

10,160'

10/25/78

Latitude $39^{\circ}17'30''$
(15') $39^{\circ}20'$

Longitude $80^{\circ}35'$

14,135'

GEORGE STURM
100 Ac.

JOHN &
THURMAN
STOUT
220 Ac.

GEORGE & ROSE STURM
31 Ac.

JEFFREY MILLS
102 Ac.

JEFFREY MILLS
33 Ac.

TOPO $7\frac{1}{2}$

ELEV. 1199' 5614' A

A - $S67^{\circ}30'W$ 95'
B - $S61^{\circ}30'W$ 173'
C - $S32^{\circ}E$ 173'



Handwritten notes:
DODD
21285
5350

Minimum Error of Closure $1' IN 200'$
Source of Elevation $974' INT. (42) AND (5) U.S.G.S. TOPOGRAPHIC QUADRANGLE - 7\frac{1}{2} MIN.$

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia." *Paul G. Dean*

New Location
Drill Deeper
Abandonment
11/8/78

Company PETROLEUM DEVELOPMENT CORP
PO Box 26
Address 103 E. MAIN BRIDGEPORT W. VA.
GEORGE W & ROSE M. STURM
Farm GUY STOUT HEIRS
Tract 1 Acres 31 Lease No. _____
Well (Farm) No. 1 Serial No. _____
Elevation (Spirit Level) 1199' SC
Quadrangle SALEM CENTERPOINT
County DODDRIDGE District GREENBRIER
Engineer PAUL G. DEAN
Engineer's Registration No. 1856
File No. PDC 4-P9-33 Drawing No. 1
Date 10/20/78 Scale 1" = 500'

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

WELL LOCATION MAP
FILE NO. DODD-2305-P

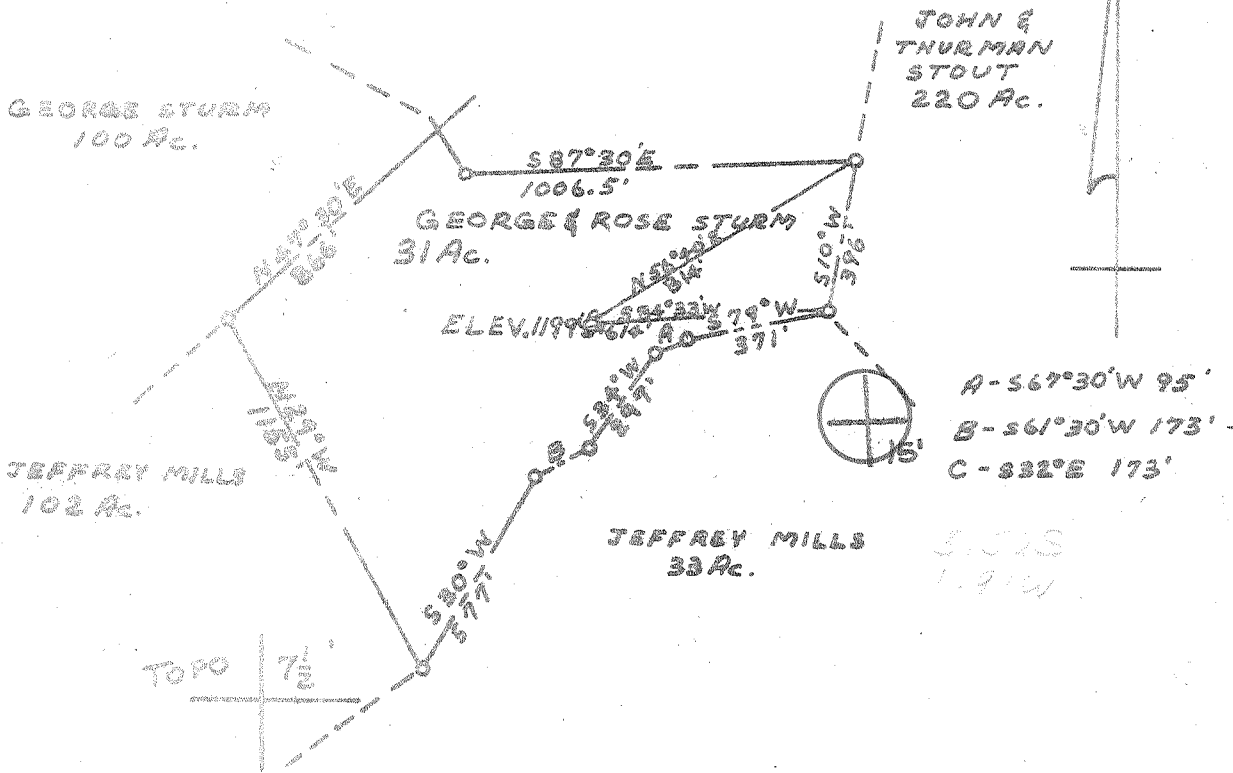
+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

47-017 DEC 4 1978

Latitude $39^{\circ}17'30''$
(15') $39^{\circ}20''$

Longitude $80^{\circ}35'$



New Location
Drill Deeper
Abandonment

Minimum Error of Closure 1' IN 200'
Source of Elevation 974' INT. AND U.S.G.S. TOPOGRAPHIC
QUADRANGLE - 7 1/2 MIN.
"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia." *Paul G. Dean*

