



1) Date: December 12, 1983  
 2) Operator's Well No. D. Knight #1  
 3) API Well No. 47 - 001 - 2024  
 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: 1802' Watershed: Sand Run  
 District: Glade County: Barbour Quadrangle: Belington
- 6) WELL OPERATOR Berea Oil & Gas Corp. 7) DESIGNATED AGENT Mark Schumacher  
 Address P.O. Box 569 Address P.O. Box 299  
Dover, OH 44622 Bridgeport, WV 26330
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Robert Stewart Name Phillip Tracy  
 Address Box 345, Jane Lew, WV 26378 Address Elkins, WV  
 Phone: (304) 884-7782 631-8198
- 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, Haverty Group OIL & GAS DIVISION  
 12) Estimated depth of completed well, 5600 feet  
 13) Approximate strata depths: Fresh, 40 feet; salt, - feet. DEPT. OF MINES  
 14) Approximate coal seam depths: - Is coal being mined in the area? Yes  / No  /

RECEIVED  
 JAN 25 1984  
 OIL & GAS DIVISION  
 DEPT. OF MINES

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	11 3/4	J55	361b	X		30	----	----	Kinds
Fresh water	8 5/8	K55	231b	X		900	900	to surface	By Rule 15.05
Coal									Sizes
Intermediate									
Production	4 1/2	J55	10.51b	X		5600	5600	1000' Fillup	Depths set Or as req
Tubing	1 1/2	J55	4.21b	X		5500	5500	----	by Rule 15.01
Liners									Perforations:
									Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-001-2024

Date February 7, 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 February 7, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <b>BLANKET</b>	Agent: <u>ls</u>	Plat: <u>ML</u>	Casing <u>ML</u>	Fee <u>30571</u>
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*[Signature]*  
 Administrator, Office of Oil and Gas

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

File



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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 Phillip Knight  
Address Route #2  
Belington, WV 26250  
(ii) Name  
Address  
(iii) Name  
Address

5(i) COAL OPERATOR  
Address  
5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name William A. Cox  
Address 236 Peufold Place  
New Orleans, LA 70123  
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.

Take notice that under Chapter 22 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Administrator of the Office of Oil and Gas, West Virginia Department of Mines, with respect to a well at the location described on attached Application and depicted on attached Form IV-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Administrator.

6) EXTRACTION RIGHTS  
Check and provide one of the following:  
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)  
7) ROYALTY PROVISIONS  
Is the right to extract, produce or market the oil or gas based upon a lease or leases or other contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No  
If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

DEPT. OF MINES  
OIL & GAS DIVISION

RECEIVED  
FEB 2 - 1984

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  
Doyle Kinsley, Supt. of Land  
this 12 day of December, 1983.  
My commission expires 2-18, 1988.

WELL  
OPERATOR Berea Oil & Gas Corp.  
By Doyle Kinsley  
Its Superintendent of Land  
Address P.O. Box 569  
Dover, OH 44622  
Telephone (216) 364-7731

Anna R. Contini  
Notary Public, Susarawan County,  
State of Ohio  
ANNA R. CONTINI, Notary Public  
State of Ohio  
My Commission Expires Feb. 18, 1988

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.

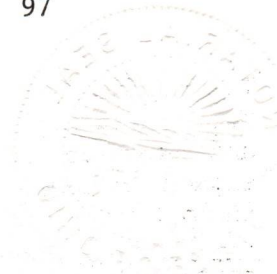
INFORMATION SUPPLIED UNDER CODE § 22-4-11(d)

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</u>	<u>Page</u>
Dorothy Knight	Fuel Resources, Inc.	100%	81	97





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 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: 1802' Watershed: Sand Run  
 District: Glade County: Barbour Quadrangle: Belington
- 6) WELL OPERATOR Berea Oil & Gas Corp. 7) DESIGNATED AGENT Mark Schumacher  
 Address P.O. Box 569 Address P.O. Box 299  
Dover, OH 44622 Bridgeport, WV 26330
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Phillip Tracy 9) DRILLING CONTRACTOR:  
 Name Robert Stewart Name \_\_\_\_\_  
 Address Box 345, Jane Lew, WV 26378 Address \_\_\_\_\_  
 Phone: (304) 884-7782 37-8798
- 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, Haverly Group
- 12) Estimated depth of completed well, 5600 feet
- 13) Approximate strata depths: Fresh, 40 feet; salt, \_\_\_\_\_ feet.
- 14) Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes  / No  /

RECEIVED  
 JAN 25 1984  
 OIL & GAS DIVISION  
 DEPT. OF MINES

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	11 3/4	J55	36 lb.	X		30			Kinds
Fresh water	8 5/8	K55	23 lb.	X		900	900	to surface	By Rule 15.05
Coal									Sizes
Intermediate									
Production	4 1/2	J55	10.5 lb.	X		5600	5600	1000' Fillup	Depths set Or as req.
Tubing	1 1/2	J55	4.2 lb.	X		5500	5500		by Rule 15.01
Liners									Perforations:
									Top Bottom

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

The named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code §22-4-20, if the permit is to be issued within fifteen (15) days of the filing of the Application.

