

LOCATE ALL UTILITIES BEFORE CONSTRUCTION.

PLATEAU DISTRICT

WILLIS BRANCH COAL COMPANY PARCEL "B" OF DEED BOOK 61 PAGE 482

WILLIS BRANCH COAL COMPANY PARCEL "E" OF DEED BOOK 61 PAGE 482

FAYETTE COUNTY RALEIGH COUNTY

TOWN DISTRICT

PROPOSED WELL

N23°31'12"W 8278.159' TO MONUMENT
N24°52'05"W 8160.444' TO MONUMENT
N34°28'55"E 226.413' MONUMENT TO MONUMENT

WILLIS BRANCH COAL COMPANY

2.123
1.75W

TOPO LOCATION

WEST VIRGINIA STATE PLANE COORDINATES

322578.898
817790.873

HANSFORD SMOKELESS COLLIERIES, INC. COORDINATES

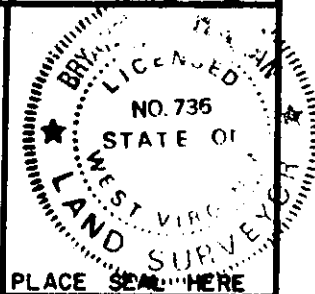
43880.245
60768.739

REFERENCES NOT REQUIRED. SURVEYOR WILL SET WELL AFTER LOCATION IS CONSTRUCTED.

NO KNOWN WATER WELLS WITHIN 100'

FILE NO. _____
DRAWING NO. _____
SCALE 1"=1000'
MINIMUM DEGREE OF ACCURACY 1/3000
PROVEN SOURCE OF ELEVATION 2376 SOUTH OF LOCATION

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
(SIGNED) Raymond Brown
R. P. E. _____ L. L. S. 736



WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
#10 McJUNKIN ROAD
NITRO, WEST VIRGINIA 25143-2506



DATE 06-30, 19 97
OPERATOR'S WELL NO. 23-WB-5
API WELL NO. 47-081-01099C
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS", PRODUCTION X STORAGE ___ DEEP ___ SHALLOW ___
LOCATION: ELEVATION 2312 WATER SHED RIGHT FORK OF DIXONS BRANCH
DISTRICT TOWN COUNTY RALEIGH
QUADRANGLE PAX, WV 7.5'
SURFACE OWNER WILLIS BRANCH COAL COMPANY ACREAGE 1465
OIL & GAS ROYALTY OWNER WILLIS BRANCH COAL COMPANY LEASE ACREAGE 1465
LEASE NO. _____
PROPOSED WORK: DRILL X 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 Beekmantown ESTIMATED DEPTH 1050'
WELL OPERATOR Penn Virginia Oil & Gas Corporation DESIGNATED AGENT DANA BLACKSHIRE
ADDRESS 999 EXECUTIVE PARK BLVD., SUITE 300 ADDRESS PO BOX 469
KINGSPORT, TN 37660 RAVENCLIFF, WV 25913

1-1 000
SEP 22 1997

CHARLESTON BLUEPRINT 38/115

WR-35

MAR 24 1998
WV Division of Environmental Protection

15-Aug-97
API # 47- 81-01099 C

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: WILLIS BRANCH COAL CO. Operator Well No.: 23C-WB-5

LOCATION: Elevation: 2,512.00 Quadrangle: PAX

District: TOWN County: RALEIGH
Latitude: 11100 Feet South of 37 Deg. 55Min. 0 Sec.
Longitude: 10150 Feet West of 81 Deg. 15 Min. 0 Sec.

Company: PENN VIRGINIA OIL AND GAS
999 EXEC. PARK BLVD., STE. 300
KINGSPORT, TN 37660-0000

Agent: DANA BLACKSHIRE

Inspector: RODNEY DILLON
Permit Issued: 08/18/97
Well work Commenced: 12/02/97
Well work Completed: 12/22/97
Verbal Plugging
Permission granted on:
Rotary Cable _____ Rig
Total Depth (feet) 1438'
Fresh water depths (ft) Damp at
107' & 844'
Salt water depths (ft) _____
Is coal being mined in area (Y/N)? N
Coal Depths (ft): _____

Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13 3/8"	32'	32'	0
9 5/8"	222'	222'	94

OPEN FLOW DATA

Producing formation Beckley Coal open mine Pay zone depth (ft) 1433-1488
Gas: Initial open flow 0 MCF/d Oil: Initial open flow _____ Bbl/c
Final open flow N/A * MCF/d Final open flow _____ Bbl/c
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 0 psig (surface pressure) after N/A Hours
* Note: Gas quality & quantity to be tested later
Second producing formation Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/c
Final open flow _____ MCF/d Final open flow _____ Bbl/c
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: PENN VIRGINIA OIL AND GAS CORPORATION

By: William M. Ryan
Date: 3/17/98

RAL 1099 C

MAR 24 1998

FORM WR-35R
(REVERSE)

PERMIT #: 47-081-01099
WELL#: 23C-WB-5

<u>FORMATIONS</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
Sand, Shale & Coal	0	560	Coal @ 259-261, 370-374, 556-560
Sand & Shale	560	1188	
Sand, Shale & Coal	1188	1232	Coal @ 1188-1190, 1217-1220, 1227-1232
Sand & Shale	1232	1433	
Open Mine	1433	1438	No shows reported

