

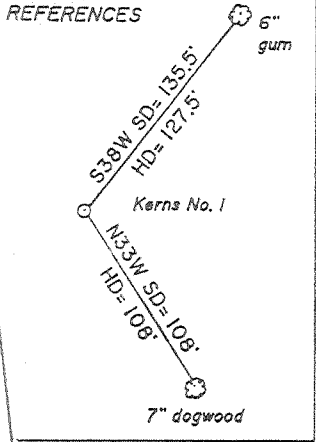
11575

LATITUDE 39-25-00 N

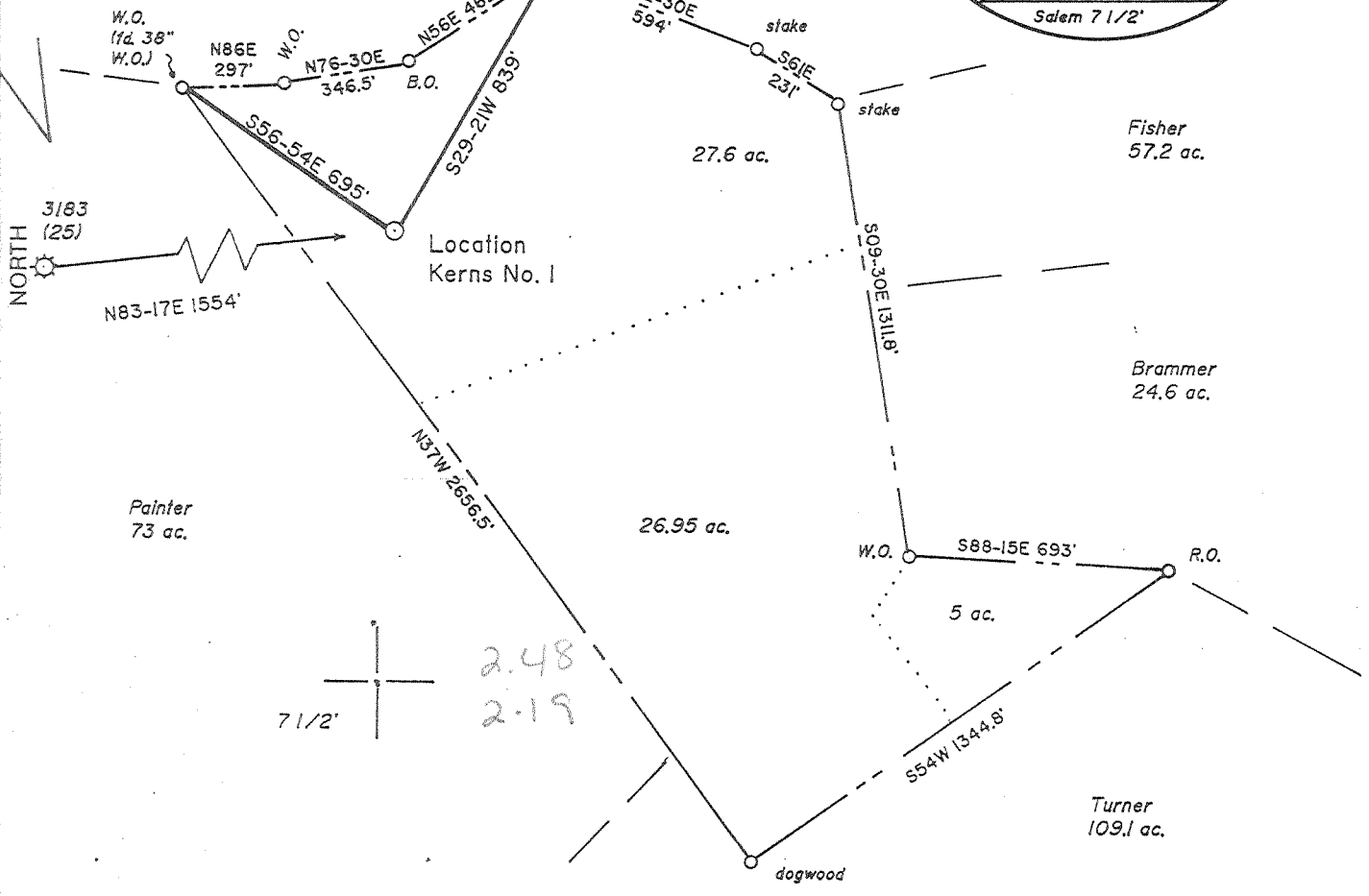
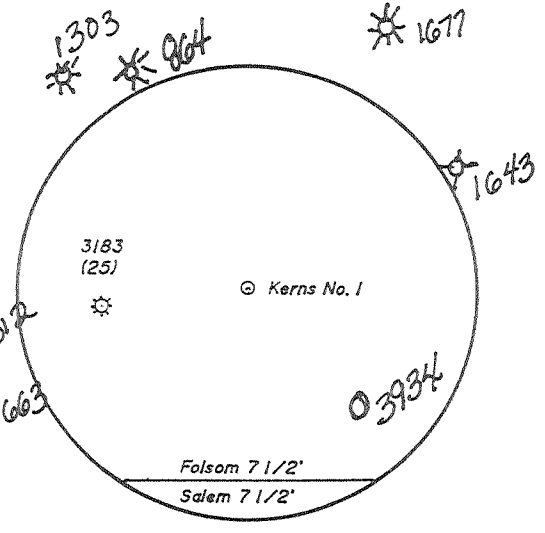
LONGITUDE 80-32-30 W