WAIVER

The undersigned coal operator \_\_\_\_\_ / lessee \_\_\_\_\_ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: JAN. 19, 19 84  
 By William A. Cox  
 Its OWNER



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- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Robert Stewart PHILLIP TRACY Name \_\_\_\_\_  
 Address Box 345, Jane Dow, WV 26378 ELKINS, WV Address \_\_\_\_\_  
 Phone: (304)884-7782 637-8798
- 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate   
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**RECEIVED**  
 JAN 3 1984  
 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		Kinds	Sizes
Conductor	<u>1 3/4</u>	<u>J55</u>	<u>361b.</u>	<u>X</u>		<u>30</u>				
Fresh water	<u>8 5/8</u>	<u>K55</u>	<u>231b.</u>	<u>X</u>		<u>900</u>	<u>900</u>	<u>to surface</u>		<u>By Rule 15.05</u>
Coal										Sizes
Intermediate										
Production	<u>4 1/2</u>	<u>J55</u>	<u>10.51b.</u>	<u>X</u>		<u>5600</u>	<u>5600</u>	<u>1000' Fillup</u>		<u>Depths set Or as req</u>
Tubing	<u>1 1/2</u>	<u>J55</u>	<u>4.21b.</u>	<u>X</u>		<u>5500</u>	<u>5500</u>			<u>by Rule 15.01</u>
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 plan 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 \_\_\_\_\_

Philip E Knight Jr. Date: 12/28/83  
 (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.







State of West Virginia  
Department of Mines  
Oil and Gas Division

DATE 13 June 1983  
WELL NO. D. Knight - 1  
API NO. 47-001-2024

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME BEREA OIL & GAS CORP.  
Address 901 Chemical Bank Bldg.  
69 Delaware Ave., Buffalo, NY  
Telephone 716-842-0711 14202

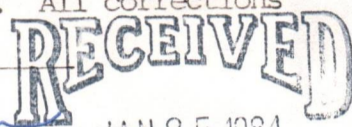
DESIGNATED AGENT MARK SCHUMACKER  
Address PO Box 299  
Bridgeport, WV 26330  
Telephone 304-842-6931

LANDOWNER Phillip Knight  
Revegetation to be carried out by \_\_\_\_\_

SOIL CONS. DISTRICT Tygart Valley  
Operator \_\_\_\_\_ (Agent)

This plan has been reviewed by Tygart Valley SCD. All corrections  
and additions become a part of this plan: 6/19/83  
(Date)

Jean Freeman  
(SCD Agent)



OIL & GAS DIVISION

DEPT. OF MINES

ACCESS ROAD

LOCATION

Structure Culverts (A)  
Spacing AS Shown (Min. 12" & Min. 15"  
when leaving State Road)  
Page Ref. Manual 2-7

Structure Diversion Ditch (1)  
Material Soil (2% max. slope)  
Page Ref. Manual 2-12

Structure Drainage Ditch (B)  
Spacing To be constructed along road.  
Page Ref. Manual 2-12

Structure Drilling pit (2)  
Material Soil  
Page Ref. Manual -----

Structure Cross Drains (C)  
Spacing 5%-135' 15%-60'  
10%- 80' 20%-45'  
Page Ref. Manual 2-4

Structure Sediment trap (3)  
Material Soil  
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.

NOTE: Drainage to be maintained after completion of well and seeding to commence within 3 months after completion of well.

REVEGETATION

Treatment Area I

Treatment Area II

Lime 3 Tons/acre  
or correct to pH 6.5

Lime 3 Tons/acre  
or correct to pH 6.5

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

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

Mulch 2 Tons/acre

Mulch 2 Tons/acre

Seed\* Ky-31 Tall Fescue 30 lbs/acre

Seed\* Ky-31 Tall Fescue 30 lbs/acre

|| Birdsfoot Trefoil 10 lbs/acre

Birdsfoot Trefoil 10 lbs/acre

Domestic Ryegrass 10 lbs/acre

Domestic Ryegrass 10 lbs/acre

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

PLAN PREPARED BY Ostrander Land Surveying, Inc

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

ADDRESS PO Box 676

Buckhannon, WV 26201

PHONE NO. 304-472-0817

A-10

C.t



**FUEL RESOURCES INC.**

195 Montague Street, Brooklyn, New York 11201 / (212) 643-2773  
(304) 823-1776

ROBERT V. FINA  
Manager of Leases

October 29, 1982

Oil & Gas Division  
West Virginia Department of Mines  
1615 Washington Street East  
Charleston, West Va.

Attention: Mr. Mike Lewis

Dear Mr. Lewis:

Please be advised that Berea Oil & Gas Corporation is Fuel Resources' Inc.'s operator. Drilling permits can be issued in their name, when they are drilling for FRI. If anything should change in the future we will let you know.

Your cooperation in this matter would be greatly appreciated.

Very truly yours,

*R. V. Fina*

RVF:djf

RECEIVED

NOV 6 1982

Berea, Ohio Philadelphia

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.			
5/2/82 Perfs 5th Sand:	2148 - 2150'	(4)	5/2/84 Frac: Formation broke @ 2800#. ISIP 1750#, 5 min 1630#. Used 448 BW, 750 gal HCl aci 500 gal methanol, 10,000# 80/100 sand, 30,000# 20/40 sand. Avg. pump rate 24 BPM @ 2700#
Bayard:	2361 - 2363'	(4)	
Balltown:	2749 - 2750'	(2)	
5/2/84 Riley:	3751 - 3755'	(6)	5/2/84 Frac. Formation broke @ 1800#. ISIP 1460#, 5 min 1380#. Used 598 BW, 500 gal MOD 202 acid. 500 gal 25% methanol, 15,000# 80/100 sand, 45,000# 20/40 sand. Avg. pump rate 26 BPM @ 2400#.
Benson:	3931 - 3932'	(3)	
	3933 - 3936'	(2)	
1st Elk:	4140 - 4142'	(3)	

