



FILE NO. P.D.C. #3 - P924  
 DRAWING NO. 1  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1" IN 200'  
 PROVEN SOURCE OF ELEVATION B.M. 815 AT BRIDGE ON RT. 52 OVER HUGHES RIVER

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) Paul H. Dean  
 R.P.E. # 1856 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE 11/2, 19 79  
 OPERATOR'S WELL NO. 1  
 API WELL NO. 47 - 017 - 2535  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 965' WATER SHED HUGHES RIVER  
 DISTRICT SOUTHWEST COUNTY DODDRIDGE  
 QUADRANGLE OXFORD 7 1/2, HOLDEN 15' NC  
 SURFACE OWNER OPAL GRIBBLE ACREAGE 50.12  
 OIL & GAS ROYALTY OWNER OPAL GRIBBLE LEASE ACREAGE 50  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  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 CEDAR CREEK ESTIMATED DEPTH 5500' DEC 6 1979  
 WELL OPERATOR PETROLEUM DEVELOPMENT DESIGNATED AGENT PETROLEUM DEVELOPMENT  
 ADDRESS 103 E. MAIN ADDRESS 103 E. MAIN  
6-4 BRIDGEPORT W.Va. STRAIGHT FR BRUCE BRIDGEPORT W.Va. CR 133

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

Date: February 4, 1980

FORM IV-35  
(Obverse)

Operator's Well No. Opal Gribble #1  
API Well No. 47 - 017 - 2535  
State County Permit

[08-78]

WELL OPERATOR'S REPORT 47  
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal   
(If "Gas", Production  / Underground storage  / Deep  / Shallow   
LOCATION: Elevation: 965' Watershed: Hughes River  
District: Southwest County: Doddridge Quadrangle: Oxford

WELL OPERATOR Petroleum Development Corporation DESIGNATED AGENT Petroleum Development Corporation  
Address PO Box 26, 103 East Main Street Address PO Box 26, 103 East Main Street  
Bridgeport, W. Va. 26330 Bridgeport, W. Va. 26330

PERMITTED WORK: Drill  / Convert  / Drill deeper  / Redrill  / Fracture or stimulate   
Plug off old formation  / Perforate new formation   
Other physical change in well (specify) \_\_\_\_\_

PERMIT ISSUED ON November 9, 19 79

OIL & GAS INSPECTOR FOR THIS WORK:  
Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, W. Va. 26301

IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
\_\_\_\_\_, 19 \_\_\_\_\_

GEOLOGICAL TARGET FORMATION: Cedar Creek Depth 5300 feet

Depth of completed well, 5389 feet Rotary  / Cable Tools

Water strata depth: Fresh, 1 @ 70 feet; salt, \_\_\_\_\_ feet.

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

Work was commenced November 28, 19 79, and completed December 4, 19 79

CEMENTING AND TUBING PROGRAM

CEMENTING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-IN OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor	11 3/4"				X	16'	16'	surface
Casing								
Intermediate	8 5/8"	H-40	20#	X		320'	312'	90 sks.
Production	4 1/2"	K-55	10.5#	X		5389'	4951'	530 sks.
Perforators								

**FEB 5 1980**  
OIL & GAS DIVISION  
DEPT. OF MINES

OPEN FLOW DATA

Producing formation Benson Pay zone depth 4843-47 feet  
Gas: Initial open flow, no show Mcf/d Oil: Initial open flow, \_\_\_\_\_ Bbl/d  
Final open flow, 984 Mcf/d Final open flow, \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests, 48 hours  
Static rock pressure, 1000 psig (surface measurement) after \_\_\_\_\_ hours shut in

[If applicable due to multiple completion--]  
Second producing formation Warren Pay zone depth 3309-3451 feet  
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 measurement) after \_\_\_\_\_ hours shut in

FEB 28 1980

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

Benson	480 BBL	10,000# 80/100	40,000# 20-40	500 gal. acid	4843-47
Warren	430 BBL	10,000# 80/100	30,000# 20-40	500 gal. acid	3309-13 3324-26 3449-51

