

WR-35

Office of Oil & Gas  
UC Section

MAR 15 1999

WV Division of  
Environmental Protection

08-Apr-98  
API # 47- 1-02747

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

Reviewed AS

Well Operator's Report of Well Work

Farm name: BECKWITH LUMBER CO. Operator Well No.: EMPIRE BANK X |

LOCATION: Elevation: 1,346.00 Quadrangle: BROWNTON

District: PLEASANT County: BARBOUR  
Latitude: 10650 Feet South of 39 Deg. 15Min. 0 Sec.  
Longitude 2575 Feet West of 80 Deg. 10 Min. 0 Sec.

Company: PETROLEUM DEVELOPMENT COR  
103 E. MAIN ST. - P.O. BOX 26  
BRIDGEPORT, WV 26330-0026

Agent: ERIC R. STEARNS

Inspector: PHILLIP TRACY  
Permit Issued: 04/09/98  
Well work Commenced: 02/05/99  
Well work Completed: 02/11/99

Verbal Plugging  
Permission granted on: \_\_\_\_\_

Rotary x Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 4808  
Fresh water depths (ft) \_\_\_\_\_  
30; 230; 310

Salt water depths (ft) \_\_\_\_\_  
n/a

Is coal being mined in area (Y/N)? N  
Coal Depths (ft) 19-21

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
16"	17'	17'	
11 3/4"	30'	30'	
8 5/8"	1005'	1005'	196 sks
4 1/2"	3830'	3830'	395 sks

OPEN FLOW DATA

Producing formation Bradford Pay zone depth (ft) 3727-3729  
Gas: Initial open flow ns MCF/d Oil: Initial open flow 0 Bbl/d  
Final open flow 550 MCF/d Final open flow 0 Bbl/d  
Time of open flow between initial and final tests 4 Hours  
Static rock Pressure 320 psig (surface pressure) after 72 Hours

Second producing formation Speechley Pay zone depth (ft) 3240-3242  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow co-mingled 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

Third producing formation 5th Sand Pay zone depth (ft) 2608-2612  
Fourth producing formation \_\_\_\_\_ Pay zone depth (ft) 2480-2484

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: Eric R. Stearns  
PETROLEUM DEVELOPMENT CORPORATION

By: Eric R. Stearns

Date: March 12, 1999

BAR 2747

MAR 22 1999

EMPIRE BANK #1  
47-001-2747

FORMATION	PERFORATIONS	BBL WATER	20/40 SAND	SCF N2	AIR BPM
BRADFORD	10 (3727' - 3729')	240	20,000	25,075	20
SPEECHLEY	9 (3240' - 3242')	186	15,000	20,375	20
5TH SAND	16 (2608' - 2612')	372	40,000	36,000	25
4TH SAND	16 (2480' - 2484')	368	40,000	36,850	24

FORMATION	W E L L TOP FEET	L O G BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	
sand, shale, RR	10	1530	1" water @30'
Little Lime	1530	1555	1/2" water @230'
sand, shale	1555	1572	1 & 1/2" water @310'
Big Lime	1572	1632	Coal @ 19' - 21'
sand, shale	1632	1635	
Keener	1635	1650	
sand, shale	1650	1652	gas chk @ 1819' No Show
Big Injun	1652	1750	gas chk @ 2227' No Show
sand, shale	1750	1790	gas chk @ 2569' No Show
Weir	1790	1820	gas chk @ 2723' No Show
sand, shale	1820	1980	gas chk @ 2910' No Show
Gantz	1980	1990	gas chk @ 3065' No Show
sand, shale	1990	2030	gas chk @ 3472' No Show
50 ft	2030	2100	gas chk @ 4001' No Show
sand, shale	2100	2150	gas chk @ 4282' No Show
30 ft	2150	2200	gas chk @ 4562' No Show
sand, shale	2200	2230	gas chk @ TD No Show
Gordon	2230	2280	gas chk @ collars No Show
sand, shale	2280	2304	
4th	2304	2490	
sand, shale	2490	2534	
5th	2534	2616	
sand, shale	2616	2635	
Bayard	2635	2660	
sand, shale	2660	2700	
Elizabeth	2700	2726	
sand, shale	2726	2890	
Speechley	2890	3176	
sand, shale	3176	3200	
Balltown	3200	3600	
sand, shale	3600	3982	
Bradford	3982	3841	
sand, shale	3841	4100	
Riley	4100	4680	
sand, shale	4680	4490	
Benson	4490	4528	
sand, shale	4528	4813	Drillers TD
		4808	Logger TD