WELL LOG

Continued on page two

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Depths taken from Drillers Log					
Dirt			0	15	
Shale			15	51	Hole Wet @ 30'
Sand			51	425	
Sand & Shale			425	660	1" stream water @ 430'
Red Rock			660	775	
Sand			775	980	
Red Rock & shale			980	1053	
Depths taken from Gamma Ray Log					
Little Lime			1053	1069	
Silt and shale			1069	1121	
Big Lime			1121	1177	
Big Injun			1177	1336	Gas Check @ 1194' no show
Silt and shale			1336	1462	
Siltstone			1462	1493	
silt and shale			1493	1810	Gas Check @ 1729' no show
Gordon			1810	1958	
Silt and shale			1958	2028	
4th Sand			2028	2122	Gas check @ 2102' no show
Shale			2122	2138	
5th Sand			2138	2207	
Silt and shale			2207	2359	
Bayard			2359	2388	
Silt and shale			2388	2425	
Shale			2425	2590	Gas check @ 2547' no show
Speechley			2590	2670	
Silt and shale			2670	2741	
Balltown			2741	3000	
Silt and shale			3000	3672	Gas check @ 3268' no show
Riley			3672	3818	Gas check @ 3766' no show
Shale			3818	3891	
Benson			3891	3956	
Shale			3956	4091	
1st Elk			4091	4229	Gas check @ 4142' no show
Shale			4229	4289	
2nd Elk			4289	4555	

CONTINUED ON PAGE TWO

(Attach separate sheets as necessary)

Berea Oil & Gas Corp.

Well Operator

*Thomas E. Riley*

By: Thomas E. Riley, P.E., Manager of Engineering

Date: May 16, 1984

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."

IV-35  
(Rev 8-81)

**RECEIVED**

MAY 17 1984

OIL & GAS DIVISION  
**DEPT. OF MINES**



State of West Virginia

Department of Mines  
Oil and Gas Division

Date May 16, 1984  
Operator's  
Well No. D. Knight #1  
Farm Phillip Knight  
API No. 47 - 001 - 2024

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: 1802' Watershed Sand Run  
District: Glade County Barbour Quadrangle Belington

COMPANY Berea Oil & Gas Corp.

ADDRESS P.O. Box 299, Bridgeport, WV 26330

DESIGNATED AGENT Thomas E. Riley, P.E.

ADDRESS P.O. Box 299, Bridgeport, WV 26330

SURFACE OWNER Phillip Knight

ADDRESS Sand Run, Philippi WV

MINERAL RIGHTS OWNER Dorothy Knight

ADDRESS Sand Run, Philippi, WV

OIL AND GAS INSPECTOR FOR THIS WORK Phillip

Tracy ADDRESS Ellamore, WV

PERMIT ISSUED 2/7/84

DRILLING COMMENCED 2/28/84

DRILLING COMPLETED 3/8/84

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.			
11 3/4" <del>13 1/2"</del>		30'	--
9 5/8			
8 5/8	1005'	966'	250 sks.
7			
5 1/2			
4 1/2	5592'	5279.6'	760 sks.
3			
X 1 1/2		5100'	
Liners used			

GEOLOGICAL TARGET FORMATION Haverty Group Depth 5600' feet

Depth of completed well 5592 feet Rotary X / Cable Tools \_\_\_\_\_

Water strata depth: Fresh 30, 430 feet; Salt \_\_\_\_\_ feet

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

OPEN FLOW DATA 5th Sand, Bayard, Balltown, Riley, See Well Treatment  
Producing formation Benson, 1 & 5th Elk, Haverty Pay zone depth Details feet

Gas: Initial open flow 60 Mcf/d Oil: Initial open flow none Bbl/d  
Test Date 5/15/84 Final open flow 1109 Mcf/d Final open flow none Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1350 psig (surface measurement) after 72 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

(Continue on reverse side)

Barbour 2024

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

5/1/84 Perf.  
5th Elk: 5019' (1)

5/1/84 Perf.  
Haverty: 5141' (1)  
5145' 5147' (3)  
5154' 5156' (3)  
5164' 5166' (3)  
5170' 5172' (3)

5/2/84 Frac:  
Formation broke @ 2600#. ISIP 1950# 5 min  
1700#. Used 765 BW, 500 gal MOD 202 acid.  
15,000# 80/100 sand, 45,000# 20/40 sand,  
500 gal 25% methanal. Avg. pump rate 27BPM  
@ 3100#.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
CONTINUED FROM PAGE ONE					
Shale			4555	4569	
3rd Elk			4569	4705	
Silt and shale			4705	4775	
4th Elk			4775	4831	
Shale			4831	4876	
5th Elk			4876	5021	
Silt and shale			5021	5131	
Haverty			5131	5213	
Silt and shale			5213	5324	
Fox			5324	5375	
Silt and shale			5375	5611	

(Attach separate sheets as necessary)

Berea Oil & Gas Corp.

Well Operator

*Thomas E. Riley*  
By: Thomas E. Riley, P.E., Manager of Engineering

Date: May 16, 1984

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."

