

Latitude 37° 50'

1

2

3

5.27 MI. S.

1.95 MI. W.

3

A-2

EL. 2362'

Longitude 81° 10'

DRAIN TO
WHITESTICK

N 73-1/2° - 1160'

N 62° 15' E - 1440'

N 12° 27' W
93.81'
CONC. MON.C & P CO.
3.50 ACRES

N 23° 14' E - 372.43'

BEAVER COAL CO., LIMITED

LOT #921 17,638.38 Ac.

CONC. MON.

N 80° 02' E
86.15'BEAVER
LOT 8

WV SECONDARY 20

ACCURACY: 1' / 200'

Source of Elevation ROAD INT. SOUTH (2494')

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.

New Location ☒
 Drill Deeper ☐
 Abandonment ☐
 Fracture ☐
 Redrill ☐

Company APPALACHIAN EXPL. & DEV., INC.

Address CHARLESTON, WV

Farm BEAVER COAL CO., LIMITED

Tract Acres/2638.38 Lease No.

Well (Farm) No. A-2 Serial No.

Elevation (Spirit Level) 2362

Quadrangle BECKLEY SW

County RALEIGH District TOWN

Engineer CHET WATERMAN

Engineer's Registration No. 3788

File No. 76003-261 Drawing No.

Date 6/3/76 Scale 1" = 200'

CO: 081 PMT: 358

Loc Digitized from OGIS 7.5' Mular

QUAD: 234 DATE: 25-MAY-90

LAT: 37 47.5 Miles South: 2.28

LONG: 81 10.0 Miles West: 1.95

WELL LOCATION MAP

FILE NO. RAL-358

+ 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.

47-081



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

FEB 18 1977

Oil and Gas Division

WELL RECORD

Quadrangle Beckley

Permit No. RAL-358

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

Company Appalachian Explor. & Devel., Inc.
Address Box 628, Charleston, W.Va. 25322
Farm Beaver Coal Co., Ltd. Acres 17,638.38
Location (waters) Whitestick
Well No. A-2 Elev. 2362'
District Town County Raleigh
The surface of tract is owned in fee by Beaver Coal Co., Ltd.
Address Box 1537, Beckley, W.Va. 25801
Mineral rights are owned by Same as above.
Address " " "
Drilling Commenced August 12, 1976
Drilling Completed August 17, 1976
Initial open flow cu. ft. -- bbls.
Final production 696M cu. ft. per day -- bbls.
Well open 4 hrs. before test 180# 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			
7 "	752'	752'	
5 1/2			
4 1/2			
3			
2-7/8"	1527'	1527'	
Liners Used			

Well treatment details:

Attach copy of cementing record.

Fract 1390-1426 with 10,000# 80/100 and 35,000# 20/40 sand with 806 bbls. gelled water @ 2887# psi. 20 BPM.

Coal was encountered at 299'; 377' Feet (12") - (40") locks
Fresh water 40 Feet Salt Water 550 Feet
Producing Sand Ravencliff Depth 1390-96'; 1402-05'; 1416-26'.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
			0	150		
Sand and shale			150	265		
Sand and shale			265	299		
Coal			299	300		
Sand and shale			300	550		
Salt sand			550	786		
Shale			786	882		
Sand			882	956		
Shale			956	1174		
Sand			1174	1216		
Shale			1216	1384		
Sand <u>RAVENCLIFF</u>			1384	1438		
Sand and shale			1438	1555	T.D.	

(over)

* Indicates Electric Log tops in the remarks section.

offset Ral 297 maxon - Ravencliff disc; Berea was dry

MAR 2 1977

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks									
CEMENT REPORT <table><tr><th>Casing</th><th>Cement</th><td></td></tr><tr><td>7"</td><td>116 sx.</td><td>circulated</td></tr><tr><td>2-7/8"</td><td>70 sx.</td><td>top cement 1230'</td></tr></table>							Casing	Cement		7"	116 sx.	circulated	2-7/8"	70 sx.	top cement 1230'
Casing	Cement														
7"	116 sx.	circulated													
2-7/8"	70 sx.	top cement 1230'													

Date February 16, 19 77
 Appalachian Exploration & Development, Inc.
 APPROVED [Signature] Owner
 By [Signature] District Production Manager
 (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

JUL 12 1976

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,

Charleston, W. Va.

Surface Owner Beaver Coal Company, Ltd.
Attn: Mr. Tom Howard
Address Box 1537, Beckley, W. Va.

Mineral Owner Same as above.

Address Same as above.

Coal Owner Same as above.

Address Same as above.

Coal Operator Piney Creek Coal Company
Attn: Mr. George Marshall-V. Pres.
Address P.O. Box 1325, Beckley, W. Va. 25801

and
Mr. James Baylor, Pres.
P.O. Box 26765
Richmond, Va. 23261

DATE June 17, 1976

Company Appalachian Exploration & Development, Inc.

Address Box 628, Charleston, W. Va. 25322

Farm Beaver Coal Co., Ltd. Acres 17,638.38

Location (waters) Whitestick

Well No. A-2 Elevation 2362'

District Town County Raleigh

Quadrangle Beckley

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 11-21-76

Robert L. [Signature]
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED
PH: 872-3070 ADDRESS

Paul Thomas
Summersville, W. Va.

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 April 1 19 71 by Beaver Coal Company, Ltd. made to United Fuel Gas Company and recorded on the N/A day of N/A 19 N/A, in N/A County, Book N/A Page N/A

☒ 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 X 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

Address
of
Well Operator

Box 628

Street

Charleston,

City or Town

West Virginia 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.
I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements.
By *[Signature]*

RAL-358

47-081

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 S & W Drilling Company, Inc. NAME J.B. McPeters
ADDRESS Box 150, Lawrenceville, Ill. 62439 ADDRESS Box 628, Charleston, W.Va. 25322
TELEPHONE TELEPHONE 344-8355
ESTIMATED DEPTH OF COMPLETED WELL: 1480' ROTARY X CABLE TOOLS
PROPOSED GEOLOGICAL FORMATION: Ravenclyff
TYPE OF WELL: OIL GAS X COMB. STORAGE DISPOSAL
RECYCLING WATER FLOOD OTHER

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT FILL UP FOR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8			
7	550'	550'	circulate
5 1/2			
4 1/2			
3			Perf. Top
2 - 7/8"	1480'	1480'	Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 60 FEET SALT WATER 890 FEET
APPROXIMATE COAL DEPTHS 510'
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