Company PETROLEUM DEVELOPMENT CORP
Address 103 E. MAIN BRIDGEPORT W. Va.
George & Rose M. Sturm
Farm GLY STOUT HEIRS
Tract 2 Acres 31 Lease No. _____
Well (Farm) No. 2 Serial No. _____
Elevation (Spik Level) 1199' SC
Quadrangle SALEM CENTERPOINT
County DODD GREENBRIER
Engineer PAUL G. DEAN
Engineer's Registration No. 1855
File No. PDC 4-5333 Drawing No. 2
Date 10/29/78 Scale 1" = 500'

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

WELL LOCATION MAP
FILE NO. DODD-2305

+ Denotes location of well on United States Topographic Maps, scale 1 to 25,000 latitude and longitude lines being represented by border lines as shown.
- Denotes one inch spaces on border line of original tracing.

47-017



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division
WELL RECORD

RECEIVED

NOV 30 1978

OIL & GAS DIVISION
DEPT. OF MINES

Quadrangle Centerpoint

Permit No. DODD-2305

47-017-2305

Rotary XX Oil _____
Cable _____ Gas _____
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ dry
(Kjhd)

Company Petroleum Development Corporation
Address P.O. Box 26, Bridgeport, W.V. 26330
Farm Guy Stout Heirs Acres 31
Location (waters) Buffalo Calf
Well No. One Elev. 1199
District Greenbriar County Doddridge
The surface of tract is owned in fee by Guy W & Rose M. Sturm
Address Rt. 1, Salem W.V.
Mineral rights are owned by James R. Stout et al
Address Rt. 3, Box 121 Salem W.V.
Drilling Commenced 11/4/78
Drilling Completed 11/8/78
Initial open flow _____ cu. ft. _____ bbls.
Final production _____ cu. ft. per day _____ bbls.
Well open _____ hrs. before test _____ RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8		1441	100 sks
7			
5 1/2			
4 1/2		none	385 sks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

WELL ABANDONED

Coal was encountered at 468-72; 950-58 Feet _____ Inches
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand _____ Depth _____

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay			0	44		
Shale			44	82		
Water			82	84		
Red Rock			84	102		
Sand & Shale			102	550	Coal 468-72	
Shale			550	960	Coal 950-58	
Sand & Shale			960	1100		
Shale			110	2140		
Big Lime			2140	2300		
Injun			2300	2400		
Shale			2400	2740		
Berea			2740	2760		
Shale			2760	2860		
50			2860	2890		
Shale			2890	2950		
Gordon Stray			2950	3000		
Shale			3000	3035		
Gordon			3035	3085		
Shale			3085	3110		
4th			3110	3170		
Shale			3170	3260		

(over)

* Indicates Electric Log tops in the remarks section.

DEC 20 1978

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
5th			3260	3300		
Shale			3300	3870		
Speechly			3870	4040		
Shale			4040	4148		
Balltown			4148	4154		
Shale			4154	4720		
Bradford			4720	4790		
Shale			4790	5168		
Riley			5168	5240		
Shale			5240	5580		
Benson			5580	5618		
				5680		
				5677		
					T.D.	
					D.R.	

Date November 28, 19 78

APPROVED Petroleum Development Corp. Owner

By _____
Area Manager (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

OCT 25 1978

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE October 23, 1978

Surface Owner George W. & Rose M. Sturm
Address Route 1, Salem WV

Company Petroleum Development Corporation

Mineral Owner James R. Stout et al
Address Route 3, Box 121 Salem WV

Address P.O. Box 26 Bridgeport, WV 26330

Coal Owner Consolidation Coal Company
Address Rts 119-48 Morgantown, WV

Farm Guy Stout Heirs Acres 31

Coal Operator _____
Address _____

Location (waters) Buffalo Calf

Well No. One Elevation 1199'

District Greenbrier County Doddridge

Quadrangle Centerpoint

THIS PERMIT MUST BE POSTED AT THE WELL SITE

If 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 2-25-79.

INSPECTOR

TO BE NOTIFIED Paul Garrett

ADDRESS Clarksburg, West Virginia 26301

PHONE 622-3871

[Signature]
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated November 12th 1977 by Mildred G. Stout et al made to C.W. Mutschelknaus and recorded on the 11th day of October 1978 in Doddridge County, Book 104 Page 792

XX NEW WELL _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE
_____ OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Very truly yours,
PETROLEUM DEVELOPMENT CORPORATION
(Sign Name) *[Signature]*

Well Operator

Address
of
Well Operator

P.O. BOX 26
Street

Bridgeport
City or Town

West Virginia 26330
State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

DODD-2305 PERMIT NUMBER

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO XX DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Unknown _____ NAME Petroleum Development Corporation _____
 ADDRESS _____ ADDRESS P.O. Box 26 Bridgeport, WV 26330 _____
 TELEPHONE _____ TELEPHONE 842-6256 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 5500' _____ ROTARY XX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Elk _____
 TYPE OF WELL: OIL _____ GAS XX COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10 11 3/4	40'	40'	Surface
9 - 5/8			
8 - 5/8	1200'	1200'	Surface
7			
5 1/2			
4 1/2		5450'	
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 30' FEET 125' SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 200' 450' 700'
 IS COAL BEING MINED IN THE AREA? NO BY WHOM? _____

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title