13121

*Jamie*  
12/16/91



Dolson  
139.02 ac.



2.48  
2.19  
7 1/2'

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

FILE NO. \_\_\_\_\_  
DRAWING NO. 1  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1 in 200  
PROVEN SOURCE OF ELEVATION Spot elev. 1480'  
West of Location: elev. 1425

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 Z. Jackson  
R.P.E. \_\_\_\_\_ L.L.S. 708

PLACE SEAL HERE

WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
#10 McJUNKIN ROAD  
NITRO, WEST VIRGINIA 25143-2506

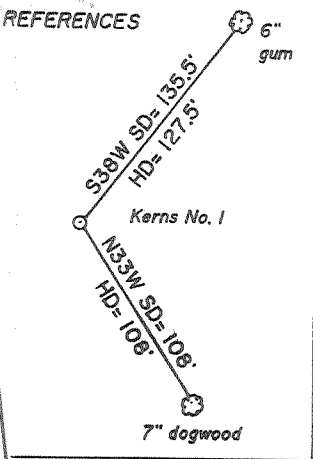


DATE November 18, 19 91  
OPERATOR'S WELL NO. Kerns No. 1  
API WELL NO. 47-017-03933-W  
STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
LOCATION: ELEVATION 1173 WATER SHED East Run  
DISTRICT McClellan COUNTY Doddridge  
QUADRANGLE Folsom 7 1/2'  
SURFACE OWNER Frederick D. Painter II et ux ACREAGE 59.6  
OIL & GAS ROYALTY OWNER John Kerns et al LEASE ACREAGE 57.59  
LEASE NO. 455600

