



New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1 in 5,000
 Source of Elevation Tied to 1985 ELEVATION AT INTERSECTION of
 Bee Branch Road and NVA. RT. 3
 "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."

Company MONITOR PETROLEUM CORP
 Address 486 5th AVE, NEW YORK, N.Y.
 Farm GEORGE E. CLAY, ET AL.
 Tract _____ Acres 212.7 Lease No. 68518
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 1930.5' *C*
 Quadrangle ARNETT, ECCLES 15'
 County RALEIGH District MARSH FORK
 SURVEYOR David L. Johnson
 SURVEYOR'S Registration No. 344
 File No. _____ Drawing No. _____
 Date 4/19/79 Scale 1" = 500'

CO: 081 PMT: 471
 Loc Digitized from OGIS 7.5' Mylar
 QUAD: 218 DATE: 22-MAY-90
 LAT: 37 52.5 Miles South: 2.29
 LONG: 81 22.5 Miles West : 0.54

WELL LOCATION MAP
FILE NO. 47-081-471

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000 latitude and longitude lines being represented by border lines as shown.

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

MAY 3 1979

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

[08-78,

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

471

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

LOCATION: Elevation: 1931 Watershed: Bee Branch of Sand Run
District: Marsh Fork County: Raleigh Quadrangle: Arnett

OPERATOR Monitor Petroleum Corporation DESIGNATED AGENT Eugene Pruitt
Address 369 Lexington Avenue Address P.O. Box 338
New York, New York 10017 Belington, W. Va. 26250

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 April 17, 19 79 OIL & GAS INSPECTOR FOR THIS WORK:
Name Leroy Hopkins
Address Ansted
W. Va.

LOGICAL TARGET FORMATION: Weir Depth 3000 feet
Depth of completed well, 3356 feet Rotary / Cable Tools
Water strata depth: Fresh, _____ feet; salt, _____ feet.
Coal seam depths: None Is coal being mined in the area? No
Work was commenced April 25, 19 79, and completed May 4, 19 79

LOGGING AND TUBING PROGRAM

LOGGING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	REMARKS	
	Size	Grade	Weight per ft	New	Used	For drilling			Left in well
Drill pipe	16"			X		30'	30'	to surface	Rinds
Production casing	8 5/8"	K40		X		1220'	1220'	150 sx	Sizes
Production casing	4 1/2"	K40	10.5	X		3350'	3350'	330 sx	Depth set
Perforations									Perforations:
									Top Section

FLOW DATA

Producing formation Weir Sand Pay zone depth 2988 feet
Gas: Initial open flow, 130 Mcf/d Oil: Initial open flow, 0 Bbl/d
Final open flow, _____ Mcf/d Final open flow, 0 Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 250 psig (surface measurement) after 30 days shut in

[If applicable due to multiple completion--]

Second producing formation Ravencliff Sand Pay zone depth 1662 feet
Gas: Initial open flow, 0 Mcf/d Oil: Initial open flow, 0 Bbl/d
Final open flow, _____ Mcf/d Final open flow, 0 Bbl/d
Time of open flow between initial and final tests, 4 hours
Static rock pressure, 100 psig (surface measurement) after 30 days shut in

JUL 16 1980

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

Ravencliff Perfs. 1635'-63' w/15 shots Frac w/300 sx 80/100 sd
 180 sx 20/40 sd
Weir Perfs. 2970'-90' w/13 shots

WELL LOG

FORMATION	Color	Hard or Soft	3" Top Feet	Bottom Feet	Remarks Including indication of all free and salt water, coal, oil and gas
Sand & Gravel	Light		0 0	30	No Coal
Lime & Shale	Brown		30	148	
Sand & Shale	Dark		145	265	
Sandy Lime	Dark		265	653	
Sand & Shale	Dark		653	990	
Sandy Lime	Dark		990	1316	
Sand & Shale	Dark		1316	1421	
Sands	Dark		1421	1560	
Lime & Silts	Dark		1560	1626	
Ravencliff Sd.	White		1626	1664	
Avis Ls.	Brown		1664	1682	
Silts & Shale	Dark		1682	2148	
M. Maxon Sd.	Tan		2148	2206	
Silts & Shale	Dark		2206	2244	
L. Maxon Sd.	Dark		2244	2350	
Silt & Shale	Dark		2350	2526	
Big Lime	Dark		2526	2956	
Weir Sd.	Tan		2956	2998	
Sand & Shells	Brown		2998	3356	TD

(Attach separate sheets to complete as necessary)

Monitor Petroleum Corporation
 Well Operator

By [Signature]
 Its President

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."

* Co-mingled CAOF 150 mcf/d



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

APR 17 1979

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE 12 April, 1979

Surface Owner G. T. Workman

Company Monitor Petroleum Corp.

Address _____

Address 489 Fifth Ave, New York, N.Y. 10017

Mineral Owner Geo. E. Clay et al

Farm G. E. Clay Acres 212.7

Address Glen Daniels, W. Va.

Location (waters) Bee Br. of Sand Run

Coal Owner same

Well No. 1 Elevation 1913.8'

Address _____

District Marsh Fork County Raleigh

Coal Operator none

Quadrangle Arnett

Address _____

~~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 12-18-79.

Deputy Director - Oil & Gas Division

INSPECTOR
TO BE NOTIFIED

Mr. Leroy Hopkins
General Delivery
Ansted, WV 25812
Ph: 658-4280

ADDRESS _____

PHONE _____

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 9 August 1973 by Geo. E. Clay et al made to Columbia Gas Trans. and recorded on the First day of October 1973, in Raleigh County, Book 38 Page 72

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, Monitor Petroleum Corp.
(Sign Name) William A. [unclear]
Well Operator

Address
of
Well Operator

P.O. Box 2683
Street
Charleston
City or Town
West Virginia 25330
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

47-081-0471 PERMIT NUMBER

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

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME Falcon Drlg Co. NAME W.E. Bennett
 ADDRESS Charleston, W. Va. ADDRESS Box 2683, Charleston, W. Va.
 TELEPHONE 343-0542 TELEPHONE 345-0216
 ESTIMATED DEPTH OF COMPLETED WELL: 3300' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Weir Sd
 TYPE OF WELL: OIL _____ GAS X 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 16"	30'	30'	to surface
13 - 10			
9 - 5/8			
8 - 5/8 8 5/8"	1400'	1400'	to surface
7			
5 1/2			
4 1/2 4 1/2"	3300'	3300'	
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 550', 630', 760', 910'
 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