



DEEP WELL

Charleston, WV

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

DATE: 06/05/00 API#: 47-99-01975W

Well Operator's Report of Well Work
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	Opera	tor Well No.:	L-15R	
Farm name: Napier, Shirley		angle: Wa	ivne WY	1.5'
LOCATION: Elevation: 858'				
District: Stonewall  Latitude: 1680 Feet South of 38  Longitude 700 Feet West of 82	Deg. 10 Deg. 25	y: Wavne Min. Min.	0 <u>Se</u> c. 0 <u>Sec</u> .	
Company: Penn Virginia Oil & Gas Corporation	Casing & Tubing	Used in drilling	O#	ells e sement til fice of Sup(Ex. Ft. Penritung
Address: P.O. Box 387			AP	R 1 6 2891
Duffield, VA 24244				WV Division of
Harry Jewell			- Fovir	onmental Protection
Tage Beicher				
	+	7	1	1100
- I Mark Commenced. 1017	1	10 com	OULT	WI
Date Well Work Completed: 10/25/00	1			
Yz-bal Plugging:		/		
Date Permission granted on.				
Rotary X Cable Rig				
Total Depth (feet):				
Fresh Water Depth (It.):			· · · · · · · · · · · · · · · · · · ·	
- Donth (II.):				
Is coal being mined in area (N/Y)?				
Coal Depths (ft.):	1	·		
OPEN FLOW DATA		1 amth (ft)		
Producing formation Lower Huron & I Gas: Initial open flowMCF/d Oil: Final open flow 25 MCF/d F Time of open flow between initial of Static rock Pressure 510 psig (surface)	inal open flow	4 Hours	Bbl/d Bbl/d Hours	
	Da	ıy zone deptl	ı (ft)	
Final open flowMCF/d  Time of open flow between initial	Oil: Initial of Final oper and final test surface pressu	pen flow n flow s nre) after	Bbl/d Bbl/d Hours Hours	
NOTE: ON BACK OF THIS FORM PUT INTERVALS, FRACTURING OR STIMU LOG WHICH IS A SYSTEMATIC DETAINCLUDING COAL ENCOUNTERED BY	THE FOLLOV LATING, PH U.FD. GEOLO	VING: 1). DE YSICAL CHA OGICAL REC	TAILS OF PINGE, ETC. 2 ORD OF AL	ERFORATED 2). THE WELL L FORMATIONS,
Signed:			_	VA A A

By: Date:\_

FORM WR-35R (REVERSE)

PERMIT #: 47-99-01975 WELL #: L-15R

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

Set CIBP at 3990'. Spotted 5 sx latex cement on top of CIBP. Perforated with 4 SPF at 2825'-2826'. Squeezed 4 ½" casing with 350 sx cement. TOC at 2738'. Perforated with 4 SPF at 2738'-2739'. Re-squeezed 4 ½" casing with 315 sx cement. TOC at 1860'.

Stage 1 – Lower Huron – Perforated from 2840' to 3030' with 47 holes. Breakdown with 500 gallons 7.5% HCL acid and N2. Treated with 307000 SCF N2. ISIP: 960 psi. ATP: 1362 psi. ATR: 25500 SCF/min.

Stage 2 – Berea – Perforated from 2135' to 2137' with 4 holes, 2149' to 2151' with 4 holes and 2184' to 2190' with 12 holes. Breakdown with 500 gallons 7.5% HCL acid and N2. Treated with 438 bbls gelled water and 30600 lbs 20/40 sand. ISIP: 1527 psi. ATP: 2491 psi. ATR: 12 BPM.

1:0

WP-35 RECEIVED Office of Oil & Gas Permitting JUN 0 9 2000

Farm name: Napier, Shirley

DATE:	06/05/00
API #:	47-99-01975

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

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WV Division of Environmental Protection Well Operator's Report of Well Work

of Well Work	Wed_
Operator Well No.:	L-15R
Quadrangle: W	avme

LOCATION: Elevation: 879'	Quadrangle: Wayne
District: Stonewall	County: Wayne
Latitude:1680Feet South of38	Deg. 10 Min. 0 Sec.
Longitude 700 Feet West of 82	Deg. 25 Min. 0 Sec.

Company

Company: Penn Virginia Oil & Gas Corporation	Casing &	Used in	Left in well	Cement fill
tem virginia on & Gas Corporation	Tubing	drilling	Figure 111 AAGII	up Cu. Ft.
Address: P.O. Box 387	20"	24'	24'	0
Duffield, VA 24244	13 3/8"	313'	313'	307
Agent: Harry Jewell	9 5/8"	1373'	1373'	564
Inspector: Dave Belcher	4 1/2"	4128'	4128'	487
Date Permit Issued: 04/16/99				
Date Well Work Commenced: 11/06/99				
Date Well Work Completed: 1/19/00				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 4160'				
Fresh Water Depth (ft.): 1" @ 425', 1 1/2" @				
764' and 5" @ 1415'			and the second s	
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				

### OPEN FLOW DATA

Producing formation <u>Lockport Dolomite</u> Pay zone depth (ft) <u>4012'-4020'</u>					
Gas: Initial open flow 115 M	CF/d Oil:	Initial open flow	Bbl/d		
Final open flow 25 MCF/d Final open flow Bbl/d					
Time of open flow between initial and final tests Hours					
Static rock Pressure 950 psig (surface pressure) after 280 Hours					
Second producing formation Pay zone depth (ft)					
Gas: Initial open flow	_MCF/d (	Dil: Initial open flow	Bbl/d		
Final open flow	MCF/d	Final open flow	Bbl/d		
Time of open flow between	n initial a	*	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.

Signed:

PERMIT #: 47-99-01975

WELL #: L-15R

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

Stage 1 Lockport

Perforated from 4012' to 4020' with 64 holes. Breakdown 250

gallons 15% HCL acid and water. Treated with 500 gallons 15%

HCL acid.

ATR: 2.5 BMP

ATP: 3400 psi

ISIP: 2900 psi

<b>FORMATIONS</b>	<u>TOP</u>	<b>BOTTOM</b>	<u>REMARKS</u>
Breathitt	 0	873	
Salt Sand	873	1230	
Pennington	1230	1317	
Little Lime	1317	1348	
Big Lime	1348	1517	
Big Injun	1517	1624	
Borden	1624	2133	
Berea	2133	2237	
Devonian Shale	2237	3287	
Corniterous Lime	3287	4050	
Big Six	4050	4090	
Rose Hill	4090	TD	