

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas

001.03138

Well Operator's Report of Well Work

Farm name: BIGELOW LODGE Operator Well No.: 10

LOCATION: Elevation: 1595' Quadrangle: THORNTON

District: COVE County: BARBOUR

Latitude: 14.270 Feet South of 39 Deg. 17 Min. 30 Sec.

Longitude: 1.280 Feet West of 79 Deg. 52 Min. 30 Sec.

Company: Texas Keystone, Inc.

Address: 560 Epsilon Drive Pittsburgh, PA 15238	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Agent: <u>Jon Farmer</u>	<u>13 3/8"</u>	<u>42</u>	<u>42</u>	<u>Sanded In</u>
Inspector: <u>Bryan Harris</u>				
Date Permit Issued: <u>07/12/10</u>	<u>9 5/8"</u>	<u>463</u>	<u>463</u>	<u>180</u>
Date Well Work Commenced: <u>09/26/11</u>				
Date Well Work Completed: <u>10/03/11</u>	<u>7"</u>	<u>1777</u>	<u>1777</u>	<u>225</u>
Verbal Plugging:				
Date Permission granted on:	<u>4 1/2"</u>	<u>0</u>	<u>5193</u>	<u>180</u>
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft.): <u>5630</u>				
Total Measured Depth(ft.): <u>5630</u>				
Fresh Water Depth (ft.): <u>245, 764</u>				
Salt Water Depth (ft.): <u>none reported</u>				
Is coal being mined in the area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>none reported</u>				
Void(s) encountered (N/Y) Depth(s): <u>N</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation: 3RD ELK Pay zone Depth (ft) 5046 - 5066  
 Gas: Initial open flow: G/S TSTM MCF/D Oil: Initial open flow: 0 Bbl/d  
 Final open flow 133 MCF/D Oil: Final open flow: 0 Bbl/d  
 Time of open flow between initial and final tests: N/A Hours  
 Static rock Pressure: 980 psig(surface pressure) after 144 Hours

Second Producing formation: ALEXANDER Pay zone Depth (ft) 4377 - 4389  
 Gas: Initial open flow: Co-mingled MCF/D Oil: Initial open flow: 0 Bbl/d  
 Final open flow Co-mingled MCF/D Oil: Final open flow: 0 Bbl/d  
 Time of open flow between initial and final tests: \_\_\_\_\_ Hours  
 Static rock Pressure: Co-mingled psig(surface pressure) after \_\_\_\_\_ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the 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.

Stephen R. [Signature]  
Signature

10/20/11  
Date

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Were core samples taken?      No X Were cuttings caught during drilling? Yes      No X

Were       $\frac{N}{Y/N}$  Electrical,       $\frac{N}{Y/N}$  Mechanical,       $\frac{Y}{Y/N}$  or Geophysical logs recorded on this well?

NOTE: IN THE AREA BELOW 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 THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL

Perforated Intervals, Fracturing, or Stimulating:

Perfed 3rd Elk 5046' - 5066 (26 shots). BD 3350 #. 210 sks 40/70 & 100 sks 20/40. 528 bbl. Gel Frac.  
Perfed Alexander 4377' - 4389' (27 shots). BD 3176 #. 200 sks 40/70 & 108 sks 20/40. 598 bbl. Gel Frac.  
Perfed Balltown C 3279' - 3287' (24 shots). BD 2000 #. 200 sks 40/70 & 103 sks 20/40. 475 bbl. Gel Frac.  
Perfed Balltown B 3117' - 3151' (24 shots). BD 2300 #. 150 sks 40/70 & 113 sks 20/40. 503 bbl. Gel Frac.

Formations Encountered	Top Depth	Bottom Depth	Notes
FILL	0	20	
SANDY SHALE	20	35	
SANDSTONE	35	53	
SHALE	53	205	
SANDY SHALE	205	330	1st FW @ 265'
SANDSTONE	330	480	
SANDY SHALE	480	610	
SANDSTONE	610	700	
SANDY SHALE	700	1145	1st FW @ 754'
RED ROCK	1145	1160	
SANDSTONE	1160	1245	
RED ROCK	1245	1512	
LITTLE LIME	1312	1328	
PENCIL CAVE SHALE	1328	1358	
BIG LIME	1358	1378	
SQUAW SANDSTONE	1378	1585	
SHALE	1585	1596	
WEBB SANDSTONE	1596	1748	
BEREA SANDSTONE	1748	1780	
SHALE	1780	1800	
GANTZ SANDSTONE	1800	1842	
LOWER GANTZ SANDSTONE	1842	1894	
SANDY SHALE	1894	2460	
BAYARD SANDSTONE	2460	2486	
SPEECHLEY A SANDSTONE	2486	2604	
SPEECHLEY B SANDSTONE	2604	2630	
SANDY SHALE	2630	3117	
BALLTOWN B SANDSTONE	3117	3244	
BALLTOWN C SANDSTONE	3244	3292	
SANDY SHALE	3292	4151	
BENSON SILTSTONE	4151	4168	
SANDY SHALE	4168	4355	
ALEXANDER	4355	4402	
SHALE	4402	4564	
1ST ELK SILTSTONE	4564	4630	
SANDY SHALE	4630	4821	
2ND ELK SILTSTONE	4821	4655	
SANDY SHALE	4655	5048	
3RD ELK SILTSTONE	5048	5106	
SANDY SHALE	5106	5440	
5TH ELK SILTSTONE	5440	5495	
SHALE	5495	5530	TD

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Third Producing formation:	<u>BALTCWNE</u>	Pay zone Depth (ft)	<u>3279 - 3287</u>
Gas: Initial open flow:	<u>Co-mingled</u>	MCF/D Oil: Initial open flow:	<u>0</u> Bbl/d
Final open flow	<u>Co-mingled</u>	MCF/D Oil: Final open flow:	<u>0</u> Bbl/d
Time of open flow between initial and final tests:		Hours	
Static rock Pressure:	<u>Co-mingled</u>	psig(surface pressure) after	<u>-</u> Hours
Fourth Producing formation:	<u>BALTCWNE</u>	Pay zone Depth (ft)	<u>3117 - 3151</u>
Gas: Initial open flow:	<u>Co-mingled</u>	MCF/D Oil: Initial open flow:	<u>0</u> Bbl/d
Final open flow	<u>Co-mingled</u>	MCF/D Oil: Final open flow:	<u>0</u> Bbl/d
Time of open flow between initial and final tests:		Hours	
Static rock Pressure:	<u>Co-mingled</u>	psig(surface pressure) after	<u>-</u> Hours

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