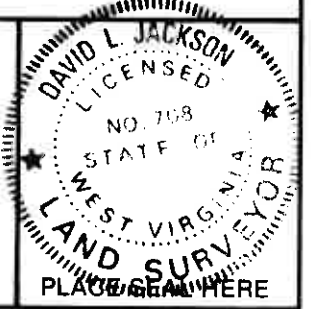


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
 DRAWING NO. 1  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY in 200  
 PROVEN SOURCE OF ELEVATION Mine Sta. K-10 9300' NW of Location. elev 1360.55

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 ENERGY.  
 (SIGNED) David L. Jackson  
 R.P.E. \_\_\_\_\_ L.L.S. 708



STATE OF WEST VIRGINIA  
 Division of Environmental Protection  
 OFFICE OF OIL AND GAS

DATE May 5, 19 95  
 OPERATOR'S WELL NO. D. Norris heirs  
 API WELL NO. No. 2  
47-001-02703  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X

LOCATION: ELEVATION 1459 WATERSHED Tygart Valley River  
 DISTRICT Phillippi COUNTY Barbour  
 QUADRANGLE Phillippi 7 1/2' NE

SURFACE OWNER Dorothy Norris heirs ACREAGE 61.4  
 OIL & GAS ROYALTY OWNER Dorothy Norris heirs LEASE ACREAGE 61.4  
 LEASE NO. 497900

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

PLUG AND ABANDON \_\_\_ CLEAN UP \_\_\_ REPLUG \_\_\_  
 TARGET FORMATION Benson ESTIMATED DEPTH 5000 5500  
 WELL OPERATOR Petroleum Development Corp. DESIGNATED AGENT Eric R. Stearns  
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330

6-6-309  
 JUN 9 1995

FORM WW-6

COUNTY NAME PERMIT

OCT 12 1995

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Permitting  
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: NORRIS, DOROTHY ETAL. Operator Well No.: D. Norris #2

LOCATION: Elevation: 1,459.00 Quadrangle: PHILIPPI

District: PHILIPPI County: BARBOUR  
Latitude: 13550 Feet South of 39 Deg. 12Min. 30 Sec.  
Longitude 10850 Feet West of 80 Deg. Min. Sec.

Company: PETROLEUM DEVELOPMENT COR  
103 E. MAIN ST. - P.O. BOX 26  
BRIDGEPORT, WV 26330-0026

Agent: ERIC STEARNS

Inspector: PHILLIP TRACY  
Permit Issued: 06/06/95  
Well work Commenced: 09/19/95  
Well work Completed: 09/24/95  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary Cable Rig  
Total Depth (feet) 4190'  
Fresh water depths (ft) \_\_\_\_\_  
267; 420; 1485  
Salt water depths (ft) \_\_\_\_\_  
n/a  
Is coal being mined in area (Y/N)? \_\_\_\_\_  
Coal Depths (ft): 233-236; 393-396; 695-698  
open mine 277-283

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	32'	32'	
11 3/4"	332'	332'	185 sks
8 5/8"	835'	835'	205 sks
4 1/2"	4106'	4106'	400 sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 3914-3916  
 Gas: Initial open flow 15 MCF/d Oil: Initial open flow 0 Bbl/d  
 Final open flow 411 MCF/d Final open flow 0 Bbl/d  
 Time of open flow between initial and final tests 4 Hours  
 Static rock Pressure 950 psig (surface pressure) after 72 Hours

Second producing formation \_\_\_\_\_ Pay zone depth (ft) \_\_\_\_\_  
 Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests \_\_\_\_\_ Hours  
 Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: PETROLEUM DEVELOPMENT CORP.