Bar 2024

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

**RECEIVED**  
FEB 29 1984

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

Permit No. 001-2024

Oil or Gas Well \_\_\_\_\_  
(KIND)

Company Berea oil & Gas

Address \_\_\_\_\_

Farm Phillip Knight

Well No. 1

District Shade County Barbour

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			
16			Kind of Packer _____
13			
10			Size of _____
8 1/4			
6 3/8			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 \_\_\_\_\_

Remarks: Buddy location

2-22-84  
DATE

Phillip Knight  
DISTRICT WELL INSPECTOR



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

RECEIVED

MAR 7 - 1984

OIL & GAS DIVISION

DEPT. OF MINES

INSPECTOR'S WELL REPORT

Permit No. 001-2024

Oil or Gas Well  
(KIND)

Company Berea Oil & Gas

Address \_\_\_\_\_

Farm Dorothy Wright

Well No. 1

District Glade County Barbour

Drilling commenced \_\_\_\_\_

Drilling completed \_\_\_\_\_ Total depth 80

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 \_\_\_\_\_

Remarks: Drilled at 80 ft

2-29-84  
DATE

Philip Dwyer  
DISTRICT WELL INSPECTOR





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

RECEIVED

MAR 7 - 1984

INSPECTOR'S WELL REPORT

OIL & GAS DIVISION  
DEPT. OF MINES

Permit No. 001-2024

Oil or Gas Well \_\_\_\_\_  
(KIND)

Company Berea oil & Gas

Address \_\_\_\_\_

Farm Darby Knight

Well No. 1

District Shade County Berkeley

Drilling commenced \_\_\_\_\_

Drilling completed \_\_\_\_\_ Total depth 1100

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 \_\_\_\_\_

Remarks: \_\_\_\_\_

3-2-84  
DATE

Philip J. [Signature]  
DISTRICT WELL INSPECTOR





**RECEIVED**

OCT 5 1984

OIL & GAS DIVISION  
**DEPT. OF MINES**

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

FINAL INSPECTION REPORT  
INSPECTORS COMPLIANCE REPORT  
May 22, 1984

COMPANY Berea Oil & Gas Corp.  
P. O. Box 299  
Bridgeport, West Virginia 26330

PERMIT NO 001-2024  
FARM & WELL NO Phillip Knight #1  
DIST. & COUNTY Glade/Barbour

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 RL Beal  
DATE 10/3/84

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. Beal*

Administrator-Oil & Gas Division  
December 17, 1984

**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 - 001 - 2 - 2024 - 0000				
2.0 Type of determination being sought (Use the codes found on the front of this form.)	102 Section of NGPA	3 Category Code			
3.0 Depth of the deepest completion location (Only needed if sections 103 or 107 in 2.0 above.)	N/A feet				
4.0 Name, address and code number of applicant. (35 letters per line maximum. If code number not available, leave blank.)	Berea Oil & Gas Corp. Name		Seller Code		
	P. O. Box 299 Street				
	Bridgeport City	WV State	26330 Zip Code		
5.0 Location of this well. (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name.)	Glade Dist. Field Name				
	Barbour County		WV State		
(b) For OCS wells:	N/A 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.)	D. Knight #1				
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	N/A				
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 Corp. Name		Buyer Code		
(b) Date of the contract:	Not available				
	Mo. Day Yr.				
(c) Estimated total annual production from the well:	23 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	3.680	0.318	- - -	3.998
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	3.680	0.318	- - - -	3.998
9.0 Person responsible for this application:	Thomas E. Riley, P.E., Manager of Engineering				
Agency Use Only	Name		Title		
Date Received by Juris. Agency	<i>Thomas E Riley</i> Signature				
Date Received by FERC	May 16, 1984		(304)842-6931		
	Date Application is Completed		Phone Number		

*0-1*

MAY 17 1984

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

**GENERAL INSTRUCTIONS**

Complete this form if you are applying for price classification under sections 102, 103, 107 or 108 of the NGPA.

Complete each appropriate item on the reverse side of this page. The code numbers used in items 4 and 6 can be obtained from the Buyer/Seller Code Book. If there is more than one purchaser or contract, identify the additional information in the space below. Also enter any additional remarks in the space below. The data reported on this form are not considered to be confidential and will not be treated as such.

Submit the completed application to the appropriate Jurisdictional Agency as listed in title 18 of the CFR, part 274.501. If there are any questions, call (202) 357-8585.

**SPECIFIC INSTRUCTIONS**

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

Section of NGPA <i>(a)</i>	Category Code <i>(b)</i>	Description  <i>(c)</i>
102	1	New OCS lease
102	2	New onshore well (2.5 mile test)
102	3	New onshore well (1000 feet deeper test)
102	4	New onshore reservoir
102	5	New reservoir on old OCS lease
103	-	New onshore production well
107	0	Deep (more than 15,000 feet) high-cost gas
107	1	Gas produced from geopressed brine
107	2	Gas produced from coal seams
107	3	Gas produced from Devonian shale
107	5	Production enhancement gas
107	6	New tight formation gas
107	7	Recompletion tight formation gas
108	0	Stripper well
108	1	Stripper well - seasonally affected
108	2	Stripper well - enhanced recovery
108	3	Stripper well - temporary pressure buildup
108	4	Stripper well - protest procedure

Enter the appropriate information regarding other Purchasers/Contracts.

