

39 13 05  
80 52 05

O. GRIBBLE  
130.88 ac.

Stone

19

Stone Pile

S&W 861.9'  
W 812.59'  
BY SURVEY  
S 56.8° 02' W 717.69'  
N 12° 04' E 709.57'

PLUG WELL

ELEV. 1010'

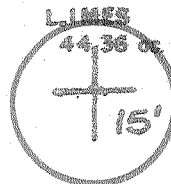
OPAL GRIBBLE  
50.12 ac.  
(C.O.G.E.)

C. FARR  
50.14 ac.

TOPO

N 40° W  
2722.5'

RUN INTO HUGHES RIVER



N. LEGGETT  
234 ac.

L. BROADWATER  
65 ac.

FILE NO. RDG 93-PS 24  
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 R.V.

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 REGU  
LATIONS ISSUED AND PRESCRIBED BY THE DEPART  
MENT OF MINES.

(SIGNED) Paul G. 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 10/30, 1979  
OPERATOR'S WELL NO. 2  
API WELL NO.  
47-017-2530  
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 1010' WATER SHED HUGHES RIVER  
DISTRICT SOUTHWEST COUNTY BOODRIDGE  
QUADRANGLE OXFORD T8, HOLAROCK 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 C.E.D.B. CREEK ESTIMATED DEPTH 5500' NOV 26 1979  
WELL OPERATOR PETROLEUM DEVELOPMENT DESIGNATED AGENT PETROLEUM DEVELOPMENT  
ADDRESS 102 MAIN ADDRESS 102 MAIN  
BRIDGEPORT, W.V.A. BRIDGEPORT, W.V.A.

FORM IV-35  
(Obverse)

Operator's  
Well No. Opal Gribble #2

[08-78]

WELL OPERATOR'S REPORT  
OF

API Well No. 47 - 017 - 2530  
State County Permit

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow  /)

LOCATION: Elevation: 1010 Watershed: Hughes River  
District: Southwest County: Doddridge Quadrangle: Oxford

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

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

PERMIT ISSUED ON November 1, 19 79

OIL & GAS INSPECTOR FOR THIS WORK:

APPLICABLE: FLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED

Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, W. Va. 26301

LOGICAL TARGET FORMATION: Cedar Creek Depth 5340 feet

Depth of completed well, 5328 feet Rotary  / Cable Tools

Water strata depth: Fresh @125 feet; salt, \_\_\_\_\_ feet.

Coal seam depths: 125', 257' Is coal being mined in the area? no

Work was commenced January 1, 19 80, and completed February 1, 19 80

LOGGING AND TUBING PROGRAM

LOGGING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-OR CASKS (Cubic feet)	PACKERS	
	Size	Grade	Weight per ft	New	Used	For drilling			Left in well
Motor	1 3/4"			X		18'	18'	surface	Winds
Flow water									
Intermediate	8 5/8"	H-40	20#	X		420'	411'	150 sks.	
Production	4 1/2"	J-55	9.5#	X		5328'	5308'	650 sks.	Bottom
LOGS									
LOGS									

PRODUCTION FLOW DATA

OIL & GAS DIVISION

DEPT. OF MINES 5166

Producing formation Cedar Creek

Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Mcf/d

Final open flow, 335 Mcf/d Final open flow, \_\_\_\_\_ Mcf/d

Time of open flow between initial and final tests, \_\_\_\_\_ hours

Static rock pressure, 1225 psig (surface measurement) after 48 hours shut in.

[If applicable due to multiple completion--]

Second producing formation Benson Pay zone depth 4883 feet

Gas: Initial open flow, \_\_\_\_\_ Mcf/d Oil: Initial open flow, \_\_\_\_\_ Mcf/d

Final open flow, \_\_\_\_\_ Mcf/d Final open flow, \_\_\_\_\_ Mcf/d

Time of open flow between initial and final tests, \_\_\_\_\_ hours

Static rock pressure, \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in.

Third producing formation: Bradford

Pay zone depth: 4241 feet

APR 9 1980

08-78]

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

Cedar Creek,	400 bbl	10,000# 80/100	40,000# 20/40	500 gal. 15% acid	5166-86
Benson	375 bbl	10,000# 80/100	30,000# 20/40	500 gal. 15% acid	4882-86
Bradford	385 bbl	10,000# 80/100	40,000# 20/40	500 gal. 15% acid	4241-4402

WELL LOG

FORMATION	Color	Hard or Soft	7 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
clay			0	5	
sand			5	20	
sand, shale, R.R.			20	125	fresh H <sub>2</sub> O 1" @ 125'
coal			125	131	
sand, shale, R.R.			131	257	
coal			257	262	
sand, shale			262	483	
sand			483	896	
sand, shale			896	1200	
sand			1200	1962	
big lime			1962	2015	
big injun			2015	2089	
sand, shale			2089	2443	
gantz			2443	2490	
sand, shale			2490	2600	
gordon			2600	2712	
sand, shale			2712	4232	
bradford			4232	4420	gas check @ 3391' no show
sand, shale			4420	4865	
benson			4865	4891	
sand, shale			4891	5140	gas check @ 4924' no show
cedar creek			5140	5209	
sand, shale			5209	5328 TD	

(Attach separate sheets to complete as necessary)

Petroleum Development Corporation  
 Well Operator  
 By John C. Messer  
 Its James M. [Signature]

**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. Two  
API Well No. 47 - 017 - 2530  
State County Permit

WELL TYPE: Oil      / Gas X /  
(If "Gas", Production X / Underground storage      / Deep      / Shallow      /)  
LOCATION: Elevation: 1010' 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  
Bridgeport, WV 26330 Bridgeport, WV 26330

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

COAL OPERATOR       
Address     

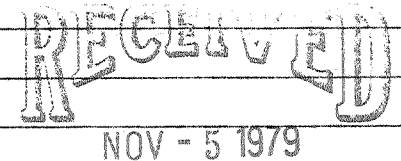
ACREAGE 50.12  
SURFACE OWNER Opal Gribble  
Address Rt. 1, Box 197  
West Union, WV 26456  
ACREAGE 50.12

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

FIELD SALE (IF MADE) TO:  
Name       
Address     

COAL LESSEE WITH DECLARATION ON RECORD:  
Name       
Address     

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



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 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.

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  
1615 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

BLANKET BOND

PETROLEUM DEVELOPMENT CORPORATION  
Well Operator  
By Johnny Mitchell  
/s/ Drilling Superintendent

[08-78]

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, 50 feet; salt, 100 feet.  
Approximate coal seam depths: None 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		Left in well	
Conductor	13 3/8	H-40		X		25	25		Kinds
Fresh water									
Coal									Sizes
Intermediate	8 5/8		20	X		250	250	Circulate	
Production	4 1/2		10.5	X		5500	5500	250 Sks	Depths set 5500
Tubing									
Liners									Perforations:
									Top Bottom

*NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 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-2 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 is noted as such on the Form IV-2 filed in connection therewith.

**THIS PERMIT MUST BE POSTED AT THE WELL SITE**

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 7-5-80

*[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.

Date: \_\_\_\_\_, 19\_\_\_\_

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