WELL LOG

FORMATION	Color	Hard or Soft	47 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
clay			0	5	
shale			5	38	
sand			38	85	fresh H <sub>2</sub> O 1" @ 70'
shale			85	214	
sand, shale			214	450	
shale			450	510	
sand, shale			510	620	
red rock			620	640	
shale, R.R.			640	1120	
sand			1120	1190	
sand, shale			1190	1920	
big lime			1920	1983	
big injun			1983	2050	
sand			2050	2210	gas check @ 2164' no show
weir sand			2210	2254	
sand, shale			2254	2797	gas check @ 2641' no show
4th sand			2797	2844	
sand, shale			2844	3295	
warren			3295	3338	
sand, shale			3338	4832	gas check @ 4370' no show
benson			4832	4852	
sand, shale			4852	5128	
cedar creek			5128	5166	gas check @ TD no show
sand, shale			5166	5389 TD	plugged back from 5389' to 5961'

(Attach separate sheets to complete as necessary)

Well Operator

By

Its

*John C. Meard*  
*Charles R. Rye*

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."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. One

API Well No. 47 - 017 - 2535  
State County Permit

WELL TYPE: Oil      / Gas X /  
(If "Gas", Production X / Underground storage      / Deep      / Shallow      /)

LOCATION: Elevation: 965' Watershed: Hughes River  
District: Southwest County: Doddridge Quadrangle: Oxford

WELL OPERATOR PETROLEUM DEVELOPMENT CORPORATION DESIGNATED AGENT PETROLEUM DEVELOPMENT CORP.  
Address P.O. BOX 26 Address P.O. BOX 26  
BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

OIL & GAS ROYALTY OWNER Opal Gribble, et.al. COAL OPERATOR       
Address Rt. 1, Box 197 Address       
West Union, WV 26456

ACREAGE 50.12 COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Opal Gribble  
Address Rt. 1, Box 197  
West Union, WV 26456

SURFACE OWNER Opal Gribble Name       
Address Rt. 1, Box 197 Address       
West Union, WV 26456     

FIELD SALE (IF MADE) TO:      Name       
Address      Address       
         

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, WV 26301

COAL LESSEE WITH DECLARATION ON RECORD:  
Name       
Address     

OIL & GAS DIVISION  
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed      / lease      / other contract X / dated June 20, 1979, to the undersigned well operator from Clarence W. Mutschelknaus

[If said deed, lease, or other contract has been recorded:]  
Recorded on Sept. 14, 1979, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Deed Book 110 at page 634. A permit is requested as follows:

PROPOSED WORK: Drill X / Drill deeper      / Redrill      / Fracture or stimulate      /  
Plug off old formation      / Perforate new formation      /  
Other physical change in well (specify)     

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any election 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.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL  
GEOPHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS  
CONSERVATION COMMISSION  
1818 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET BOND

PETROLEUM DEVELOPMENT CORPORATION  
Well Operator

By John W. Mutschelknaus  
Its      Superintendent

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Unknown

Address \_\_\_\_\_  
\_\_\_\_\_

GEOLOGICAL TARGET FORMATION, Cedar Creek

Estimated depth of completed well, 5500' feet Rotary X / Cable tools \_\_\_\_\_ /

Approximate water strata depths: Fresh, 60 feet; salt, 140 feet.

Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes \_\_\_\_\_ / No X /

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		
Conductor	13 3/8	H		X		25'	25'	Kinds
Fresh water								
Oil								Sizes
Intermediate	8 5/8		20	X		250	250	Circulate
Production	4 1/2	K	10.5	X		5500	250	Depths set 5500
Blind								
Wells								Perforations:
								Top Bottom

Regulation 2.08 of the Department of Mines provides that the original and four copies of Form IV-8 must be filed with the Department, 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 § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-8 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and Form IV-8 MUST BE FILED IN CONNECTION THEREWITH.

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved

for drilling. This permit shall expire if operations have not commenced by 7-16-80.

*[Signature]*  
Deputy Director - Oil & Gas Division

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 receipt thereof:

W A I V E R

The undersigned coal operator \_\_\_\_\_ / owner \_\_\_\_\_ / 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.

\_\_\_\_\_, 19\_\_\_\_

By \_\_\_\_\_  
Its \_\_\_\_\_