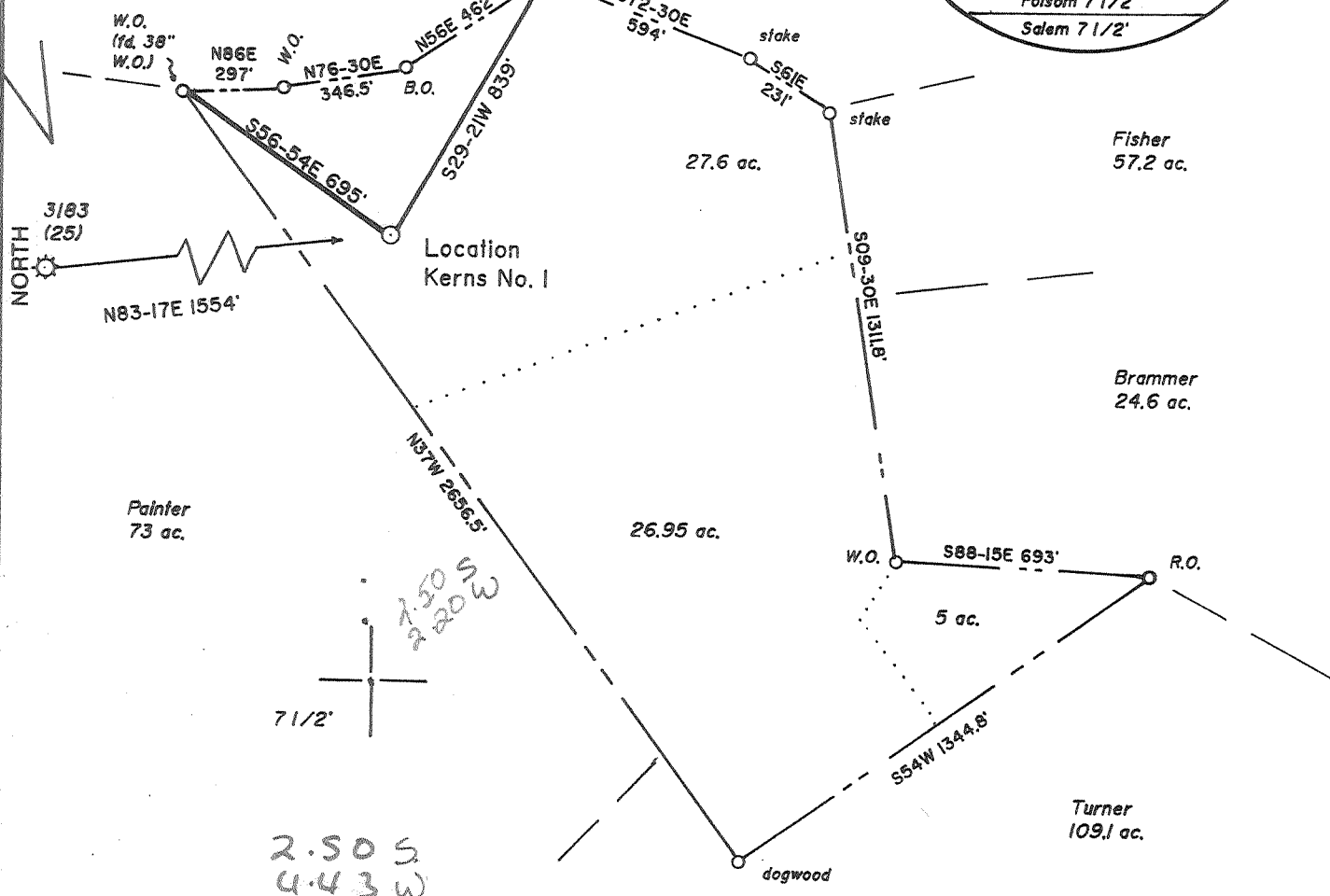
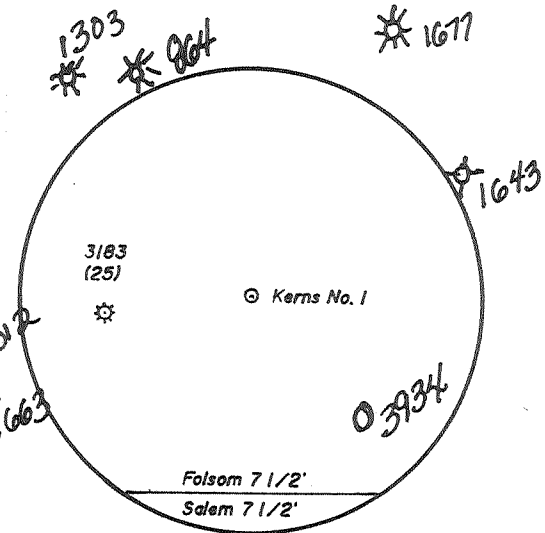
PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
Existing well drilled in 1992 to 5321, POC will set Temp Plug for 4th sand  
PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
TARGET FORMATION Benson ESTIMATED DEPTH 5000  
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