WELL WORK PERMIT APPLICATION

081 1099C

- 1) Well Operator: PENN VIRGINIA OIL & GAS CORPORATION 373 55 (6) 537
- 2) Operator's Well Number: 230-WB-5 3) Elevation: 2513
- 4) Well type: (a) Oil / or Gas X /
 (b) If Gas: Production X / Underground Storage /
 Deep / Shallow /
- Proposed Target Formation(s): Beckley Mine
- Proposed Total Depth: 1650 feet
- Approximate fresh water strata depths: 30'
- Approximate salt water depths: N/A
- Approximate coal seam depths: 290, 389, 502, 563, 1232, 1438
- 10) Does land contain coal seams tributary to active mine? Yes / No X /
- 11) Proposed Well Work: Drill and Complete CBM Well
- 12)

Issued 08/18/97
 Expires 08/18/99
RECEIVED
 WV Division of
 Environmental Protection
 JUL 31 1997
 Permitting
 Office of Oil & Gas

24087

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS			CEMENT Fill-up (cu. ft.)
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor						
Fresh Water	13 3/8	L.S.	37	40	40	fill with cuttings 28
Coal						
Intermediate						
Production	4 1/2	L.S.	20	1650	1650	680
Tubing						<i>3000 ft.</i>
Liners						

PACKERS : Kind
 Sizes
 Depths set

For Office of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Agent
 (Type)

0/005

Environmental Protection
JUL 1997

1) Date: 06-30-1997
2) Operator's well number
230-WB-5
3) API Well No: 47 - 08L - 1099-C
State County Permit

Permitting
Office of Oil & Gas
STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served: 5) (a) Coal Operator:
- (a) Name Willis Branch Coal Co. Name Costain Coal Company
 Address 157 Oak Springs Drive Address PO Box 69
San Anselmo, CA 94960 Pax, WV 25904
- (b) Name _____ (b) Coal Owner(s) with Declaration
 Address _____ Name Willis Branch Coal Co.
 Address 157 Oak Springs Drive
San Anselmo, CA 94960
- (c) Name _____ Name _____
 Address _____ Address _____
- 6) Inspector Mr. Rodney Dillon (c) Coal Lessee with Declaration
 Address Post Office Box 131 Name _____
Bradley, WV 25818-0131 Address _____
 Telephone (304)- 543-0769

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
X Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:

- _____ Personal Service (Affidavit attached)
- X Certified Mail (Postmarked postal receipt attached)
- X Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator PENN VIRGINIA OIL & GAS CORPORATION
 By: C.M. Randolph
 Its: Vice President
 Address 999 Executive Park Blvd., Suite 300
Kingsport, TN 37660
 Telephone 1-423-392-0500

Subscribed and sworn before me this 28th day of July, 1997

Kita Nelson Notary Public
 My commission expires 2-13-99

AFFIDAVIT OF PUBLICATION

BECKLEY NEWSPAPERS INC.

BECKLEY, WEST VIRGINIA 25801

August 7, 1997

STATE OF WEST VIRGINIA
COUNTY OF RALEIGH, to-wit:

I, Jack L. Scott, being first duly sworn upon my oath, do depose and say that I am Director of Advertising for Beckley Newspapers Inc., a corporation, publisher of the newspaper entitled The Register-Herald, an independent newspaper; that I have been duly authorized by the Board of directors of such corporation to execute this affidavit of publication; that such newspaper has been published for more than one year prior to publication of the annexed notice described below; that such newspaper is regularly published daily, for at least fifty weeks during the calendar year, in the municipality of Beckley, Raleigh County, West Virginia; that such newspaper is a newspaper of "general circulation" as that term is defined in article three, chapter fifty-nine of the Code of West Virginia, 1931, as amended, within the publication area or areas of the aforesaid municipality and county; that such newspaper averages in length four or more pages, exclusive of any cover, per issue; that such newspaper is circulated to the general public at a definite price of consideration; that such newspaper is a newspaper to which the general public resorts for passing events of a political, religious, commercial and social nature, and for current happenings, announcements, miscellaneous reading matters, advertisements and other notices; that the annexed notice

of Public Notice
(Description of notice)

was duly published in said newspaper once a week for two successive weeks (Class II), commencing with the issue of the 31st day of July, 1997, and ending with the issue of the 7th day of August, 1997, (and was posted at the

on the _____ day of _____); that said annexed notice was published on the following dates: July 31 and August 7, 1997 and that the

cost of publishing said annexed notice as aforesaid was \$ 22.73

Signed Jack L. Scott
Jack L. Scott
Director of Advertising
Beckley Newspapers

Taken, subscribed and sworn to before me in my said county this 7th day of August 1997

My commission expires March 27, 2001
Diana L. Slone
Notary Public of Raleigh County,
West Virginia

R/H

COPY OF PUBLICATION

PUBLIC NOTICE

Notice is hereby given that the Chief of the Office of Oil and Gas, of the Division of Environmental Protection proposes to issue a permit to approve a request to drill and produce two (2) wells drilled in the coal in Raleigh County, West Virginia. Approval of these applications will allow persons to use gas wells equipped with methane detectors. Interested persons may make comments to the Chief of the Virginia Division of Environmental Protection, Office of Oil and Gas, 1101 Melrose Avenue, Raleigh, Virginia 25801.

A copy of the permit application and Gas Commission records may be examined at the Office of Oil and Gas, 1101 Melrose Avenue, Raleigh, Virginia 25801.

B-7-THU-2-RH

081-1097

RECEIVED
Environmental Protection
Division of
Office of Oil & Gas
Permitting
14 1997

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
DIANA L. SLONE
BECKLEY NEWSPAPER
P. O. DRAWER P OR R
BECKLEY, WV 25801
My Commission Expires March 27, 2001