56WC	Stripper Well Classification
16.	IV-57WC	Stripper - Increased Production by Enhanced Recovery
17.	IV-58WC	Stripper - Seasonally Affected
18.	N/A	Directional Survey
19.	N/A	Electric Logs
20.	N/A	Subsurface cross-section charts (Geological charts)
21.	N/A	Formation Structure Map
22.	N/A	1:4000 Well Location Map
23.	N/A	Well Tabulation Sheet
24.	N/A	Gas Analysis
25.	N/A	Other
26.	N/A	Notice - Increase of Production
27.	N/A	Lease Inventory
28.	N/A	Tax records or verified copies of billing statements for appropriate period.

05/17/2024

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

Operator: Starling Drilling & Production Co., Inc. Agent: H.L. Berger
 Type Determination being sought - 107 (Devonian Shale)
 API Well No.: 47-013-3682 Well Name: BOONE #859
 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:

Gamma Ray Scale = 0 → 200 units

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

1. GR Value = 160 * 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):

Interval		Thickness of Interval Feet	Feet of less than* 0.7 (Shale Base Line) Feet
From**	To***		
2471'	5325'		

Total Devonian Interval 2854'

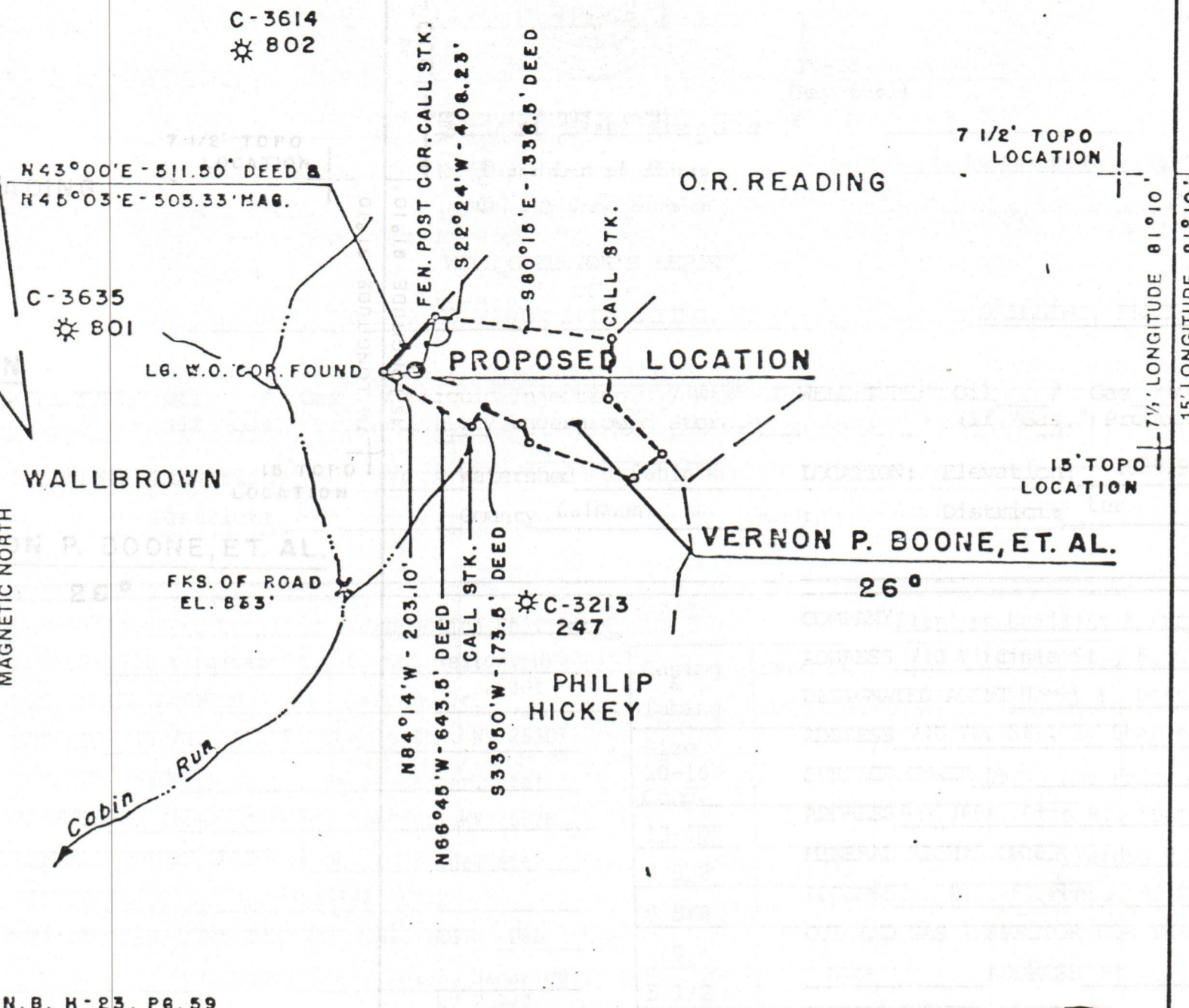
Total Less Than 0.7 (Shale Base)