Line No.	Contract Date (Mo, Da, Yr) <i>(a)</i>	Purchaser  <i>(b)</i>	Buyer Code  <i>(c)</i>
1			
2			
3			
4			
5			
6			

Remarks:

48817 T YAM

**PARTICIPANTS:**

DATE: JUN 14 1984

BUYER-SELLER

WELL OPERATOR: Berea Oil & Gas Corp.

FIRST PURCHASER: Brooklyn Union Gas Co.

OTHER: \_\_\_\_\_

W. Va. Department of Mines, Oil & Gas Division  
 WELL DETERMINATION FILE NUMBER  
840.517 -102 -001 = 2024  
 Use Above File Number on all Communications  
 Relating to Determination of this Well

**APPROVED**  
 JUN 11 1984

*Haverly  
only*

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121 \_\_\_\_\_ Items not completed - Line No. \_\_\_\_\_
- 2. IV-1 Agent \_\_\_\_\_
- 3. IV-2 Well Permit \_\_\_\_\_
- 4. IV-6 Well Plat \_\_\_\_\_
- 5. IV-35 Well Record \_\_\_\_\_ Drilling \_\_\_\_\_ Deepening \_\_\_\_\_
- 6. IV-36 Gas-Oil Test: Gas Only \_\_\_\_\_ Was Oil Produced? \_\_\_\_\_ Ratio \_\_\_\_\_
- 7. IV-39 Annual Production \_\_\_\_\_ years
- 8. IV-40 90 day Production \_\_\_\_\_ Days off line: \_\_\_\_\_
- 9. IV-48 Application for certification. Complete? \_\_\_\_\_
- 10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? \_\_\_\_\_ Affidavit Signed \_\_\_\_\_
- 18-26. Other: Survey \_\_\_\_\_ Logs \_\_\_\_\_ Geological Charts \_\_\_\_\_  
 Structure Map \_\_\_\_\_ 1: 4000 Map \_\_\_\_\_ Well Tabulations \_\_\_\_\_  
 Gas Analyses \_\_\_\_\_
- (5) Date commenced: \_\_\_\_\_ Date completed \_\_\_\_\_ Deepened \_\_\_\_\_
- (5) Production Depth: \_\_\_\_\_
- (5) Production Formation: \_\_\_\_\_
- (5) Final Open Flow: \_\_\_\_\_
- (5) After Frac. R. P. \_\_\_\_\_
- (6) Other Gas Test: \_\_\_\_\_
- (7) Avg. Daily Gas from Annual Production: \_\_\_\_\_
- (8) Avg. Daily Gas from 90-day ending w/1-120 days \_\_\_\_\_
- (8) Line Pressure: \_\_\_\_\_ PSIG from Well \_\_\_\_\_
- (9) Oil Production: \_\_\_\_\_ From Completion Report \_\_\_\_\_
- 10-17. Does lease inventory indicate enhanced recovery being done \_\_\_\_\_
- 10-17. Is affidavit signed? \_\_\_\_\_ Notarized? \_\_\_\_\_
- Does official well record with the Department confirm the submitted information? \_\_\_\_\_
- Additional information: \_\_\_\_\_ Does computer program confirm? \_\_\_\_\_
- Was Determination Checked to \_\_\_\_\_ By Whom? \_\_\_\_\_





*[Handwritten signature]*

MAY 1 1984

Are you aware of any other information which would tend to be inconsistent with the information specified above? Yes        No X. If yes, indicate the type and source of the information.

AFFIDAVIT

I, Thomas E. Riley, having been first duly sworn according to law, state that I have caused to be made a diligent search of those records hereinbefore indicated in the manner herein described, that the information contained in this document is true and accurate, and that on the basis of the records and examinations hereinbefore described and to the best of my information, knowledge and belief, there is no marker well within 2.5 miles of the well for which this determination is sought which has a completion location less than 1,000 feet above the completion location of the said well for which determination is sought.

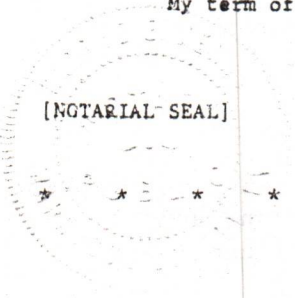
*Thomas E. Riley*

STATE OF WEST VIRGINIA  
COUNTY OF Harrison, TO WIT:

I, Hattie E. Kerns, a Notary Public in and for the state and county aforesaid, do certify that Thomas E. Riley, whose name is signed to the writing above, bearing date on the 16th day of May, 1984, has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 16th day of May, 1984.

My term of office expires on the 3rd day of January, 1993.



*Hattie E. Kerns*  
Notary Public

\* \* \* \* \*

BOTTOM HOLE PRESSURE DATA

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

$$BHP = P_w + P_w (e^{GL/53.34T} - 1)$$

Where as: PW = 1364.73 psia  
G = .65  
L = 3660'  
T = 560°R

BHP = 1464 psia

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

DATE May 16, 19 84

Operator's  
Well No. D. Knight #1

API Well No. 47 - 001 - 2024  
State County Permit

WELL CLASSIFICATION FORM

WELLS DRILLED MORE THAN 1,000 FEET DEEPER THAN A MARKER WELL

NGPA Section 102(c)(1)(B)(ii) Category 3

DESIGNATED AGENT Thomas E. Riley, P.E.

ADDRESS P. O. Box 299  
Bridgeport, WV 26330

WELL OPERATOR Berea Oil & Gas Corp.

ADDRESS P. O. Box 299  
Bridgeport, WV 26330

LOCATION: Elevation 1802'

Watershed Sand Run

District Glade County Barbour Quad Belington

GAS PURCHASER Brooklyn Union Gas Co.

