



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

*pr 17*

Well Operator's Report of Well Work

Operator Well No. : FLEMING #1

Farm Name: ROBERT D. AND KENNETH ALLISON

Quadrangle: WEST UNION

LOCATION: Elevation: 1282.00

County: DODDRIDGE

District: WEST UNION  
Latitude: 9460 Feet South of 39 Deg. 17 Min. 30 Sec.  
Longitude: 11335 Feet West of 80 Deg. 45 Min. 00 Sec.

Company: KEY OIL COMPANY  
22 GARTON PLAZA  
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD  
Permit Issued: 10/09/03  
Well Work Commenced: 02/01/04  
Well Work Completed: 02/04/04

Verbal Plugging  
Permission granted on: \_\_\_\_\_ Rig  
Rotary X Cable 5539'  
Total Depth (feet) 108' 203'  
Fresh water depths (ft) NONE  
Salt water depths (ft) NONE

Is coal being mined in area ( Y / N ) ? N  
Coal Depths ( ft ) : NONE

OPEN FLOW DATA

- Warren
- Speechley
- Balltown
- Rileys
- Benson
- Alexander

Producing formation \_\_\_\_\_ MCF / d  
 Gas: Initial open flow 60 MCF / d  
 Final open flow 2054 MCF / d  
 Time of open flow between initial and final tests N/A  
 Static rock pressure 1775 psig ( surface pressure ) after 96 Hours

Second producing formation Commingled  
 Gas: Initial open flow \_\_\_\_\_ MCF / d  
 Final open flow \_\_\_\_\_ MCF / 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: KEY OIL COMPANY

By: *Jan Chapman*  
 Date: April 20, 2004

PRESIDENT

JUN 04 2004

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8"	1270'	1270'	290 sks To Surface
4 1/2"	5466'	5466'	475 sks

RECEIVED  
Office of Oil & Gas  
Office of Chief  
APR 26 2004  
WV Department of Environmental Protection

- 3390' - 3448'
- 3460' - 3720'
- 3757' - 4512'
- 4560' - 4983'
- 5034' - 5045'
- 5276' - 5364'

0000 4761

Fleming #1 (47-017-4761)  
Four Stage Foam Frac - BJ Services

1<sup>st</sup> Stage: Alexander ( 14 holes ) ( 5292.50' to 5361' )      60 Quality Foam. 500 gal. 15% HCL.  
60,000# 20/40 sand, 565,000 SCF N2,  
814 bbls foam.

2<sup>nd</sup> Stage: Benson ( 7 holes ) ( 5037.75' to 5042.25' )      60 Quality Foam. 750 gal 15% HCL.  
Thirld Riley ( 7 holes ) ( 4971.75' to 4973.25' )      30,000# 20/40 sand, 359,000 SCF N2,  
528 bbls foam.

3<sup>rd</sup> Stage: Riley ( 7 holes ) ( 4596.50' to 4610' )      60 Quality Foam 750 gal 15% HCL.  
Balltown ( 6 holes ) ( 4185.75' to 4499' )      5,000# 80/100 sand, 35,000# 20/40 sand,  
448,000 SCF N2, 618 bbls foam.

4<sup>th</sup> Stage: Balltown ( 3 holes ) ( 3953.75' to 3954.25' )      60 Quality Foam. 750 gal 15% HCL.  
Speechley ( 7 holes ) ( 3469.25' to 3549.75' )      5,000# 80/100 sand, 45,000# 20/40 sand,  
Warren ( 4 holes ) ( 3423.75' to 3440.50' )      517,000 SCF N2, 728 bbls foam.

WELL LOG

KB-GL	0	10	
Fill	10	14	
Sand	14	27	
Sand & Red Rock & Shale	27	90	
Sand & Shale	90	138	
Red Rock	138	148	Damp @ 108'
Sand & Shale	148	358	
Red Rock	358	370	½" water @ 203'
Sand	370	390	
Sand & Shale	390	420	
Sand & Shale % Red Rock	420	537	
Sand	537	602	
Sand & Shale	602	700	
Sand	700	720	
Sand & Shale	720	1247	
Sand	1247	1260	
Sand & Shale	1260	1995	
Little Lime	1995	2030	
Big Lime	2030	2084	
Big Injun	2084	2173	
Shale	2173	2326	
Weir	2326	2433	
Shale	2433	2721	
Gordon	2721	2776	
Shale	2776	3390	
Warren	3390	3448	
Shale	3448	3460	
Speechley	3460	3720	
Shale	3720	3757	
Balltown	3757	4512	
Shale	4512	4560	
Riley	4560	4641	
Shale	4641	4947	
Third Riley	4947	4983	
Shale	4983	5034	
Benson	5034	5045	
Shale	5045	5276	
Alexander	5276	5364	
Shale	5364	5539	
TD	5539		

Gas Checks

2302' - Odor  
2804' - 6/10<sup>lbs</sup> water/w 2"  
3480' - 2/10<sup>lbs</sup> water/w 2"  
3966' - 2/10<sup>lbs</sup> water/w 2"  
4599' - 2/10<sup>lbs</sup> water/w 2"  
5004' - 2/10<sup>lbs</sup> water/w 2"  
5319' - 2/10<sup>lbs</sup> water/w 2"