20'

% Less Than 0.7 (Shale Base Line) = $\underline{0.007} \times 100 = \underline{0.7} \%$

05/17/2024

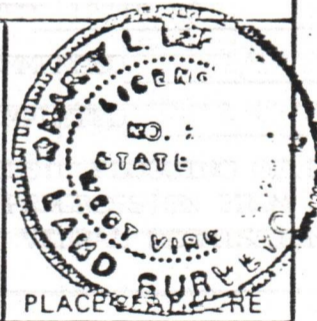
*Marked on log included with analysis.
 **Top of Devonian Section Recorded on First Interval in this Column.
 ***Lesser of TD or Bottom of Devonian Section Recorded as last Interval in this Column.



N.B. H-23, PG. 59

FILE NO. 042-068
 MAP NO. 58-C
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION U.S.G.S. DATA FKS. RD. SHOWN EL. 833'

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. 24, 19 83
 OPERATOR'S WELL NO. 859
 API WELL NO. EXP. 12/19/85
47 - 013 - 3682
 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 1089.92' WATER SHED CABIN RUN
 DISTRICT LEE COUNTY CALHOUN
 QUADRANGLE 7 1/2' ARNOLDSBURG (ARNOLDSBURG S.W.)
 SURFACE OWNER BUSTER CLEVINGER ACREAGE 26
 OIL & GAS ROYALTY OWNER VERNON P. BOONE, ET. AL. LEASE ACREAGE 26
 LEASE NO. 042-068

05/17/2024

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ___

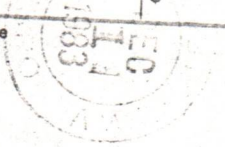
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION BROWN SHALE ESTIMATED DEPTH 5325'
 OPERATOR STERLING DRILLING & PRODUCTION CO. INC. AGENT HARRY L. BERGER
 ADDRESS 360 MADISON AVE. - 5TH FLOOR ADDRESS 710 VIRGINIA ST. E.
NEW YORK, N.Y. 10017 CHARLESTON, W.V.

859
P 522 056 676

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to DORIS LEE PRICE	
Street and No. BOX 160-A OTTO RT.	
P.O., State and ZIP Code SPENCER, W. V. 25276	
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	

PS Form 3800, Feb. 1982



IV-9
(Rev 8-81)

DATE 11-28-83

WELL NO. Boone # 859

State of West Virginia

API NO. 47-013-3682

Department of Mines
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

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

LANDOWNER Doris Lee Price 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: 11-30-83
(Date)

Jarrett Newton
(SCD Agent)