COUNTY NAME  
0000  
3933 W  
PERMIT



*Jamel*  
*12/16/91*

Dolson  
139.02 ac.



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

FILE NO. \_\_\_\_\_  
 DRAWING NO. 1  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION Spot elev. 1480'  
West of Location: elev. 1425

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 J. Jackson  
 R.P.E. \_\_\_\_\_ L.L.S. 708

PLACE SEAL HERE

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



DATE November 18, 19 91  
 OPERATOR'S WELL NO. Kerns No. 1  
 API WELL NO. 47-017-03933  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1173 WATER SHED East Run  
 DISTRICT McClellan 5 COUNTY Doddridge  
 QUADRANGLE Folsom 7 1/2' Contepoint EC  
 SURFACE OWNER Frederick D. Painter II et ux ACREAGE 59.6  
 OIL & GAS ROYALTY OWNER John Kerns et al LEASE ACREAGE 57.59  
 LEASE NO. 455600  
 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 Benson ESTIMATED DEPTH 5000  
 WELL OPERATOR Petroleum Development Corp. 687 DESIGNATED AGENT Eric R. Stearns  
 ADDRESS P.O. Box 26, Bridgeport, WV 26330 ADDRESS P.O. Box 26, Bridgeport, WV 26330  
6-6 Smithton-Flint-Sedalia (099)

COUNTY NAME PERMIT

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

*hy*

Well Operator's Report of Well Work

Farm name: **Painter, Frederick III**

Operator Well No.: **Kerns 1**

LOCATION: Elevation: **1173.00**      Quadrangle: **Folsom**

District: **McClellan**      County: **Doddridge**  
Latitude: **13100 Feet South of 39 Deg. 25 Min. 0 Sec.**  
Longitude **11575 Feet West of 80 Deg. 32 Min. 30 Sec.**

Company: **PETROLEUM DEVELOPMENT COR**  
P. O. BOX 26  
BRIDGEPORT, WV 26330-0026

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	175'	175'	200 sks
8 5/8"	1704'	1704'	391 sks
4 1/2"	5276'	5276'	540 sks

Agent: **Alan H. Smith**

Inspector: **Mike Underwood**  
Permit Issued: **10/13/98**  
Well work Commenced: **10/20/98**  
Well work Completed: **10/29/98**  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary Cable  Rig  
Total Depth (feet) **2958'**  
Fresh water depths (ft) **1369'**

Salt water depths (ft) **N/A**

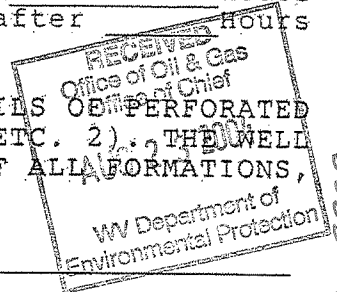
Is coal being mined in area (Y/N)? **N**  
Coal Depths (ft): **545-550, 755-760, 1000-1002**

OPEN FLOW DATA

Producing formation **Fourth Sand**      Pay zone depth (ft) **2917/2958**  
Gas: Initial open flow **500** MCF/d      Oil: Initial open flow **0** Bbl/d  
Final open flow **800** MCF/d      Final open flow **0** Bbl/d  
Time of open flow between initial and final tests **4** Hours  
Static rock Pressure **40** psig (surface pressure) after **48** 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: **Alan H. Smith**  
Date: **8/17/04**