By: Eric R. Stearns

Date: October 9, 1995

6 1995

D. Norris #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1st	Benson	16 (3914' - 3916')	50	400	500	60

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	1/2" stream water @267'
sand, shale, RR	10	1066	Coal 233' - 236'
Little Lime	1066	1074	Coal 393' - 396'
sand, shale	1074	1114	open mine @277' - 283'
Big Lime	1114	1224	1/2" stream water @420'
sand, shale	1224	1226	Coal 695' - 698'
Keener	1226	1250	
sand, shale	1250	1252	gas chk @ 876' no show
Big Injun	1252	1318	1 1/2" stream water @1485'
sand, shale	1318	1463	gas chk @ 1218' no show
Gantz	1463	1500	
sand, shale	1500	1510	
50 ft	1510	1552	
sand, shale	1552	1555	
30 ft	1555	1585	gas chk @ 1624' no show
sand, shale	1585	1875	gas chk @ 1686' no show
4th	1875	2042	gas chk @ 2126' no show
sand, shale	2042	2047	
5th	2047	2079	
sand, shale	2079	2085	gas chk @ 2252' no show
Bayard	2085	2100	gas chk @ 2470' no show
sand, shale	2100	2142	gas chk @ 2595' no show
Elizabeth	2142	2193	gas chk @ 3190' no show
sand, shale	2193	2406	
Speechly	2406	2802	gas chk @ 3596' no show
sand, shale	2802	2838	gas chk @ 3937' no show
Balltown	2838	3193	gas chk @ 4093' no show
sand, shale	3193	3233	
Bradford	3233	3360	
sand, shale	3360	3595	
Riley	3595	3816	
sand, shale	3816	3908	
Benson	3908	3952	gas chk @ collars 2/10 thru 1" w/h2o
	3952	4280	Drillers TD
		4190	Logger TD

001-2703

FORM WW-2B  
**RECEIVED**  
WV Division of  
Environmental Protection

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

Page \_\_\_ of \_\_\_  
Issued 06/06/95  
Expires 06/06/97  
38200 (5) 545

- 1) Well Operator: Petroleum Development Corporation <sup>687</sup>
- 2) Permitting Office of Oil & Gas's Well Number: D. Norris Heirs #2 3) Elevation: 1,469'
- Well type: (a) Oil \_\_\_ / or Gas XX /
- (b) If Gas: Production XX / Underground Storage \_\_\_  
Deep \_\_\_ / Shallow XX /
- 4) Proposed Target Formation(s): Elk Sands <sup>436</sup>
- 6) Proposed Total Depth: 5,500' feet
- 7) Approximate fresh water strata depths: 15'; 155'
- 8) Approximate salt water depths: Gantz @ 1585'
- 9) Approximate coal seam depths: 50'-54'; 360' - 366'
- 10) Does land contain coal seams tributary to active mine? Yes \_\_\_ / No XX /
- 11) Proposed Well Work: Drill & Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS			CEMENT Fill-up (cu. ft.)
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	11/34"	H-40	42#	30'	-----	-----
<del>Fresh Water</del>						
<del>Coal</del>				<u>800'</u>	<u>800' 45'</u>	38CSR18-11.3 38CSR18-11.2.2 38CSR18-11.1
<del>Intermediate</del>	8 5/8"	H-40	20/23#	800'	800'	
Production	4 1/2"	J-55	10/5#	5,500'	5,500'	450 sks.
Tubing						
Liners						

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

Fee(s) paid:  Well Work Permit  Registration Fund  WPCP

Plat  WW-9  WW-2B  Bond LC Agent

(Type)

12

**RECEIVED**

WV Division of  
Environmental Protection

**MAY 25 1995**

- 1) Date: Map 12, 1995
- 2) Operator's well number D. Norris Hrs. #2
- 3) API Well No: 47 - 001 - 2703  
State - County - Permit

Permitting  
Office of Oil & Gas

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
  - (a) Name Dorothy Norris  
Address Baughman Apt. #514  
212 Chestnut St, Philippi, WV 26416
  - (b) Name Trent A. Norris  
Address 39 Larchwood Drive  
Paynesville, OH 44077
  - (c) Name Deloris M. Mayle  
Address Rt. 3, Box 72  
Bruceston Mills, WV 26525
- 5) (a) Coal Operator:
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Phillip Tracy  
Address Rt. 2, Box 37-a  
Montrose, WV 26283  
Telephone (304)- 636-8798

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

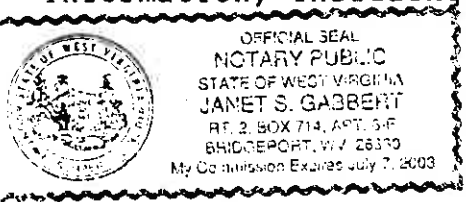
\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
XX Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through \_\_\_\_\_ on the above named parties, by:  
\_\_\_\_\_ Personal Service (Affidavit attached)  
\_\_\_\_\_ Certified Mail (Postmarked postal receipt attached)  
\_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Well Operator PETROLEUM DEVELOPMENT CORPORATION  
By: [Signature]  
Its: VP - Exploration and Development  
Address P O Box 26  
Bridgeport, WV 26330  
Telephone 304-842-6256

Subscribed and sworn before me this 24<sup>th</sup> day of MAY, 1995

[Signature] Notary Public  
My commission expires July 7, 2003