ACCESS ROAD		LOCATION
Structure <u>Culvert</u>	(A)	Structure <u>Diversion Ditch</u> (1)
Spacing <u>Side 12"</u>		Material <u>Earthen</u>
Page Ref. Manual <u>2-8</u>		Page Ref. Manual <u>2-12</u>
Structure <u>Drainage Ditches</u>	(B)	Structure <u>Rip-Rap</u> (2)
Spacing <u>Roadside</u>		Material <u>Rock</u>
Page Ref. Manual <u>2-12</u>		Page Ref. Manual <u>2-9</u>
Structure <u>Cross Ditches</u>	(C)	Structure _____ (3)
Spacing <u>150' for 3-5 % grades</u>		Material _____
Page Ref. Manual <u>2-4</u>		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 <u>2</u> Tons/acre	or correct to pH <u>6.5</u>
Fertilizer <u>600</u> lbs/acre	(10-20-20 or equivalent)
Mulch Hay <u>2</u> Tons/acre	
Seed* <u>Ky-31</u> <u>40</u> lbs/acre	
<u>Ladino Clover</u> <u>4</u> lbs/acre	
	lbs/acre

Treatment Area II	
Lime <u>2</u> Tons/acre	or correct to pH <u>6.5</u>
Fertilizer <u>600</u> lbs/acre	(10-20-20 or equivalent)
Mulch Hay <u>2</u> Tons/acre	
Seed* <u>Ky-31</u> <u>40</u> lbs/acre	
<u>Ladino Clover</u> <u>4</u> lbs/acre	
	lbs/acre

05/17/2024

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

Moore's Well Services, Inc.