ADDRESS 195 Montague Street  
Brooklyn, NY 11201

Gas Purchase Contract No. Not available

Meter Chart Code Not available

Date of Contract Not Available

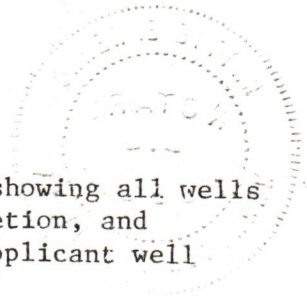
\* \* \* \* \*

List all records reasonably available to you which contain information relevant to a determination of eligibility (including production records, B&O Tax Records and royalty payment records) and indicate the location of such records:

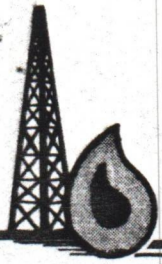
Checked logs, B & O records, production figures available. Records located in our well files. Appalachian Well Log Services, Midland, Texas. State of W. Va. Geological drilling samples report and completion reports reviewed carefully. Reviewed API well cards located in house.

Describe the search made of any records listed above:

Reviewed logs and pay section - our files. Drew well location plat showing all wells within a 2.5 mile radius of applicant well identifying deepest completion, and prepared exhibit identifying all wells within a 2.5 mile radius of applicant well identifying deepest completion.



Are there any records not reasonably available to you which may contain information relevant to a determination of eligibility? Yes \_\_\_ No X. If yes, identify such records and indicate their location, if known:



# berea oil & gas corp.

One Berea Plaza • P.O. Box 299 • Bridgeport, West Virginia 26330-0299 • (304) 842-6931  
May 16, 1984

Mr. Theodore Streit, Administrator  
West Virginia Department of Mines  
Office Of Oil and Gas - NGPA Section  
307 Jefferson Street  
Charleston, West Virginia

RE: FERC Filing - NGPA 102/Code 3  
D. Knight #1 (47-001-2024)

Dear Mr. Streit:

Enclosed please find a complete application for NGPA 102/Code 3 (1,000' deeper rule) for the Haverty formation determination on the above referenced well. We have provided supporting documents as required by the 1981 Edition of the West Virginia Administrative Regulations (Chapter 22-4) as follows:

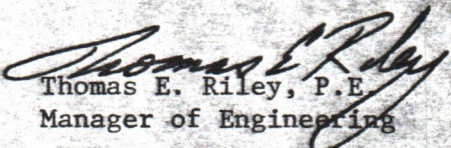
1. FERC Form 121 (original and 3 copies)
2. Form IV-6, Well Plat (3 copies)
3. Form IV-35, Well Operator's Report (3 copies)
4. Form IV-48WC (original and 3 copies)
5. Form IV-52WC (original and 1 copy)
6. Well location plat showing all wells within a 2.5 mile radius of the applicant well
7. Exhibit "A" identifying all wells within a 2.5 mile radius of applicant well

Our check in the amount of \$40.00 is attached for the filing fee.

Should you have any questions or require additional information, please do not hesitate to contact me at (304)842-6931 at our Bridgeport, West Virginia office.

Respectfully,

BEREA OIL & GAS CORP.

  
Thomas E. Riley, P.E.  
Manager of Engineering

TER/lk  
Encl.

cc: Buffalo Office  
Dover Office  
D. Copley's Office  
E. Mehring  
Brooklyn Union Gas  
FERC File

• Corporate Headquarters •

69 Delaware Avenue • 900 Chemical Bank Building • Buffalo, New York 14202-3878 • (716) 842-0711 • Telex # 646894

**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 - 001 - 2 - 2024 - 0000				
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	103 Section of NGPA		Category Code		
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	5172 feet				
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Berea Oil & Gas Corp. Name			_____ Seller Code	
	P. O. Box 299 Street				
	Bridgeport	WV	26330		
	City	State	Zip Code		
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	Glade Dist. Field Name				
	Barbour		WV		
	County		State		
(b) For OCS wells:	N/A				
	Area Name		Block Number		
	Date of Lease:				
	Mo. Day Yr.				
(c) Name and identification number of this well: (35 letters and digits maximum.)	D. Knight #1				
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	N/A				
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 Corp. Name			_____ Buyer Code	
(b) Date of the contract:	Not available				
	Mo. Day Yr.				
(c) Estimated total annual production from the well:	23 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	2 . 8 8 9	0 . 2 4 9	-----	3 . 1 3 8
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	2 . 8 8 9	0 . 2 4 9	-----	3 . 1 3 8
9.0 Person responsible for this application:	Thomas E. Riley, P.E., Manager of Engineering				
Agency Use Only	Name		Title		
Date Received by Juris. Agency	<i>Thomas E Riley</i> Signature				
Date Received by FERC	May 16, 1984		(304)842-6931		
	Date Application is Completed		Phone Number		

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

GENERAL INSTRUCTIONS

Complete this form if you are applying for price classification under sections 102, 103, 107 or 108 of the NGPA.

Complete each appropriate item on the reverse side of this page. The code numbers used in items 4 and 6 can be obtained from the Buyer/Seller Code Book. If there is more than one purchaser or contract, identify the additional information in the space below. Also enter any additional remarks in the space below. The data reported on this form are not considered to be confidential and will not be treated as such.

