



FILE NO. _____
 DRAWING NO. _____
 SCALE 1"=1000'
 MINIMUM DEGREE OF ACCURACY 1/5000
 PROVEN SOURCE OF ELEVATION USGS BM 0-180
ELEVATION 1407.84'

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) [Signature]
 R. P. E. _____ L. L. S. 736

BRUNN W. ROWMAN
 LICENSED
 NO. 736
 STATE OF WEST VIRGINIA
 LAND SURVEYOR
 PLACE SEAL HERE

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



DATE MAY 20 19 99
 OPERATOR'S WELL NO. WP-5CR-234
 API WELL NO. _____
47 - 109 - 01823 C
 STATE COUNTY PERMIT

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION X STORAGE _____ DEEP _____ SHALLOW _____)
 LOCATION: ELEVATION 1380.61 WATER SHED LAUREL FORK
 DISTRICT SLAB FORK COUNTY WYOMING
 QUADRANGLE MATHENY, WV 7.5'
 SURFACE OWNER CHARLIE FRAZIER ACREAGE 10±
 OIL & GAS ROYALTY OWNER PENN VIRGINIA OIL & GAS CORPORATION LEASE ACREAGE 30582±
 LEASE NO. _____
 PROPOSED WORK: DRILL X CONVERT _____ DRILL DEEPER _____ RE-DRILL _____ 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 Becky Fire Creek, Pool 4, 5 & 4 ESTIMATED DEPTH 1100
 WELL OPERATOR PENN VIRGINIA OIL & GAS CORP. DESIGNATED AGENT MR. HARRY JEWEL, III 06 1999
 ADDRESS 999 EXECUTIVE PARK BLVD., SUITE 300 ADDRESS PO BOX 460
KINGSPORT, TN 37660 RAVENCLIFF, WV 25913

CHARLESTON BLUEPRINT 087151

WYO 1823-C

RECEIVED
 WR - Office of Oil & Gas
 Permitting
 MAR 22 2000
 WV Division of
 Environmental Protection

30-Jun-99
 API # 47-109-01823 C

Reviewed AS

State of West Virginia
 Division of Environmental Protection
 Section of Oil and Gas
 Well Operator's Report of Well Work

Farm Name: FRAZIER, CHARLIE Operator Well No.: 5CR-234

LOCATION: Elevation: 1,380.60 Quadrangle: MATHENY
 District: SLAB FORK County: WYOMING
 Latitude: 6650 Feet South of 37 Deg. 42Min. 30 Sec.
 Longitude 900 Feet West of 81 Deg. 32 Min. 30 Sec.

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

Agent: HARRY JEWELL, III

Inspector: OFIE HELMICK
 Permit Issued: 07/01/99
 Well work Commenced: 09/09/99
 Well work Completed: 10/22/99
 Verbal Plugging
 Permission granted on: _____
 Rotary Cable _____ Rig
 Total Depth (feet) 986'
 Fresh water depths (ft) 1" at 170',
 1" at 470', 1" at 529'
 Salt water depths (ft) _____

Size	Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu.-Ft.
13 3/8"		21'	21'	0
8 5/8"		346'	346'	229 cu ft
4 1/2"		966'	966'	271 cu ft
2 3/8"			858'	

Is coal being mined in area (Y/N) N
 Coal Depths (ft): See Log

OPEN FLOW DATA

Poca 4 Sand, Poca 4, Poca 5, Poca 6 & Fire Creek Coals
 Producing formation _____ Pay zone depth (ft) _____
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow Show MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure na psig (surface pressure) after _____ Hours
 Second producing formation _____ Pay zone depth (ft) _____
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ MCF/d Final open flow _____ Bbl/d
 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: 12/10/99

MAR 31 2000

WYO 1823

FORM WR-35R
(REVERSE)

PERMIT #: 47-109-01823
WELL #: 5CR-234

DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC.

Stage 1	Poca 4 Sand & Poca 4 Coal	Perforated Sand from 813' to 820' with 15 holes and Coal from 825'-828' with 9 holes. Breakdown with 500 gallons 7.5% HCL acid and water. Treated with 317 bbls of water and 10047 lbs 20/40 sand. ATR: 20 BMP ATP: 2055 psi ISIP: 850 psi
Stage 2	Poca 5 Coal	Perforated from 783' to 788' with 15 holes and from 790' to 795' with 15 holes. Breakdown with 336 gallons 7.5% HCL acid and water. Treated with 237 bbls of water and 5867 lbs 20/40 sand. ATR: 20.4 BMP ATP: 2205 psi ISIP: 1120 psi
Stage 3	Poca 6 Coal	Perforated from 731'-735' with 20 holes. Breakdown with 336 gallons 7.5% HCL acid and water. Treated with 290 bbls of water and 8667 lbs 20/40 sand. ATR: 19.1 BMP ATP: 3221 psi ISIP: 1975 psi
Stage 4	Fire Creek Coal	Perforated from 638'-642' with 20 holes. Breakdown with 336 gallons 7.5% HCL acid and water. Treated with 234 bbls of water and 5905 lbs 20/40 sand. ATR: 20.6 BMP ATP: 3435 psi ISIP: 2500 psi

<u>FORMATIONS</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
Sand & Shale	0	140	
Sand	140	210	
Shale	210	265	
Sand	265	470	
Coal	470	472	
Shale	472	503	
Sand	503	637	
Fire Creek Coal	637	641	
Sand	641	720	
Shale	720	730	
Poca 6 Coal	730	736	
Sand & Shale	736	783	
Poca 5 Coal	783	785	
Shale	785	790	
Poca 5 Coal	790	792	
Sand & Shale	792	806	
Sand	806	826	
Poca 4 Coal	826	828	
Sand & Shale	828	878	
Lower Poca 4 Coal	878	879	
Sand & Shale	879	986	No shows reported @ TD