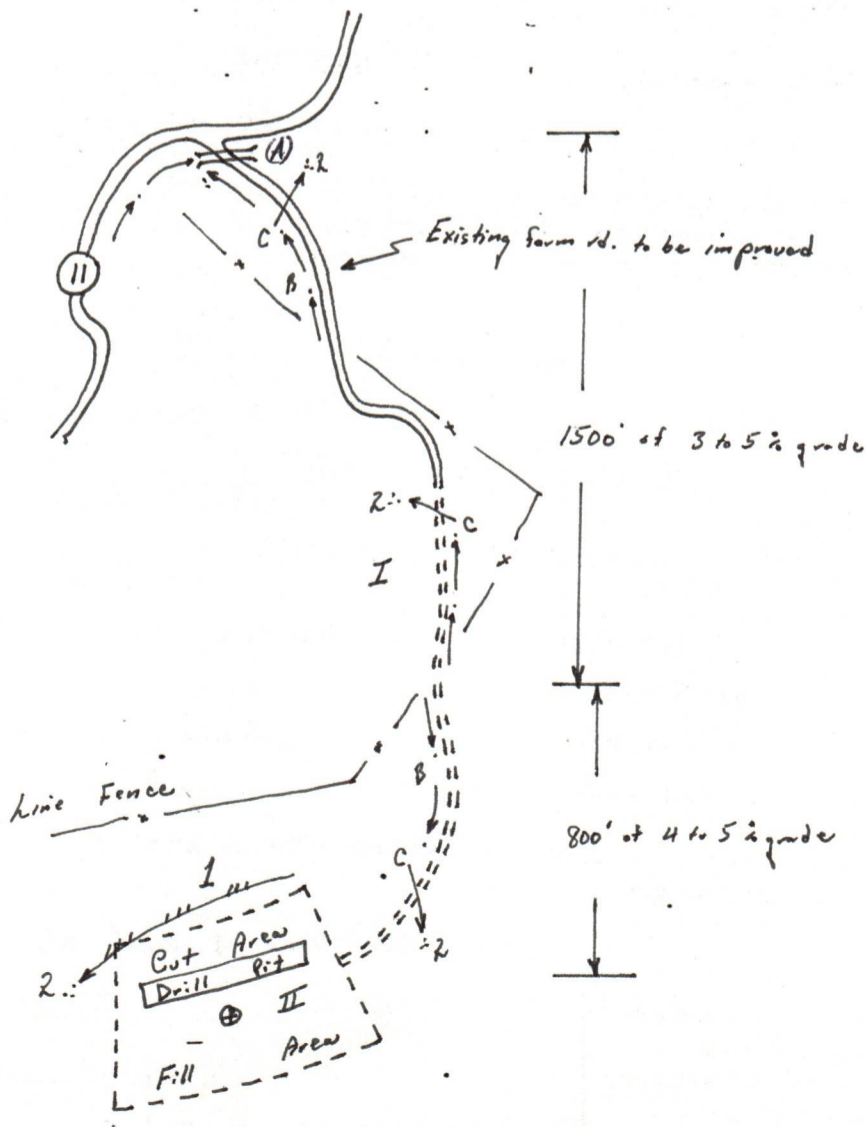
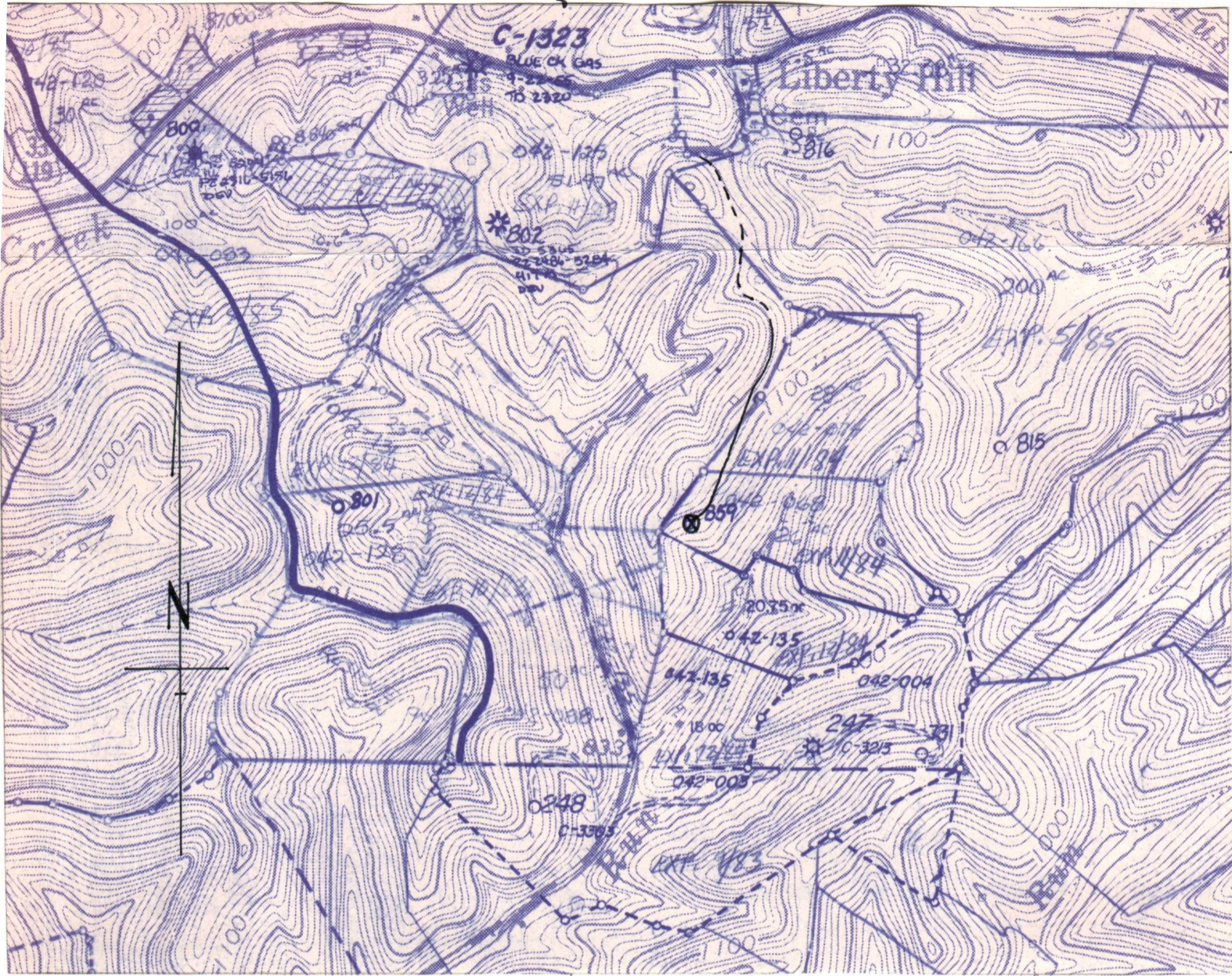
PLAN PREPARED BY Richard X. Campbell

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.



05/17/2024