Submit the completed application to the appropriate Jurisdictional Agency as listed in title 18 of the CFR, part 274.501. If there are any questions, call (202) 357-8585.

SPECIFIC INSTRUCTIONS

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

Section of NGPA <i>(a)</i>	Category Code <i>(b)</i>	Description  <i>(c)</i>
102	1	New OCS lease
102	2	New onshore well (2.5 mile test)
102	3	New onshore well (1000 feet deeper test)
102	4	New onshore reservoir
102	5	New reservoir on old OCS lease
103	-	New onshore production well
107	0	Deep (more than 15,000 feet) high-cost gas
107	1	Gas produced from geopressed brine
107	2	Gas produced from coal seams
107	3	Gas produced from Devonian shale
107	5	Production enhancement gas
107	6	New tight formation gas
107	7	Recompletion tight formation gas
108	0	Stripper well
108	1	Stripper well - seasonally affected
108	2	Stripper well - enhanced recovery
108	3	Stripper well - temporary pressure buildup
108	4	Stripper well - protest procedure

Enter the appropriate information regarding other Purchasers/Contracts.

Line No.	Contract Date (Mo, Da, Yr) <i>(a)</i>	Purchaser  <i>(b)</i>	Buyer Code  <i>(c)</i>
1			
2			
3			
4			
5			
6			

Remarks:

APR 7 1985

PARTICIPANTS: DATE: JUN 14 1984 BUYER-SELLER  
 WELL OPERATOR: Berea Oil & Gas Corp.  
 FIRST PURCHASER: Brooklyn Union Gas Co.  
 OTHER: \_\_\_\_\_

W. Va. Department of Mines, Oil & Gas Division  
 WELL DETERMINATION FILE NUMBER  
840.517 - 103 - 001 - 2024  
 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-48 Application for certification. Complete? \_\_\_\_\_
  - 10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? \_\_\_\_\_ Affidavit Signed \_\_\_\_\_
  - 18-26. Other: Survey \_\_\_\_\_ Logs \_\_\_\_\_ Geological Charts \_\_\_\_\_  
 Structure Map \_\_\_\_\_ 1: 4000 Map \_\_\_\_\_ Well Tabulations \_\_\_\_\_  
 Gas Analyses \_\_\_\_\_
  - (5) Date commenced: \_\_\_\_\_ Date completed \_\_\_\_\_ Deepened \_\_\_\_\_
  - (5) Production Depth: \_\_\_\_\_
  - (5) Production Formation: \_\_\_\_\_
  - (5) Final Open Flow: \_\_\_\_\_
  - (5) After Frac. R. P. \_\_\_\_\_
  - (6) Other Gas Test: \_\_\_\_\_
  - (7) Avg. Daily Gas from Annual Production: \_\_\_\_\_
  - (8) Avg. Daily Gas from 90-day ending w/1-120 days \_\_\_\_\_
  - (8) Line Pressure: \_\_\_\_\_ PSIG from Depth \_\_\_\_\_
  - (9) Oil Production: \_\_\_\_\_ From Completion Report \_\_\_\_\_
  - 10-17. Does lease inventory indicate enhanced recovery being done \_\_\_\_\_
  - 10-17. Is affidavit signed? \_\_\_\_\_ Notarized? \_\_\_\_\_
  - Does official well record with the Department confirm the submitted information? \_\_\_\_\_
  - Additional information \_\_\_\_\_ Does computer program confirm? \_\_\_\_\_
  - Was Determination Objected to \_\_\_\_\_ By Whom? \_\_\_\_\_

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

Date May 16, 1984

Operator's Well No. D. Knight #1

API Well No. 47 - 001 - 2024  
State County Permit

WELL CLASSIFICATION FORM  
NEW ONSHORE PRODUCTION WELL

NGPA Section 103

DESIGNATED AGENT Thomas E. Riley, P.E.

ADDRESS P. O. Box 299

Bridgeport, WV 26330

LOCATION: Elevation 1802'

Watershed Sand Run

Dist. Glade County Barbour Quad Belington

Gas Purchase Contract No. Not Available

Meter Chart Code Not Available

Date of Contract Not Available

WELL OPERATOR Berea Oil & Gas Corp.

ADDRESS P. O. Box 299

Bridgeport, WV 26330

GAS PURCHASER Brooklyn Union Gas Co.

ADDRESS 195 Montague St.

Brooklyn, NY 11201

\* \* \* \* \*

Date surface drilling was begun: 2/7/84

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

$P_W + P_W = (e^{GL/53.34T} - 1)$

Where as: PW = 1364.73 psia      BHP = 1464 psia  
G = .65  
L = 3660'  
T = 560°R

AFFIDAVIT

I, Thomas E. Riley, having been first sworn according to law state that surface drilling of the well for which this determination is sought was begun on or after February 19, 1977; the well satisfies applicable state or federal well spacing requirements and the well is not within a proration unit, in existence at the time surface drilling began, which was applicable to the reservoir from which gas is or will be produced and which applied to any other well producing gas in commercial quantities or on which surface drilling began on or after February 19, 1977, and which was capable of producing gas in commercial quantities. I state, further, that I have concluded, to the best of my information, knowledge and belief, that the well for which this determination is sought is a new onshore production well and that I am not aware of any information not described in the application which is inconsistent with this conclusion.