0000  
3933 W

Kerns #1  
47-017-03933 W

Fourth Sand Formation  
14 Perfs (2917' - 2958')

FORMATION	TOP FEET	BOTTOM FEET	REMARKS
KB-GL	0	10	
sand, shale, RR	10	2036	Hole Damp@ 1369
Little Lime	2036	2062	Coal 545-550, 755-760
sand, shale	2062	2074	Coal 1000 - 1002
Big Lime	2074	2155	gas chk@ 2016 no show
Big Injun	2155	2254	gas chk@ 2327 6/10 - 2" H2o
sand, shale	2254	2610	
Gantz	2610	2633	
sand, shale	2633	2811	gas chk@ 2730 4/10 - 2" H2o
Gordon	2811	2846	
sand, shale	2846	2904	gas chk@ 2857 8/10 - 2" H2o
4 th	2904	2958	

Set Bridge Plug At 3000' and Frac:

0 SCF Nitrogen

250 Gal 15% HCL Acid

4000# 20/40 Mesh Resin Sand

36000# 20/40 Mesh Sand

Drill Out Frac Plug And Put Back In Line.

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

Reviewed TMG  
Recorded \_\_\_\_\_

Well Operator's Report of Well Work

Farm name: PAINTER, FREDERICK & ROSE Operator Well No.: KERNS #1

LOCATION: Elevation: 1173.00 Quadrangle: FOLSOM

District: MCCLELLAN County: DODDRIDGE  
Latitude: 13100 Feet South of 39 Deg. 25Min. 0 Sec.  
Longitude 11575 Feet West of 80 Deg. 32 Min. 30 Sec.

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

Agent: ERIC R. STEARNS

Inspector: MIKE UNDERWOOD  
Permit Issued: 12/16/91  
Well work Commenced: 01/23/92  
Well work Completed: 01/29/92  
Verbal Plugging \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary x Cable Rig \_\_\_\_\_  
Total Depth (feet) 5321'  
Fresh water depths (ft) \_\_\_\_\_  
1369  
Salt water depths (ft) \_\_\_\_\_  
n/a  
Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 545-550; 755-760;  
1000-1002 Coal

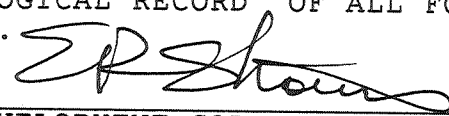
Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	175'	175'	200 sks
8 5/8"	1704'	1704'	391 sks
4 1/2"	5276'	5276'	540 sks

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 5196-5199  
Gas: Initial open flow 267 MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 335 MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 4 Hours  
Static rock Pressure 1220 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: February 27, 1992

MAR 6 1992

Kerns #1

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1ST	Benson	13(5196-5199)	100	450	500	66

W E L L L O G

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	
sand, shale, RR	10	2036	Hole Damp @ 1369'
Little Lime	2036	2062	Coal 545-550; 755-760
sand, shale	2062	2074	Coal 1000-1002
Big Lime	2074	2155	gas chk @ 2016' No Show
Big Injun	2155	2254	gas chk @ 2327' 6/10-2"H2O
sand, shale	2254	2610	
Gantz	2610	2633	
sand, shale	2633	2811	gas chk @ 2730' 4/10-2"H2O
Gordon	2811	2846	
sand, shale	2846	2904	gas chk @ 2857' 8/10-2"H2O
4th	2904	2958	
sand, shale	2958	2973	
5th	2973	3021	gas chk @ 3014' 4/10-7"H2O
sand, shale	3021	3541	gas chk @ 3296' 4/10-7" H2O
Speechley	3541	4004	gas chk @ 3700' 4/10-7" H2O
sand, shale	4004	4060	gas chk @ 3917' 40/10-2" H2O
Balltown	4060	4561	
sand, shale	4561	4645	
Bradford	4645	4752	
sand, shale	4752	4861	gas chk @ 4825' 44/10-2" H2O
Riley	4861	5116	
sand, shale	5116	5171	gas chk @ 5166' 80/10-2" H2O
Benson	5171	5217	gas chk @ 5198' 90/10-2" H2O
sand, shale	5217	5325	
	5325	5325	Driller TD 40/10-2"H2O
			DC's 24/10-2"H2O
		5315	Logger TD

