



ACCURACY: 1' / 200'

Source of Elevation KNOB ABOVE STRIP (983')

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.

Chet Waterman

- New Location
- Drill Deeper
- Abandonment
- Fracture
- Redrill

Company **APPALACHIAN EXPL. & DEV. INC.**
 Address **CHARLESTON, WV**
 Farm **C. E. ALBERTSON**
 Tract _____ Acres 1000 Lease No. _____
 Well (Farm) No. **2** Serial No. _____
 Elevation (Spirit Level) **812'**
 Quadrangle **ST. ALBANS** *NE*
 County **PUTNAM** District **POCATALICO**
 Engineer **CHET WATERMAN**
 Engineer's Registration No. **3788**
 File No. **74 003-353** Drawing No. _____
 Date **8/1/74** Scale **1" = 500'**

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

WELL LOCATION MAP
 FILE NO. *Put-782*

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.

47-079



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division
WELL RECORD

Quadrangle Saint Albans

Permit No. Put-782

Rotary X Oil
Cable _____ Gas X
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Company Appalachian Exploration & Dev., Inc.
Address P.O. Box 628, Charleston, W. Va. 25322
Farm C.E. Albertson Acres 1000
Location (waters) Bailey Branch/Poca River
Well No. 2 Elev. _____
District Pocatalico County Putnam
The surface of tract is owned in fee by _____
Lee Roy Muck
Address Poca, West Virginia
Mineral rights are owned by C.E. Albertson et al
Address 1040 Main St., Dunedin, Florida 33528
Drilling Commenced 10/13/74
Drilling Completed 10/28/74
Initial open flow _____ cu. ft. _____ bbls.
Final production 320 M cu. ft. per day _____ bbls.
Well open 24 hrs. before test 1200 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20- 10			
Cond.			
13- 10 3/8"	150.63'	150.63'	
9 5/8	1927.11'	1927.11'	
8 5/8			
7	4906'	4906'	
4 1/2			
3			
2-3/8"	4804'		
Liners Used			

Well treatment details:

Attach copy of cementing record.

Perforated Oriskany 4760-80' (20 holes). Spotted 1000 gals. MCA down backside. Fract Oriskany with 690 bbls. sand laden fluid, 1050 bbls. total. Breakdown pressure 3100#.
Acidized perforations 4760-80' with 1500 gals. mod 101 with inhibitor and 5-N non-emulsion agent. Max. press. 2300# psi.

Coal was encountered at None logged Feet _____ Inches _____
Fresh water 70 Feet _____ Salt Water 1230 Feet _____
Producing Sand Oriskany Depth 4760-80'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			0	94		
Shale			94	118		
Sand			118	124		
Sandy shale			124	175		
Sand			175	205		
Shale			205	248		
Sand			248	258		
Shale			258	285		
Sandy shale			285	465		
Shale			465	698		
Sandy shale			698	865		
Shale			865	1230		
Salt sand			1230	1619		
Big Lime			1619	1802		
Shale			1802	1836		
Injun sand			1836	1875		
Shale			1875	2288		
Berea			2288	2298		
Shale			2298	4666		
Lime			4666	4723		
<u>Oriskany sand</u>			4723	4779		

(over)

* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Newburg			5482	5496		
DTD in Mackenzie			5530			
LTD			5531			
Failed to extend deeper Newburg reserv.						
<u>CEMENT RECORD</u>						
CASING		NO.	OF SKS.		TYPE CEMENT	
20"		15			Class A w/1 sk. CaCl ₂	
13-3/8"		125			Class A 3% CaCl ₂	
9-5/8"		350			Halliburton Lite	
		100			Regular	Cement circulated
7"		75			Class A	
Newburg dry; Pb to Orisk						

Date March 24, 19 75
 APPALACHIAN EXPLORATION & DEVELOPMENT, INC.
 APPROVED [Signature] Owner
 By District Production Superintendent
 (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED

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

DATE August 8, 1974

Surface Owner Lee Roy Muck
Address Poca, West Virginia
Mineral Owner C.E. Albertson etal
Address 1040 Main St., Dunedin, Florida 33528
Coal Owner Davison Fuel & Dock Company
Address Sunset Avenue, North Bend, Ohio 45052
Coal Operator not operated
Address _____

Company Appalachian Exploration & Dev., Inc.
Address P.O. Box 628, Charleston, W. Va. 25322
Farm C.E. Albertson etal Acres 1000
Location (waters) Bailey Branch/Poca River
Well No. 2 Elevation _____
District Pocatalico County Putnam
Quadrangle Saint Albans

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 12-13-74

INSPECTOR TO BE NOTIFIED Nichols
Clendenin, W. Va. PH: 548-9961
25045

[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 October 20 19 73 by C.E. Albertson etal made to A.E.D., Inc. and recorded on the 4th day of January 19 74, in Putnam County, Book 57 Page 451-458.
 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.

Very truly yours,
APPALACHIAN EXPLORATION & DEVELOPMENT, INC.
(Sign Name) [Signature]
Well Operator

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:
West Virginia Geological and Economic Survey
P. O. Box 879
Martinsburg, W. Va. 26505
Tel. 304-296-4461

Address
of
Well Operator

P.O. Box 628
Street
Charleston
City or Town
W. Va. 25322
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

Permit - 782 PERMIT NUMBER
417-079

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

PROPOSED WORK ORDER TO _____ DRILL DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Unknown NAME J.B. McPeters
 ADDRESS _____ ADDRESS Box 628, Charleston, W.Va. 25322
 TELEPHONE _____ TELEPHONE 344-8355
 ESTIMATED DEPTH OF COMPLETED WELL: 5500' ROTARY CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Newburg
 TYPE OF WELL: OIL _____ GAS 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 - KK3/8"	150'	150'	
9 - 5/8	1900'	1900'	to circulate
8 - 5/8			
7	5400'	5400'	150 sks.
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 390 FEET SALT WATER 1190 FEET
 APPROXIMATE COAL DEPTHS None known.
 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