*Thomas E. Riley*

STATE OF WEST VIRGINIA,  
COUNTY OF Harrison, TO WIT:

I, Hattie E. Kerns, a Notary Public in and for the state and county aforesaid, do certify that Thomas E. Riley, whose name is signed to the writing above, bearing date the 16th day of May, 1984, has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 16th day of May, 1984.

My term of office expires on the 3rd day of January, 1993.

[NOTARIAL SEAL]

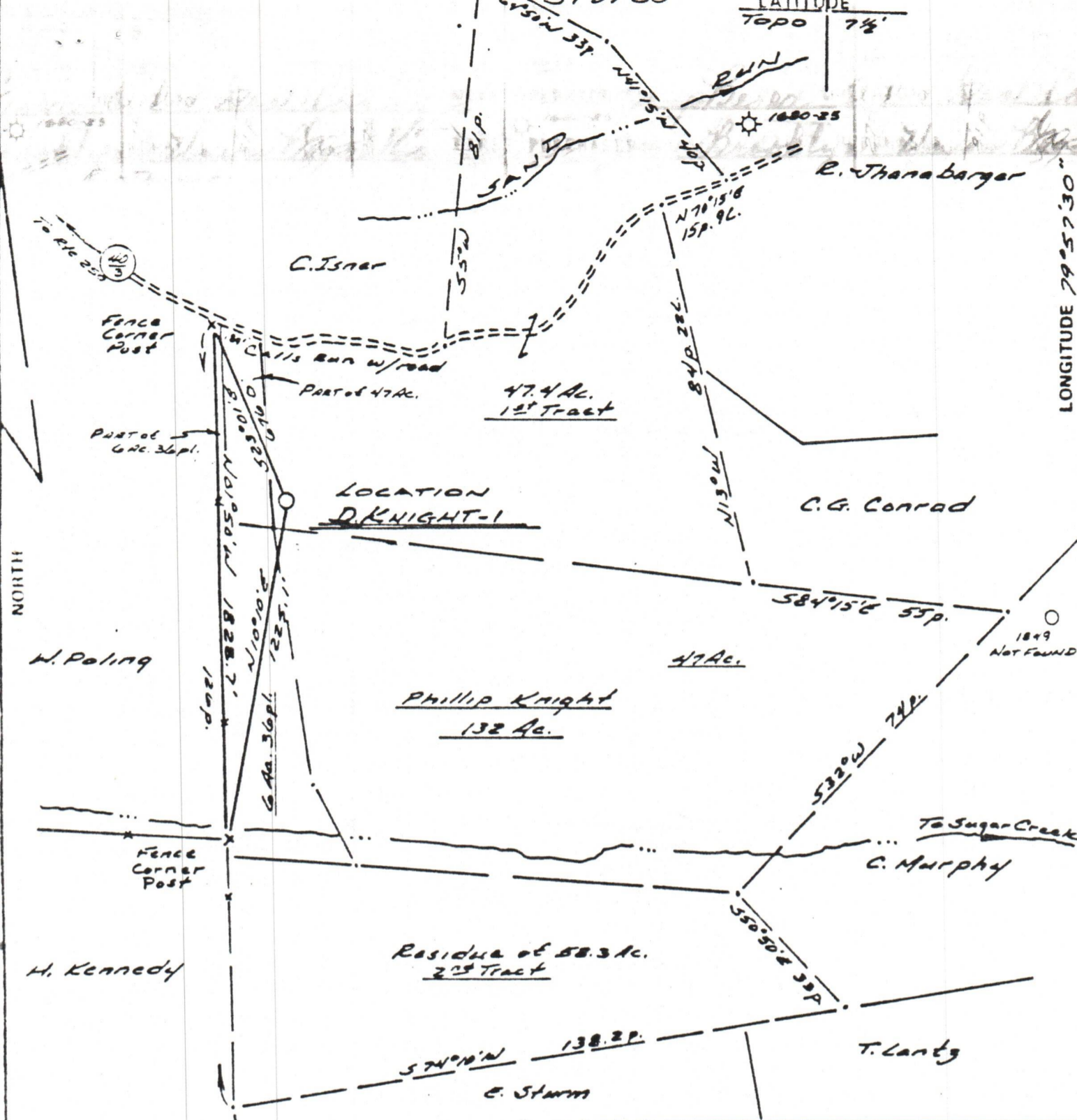
*Hattie E. Kerns*  
Notary Public





*[Handwritten signature]*

MAY 2 1984



FILE NO 586.01  
 DRAWING NO 83-7  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION Spot 61-1921'  
W. of location.

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) Rufford S. Ostrander  
 R.P.E. \_\_\_\_\_ L.L.S. 555  
Buckhannon, W. Va. 26001

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE 7 February, 19 83  
 OPERATOR'S WELL NO. D. Knight-1  
 API WELL NO. \_\_\_\_\_  
47 - 001 - 2024  
 STATE COUNTY PERMIT

(-) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS.") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1802' WATER SHED Sand Run  
 DISTRICT Glade COUNTY Barbour  
 QUADRANGLE Belington  
 SURFACE OWNER Phillip Knight ACREAGE 132  
 OIL & GAS ROYALTY OWNER DOROTHY Knight LEASE ACREAGE 47.4±  
 LEASE NO. \_\_\_\_\_  
 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 Haverly ESTIMATED DEPTH 5600  
 WELL OPERATOR BERSA OIL & GAS CO. INC. DESIGNATED AGENT Mark Schumacher  
 ADDRESS Oil Chemical Bank Bldg., 69 Delaware Ave. ADDRESS Box 249