RECEIVED

NOV 25 1991

DEPT. OF ENERGY

017-3933  
Issued 12/16/91

Page \_\_\_ of \_\_\_  
Expires 12/16/93

FORM WW-2B

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

Petroleum Development Corporation <sup>687</sup> 38200 (5) 349

- 1) Well Operator: \_\_\_\_\_
- 2) Operator's Well Number: \_\_\_\_\_ Kerns #1 \_\_\_\_\_ 3) Elevation: 1173'
- 4) Well type: (a) Oil \_\_\_ / or Gas X /  
(b) If Gas: Production X / Underground Storage X /  
Deep \_\_\_ / Shallow \_\_\_ /
- 5) Proposed Target Formation(s): Alexander <sup>439</sup>
- 6) Proposed Total Depth: 5500 feet
- 7) Approximate fresh water strata depths: 50, 1405, 1580
- 8) Approximate salt water depths: None reported
- 9) Approximate coal seam depths: 275, 352, 542, 802, 895, 1527
- 10) Does land contain coal seams tributary to active mine? Yes \_\_\_ / No X /
- 11) Proposed Well Work: Drill & stimulate new well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4	H-40	40	30/180	30/180	surface
Fresh Water		380SP18-11.3				Dily MU
Coal		380SP18-11.2.2				
Intermediate	8 5/8	H-42	20\23#	1050/1685	1050/1685	Surface
Production	4 1/2	J-55	10.5	5500	5500	400 sks 380SP18-11.4
Tubing						
Liners						

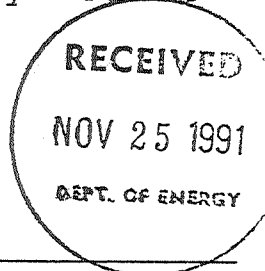
PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

0 861 992  
30 Fee(s) paid:    Well Work Permit    Reclamation Fund    WPCP  
   Plat    WW-9    WW-2B    Bond    Agent  
 (Type)

1) Date: November 20, 1991  
2) Operator's well number  
John Kerns #1  
3) API Well No: 47 - 017 - 3933  
State - County - Permit

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 Frederick & Rose Painter  
Address 4028 Lunar Drive  
Anchorage, AK 99504  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Mike Underwood  
Address Rt. 2, box 135  
Salem, WV 26426  
Telephone (304)- 782-1043

5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name Same as surface  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

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:

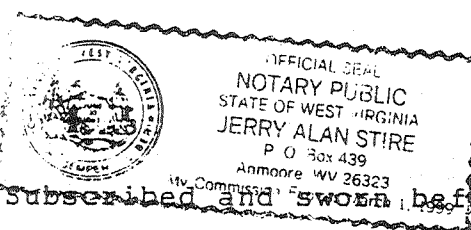
- \_\_\_\_\_ Personal Service (Affidavit attached)
- XX Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_\_ Publication (Notice of Publication attached)

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: \_\_\_\_\_  
Its: \_\_\_\_\_ Geologist  
Address \_\_\_\_\_ P.O. Box 26  
\_\_\_\_\_ Bridgeport, WV 26330  
Telephone \_\_\_\_\_ 304-842-6256



Subscribed and sworn to before me this 20th day of November, 1991

My commission expires March 1, 1999 \_\_\_\_\_ Notary Public