

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

001-03140

Well Operator's Report of Well Work

Farm name: BIGELOW LODGE Operator Well No.: 16
 LOCATION: Elevation: 1822' Quadrangle: NESTORVILLE
 District: COVE County: BARBOUR
 Latitude: 110 Feet South of 39 Deg. 15 Min. 0 Sec.
 Longitude: 750 Feet West of 79 Deg. 52 Min. 30 Sec.

Company: Texas Key-stone, Inc.

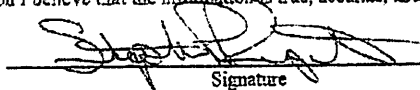
Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
560 Epsilon Drive Pittsburgh, PA 15238				
Agent: Jon Farmer	13 3/8"	42	42	Sanded In
Inspector: Bryan Harris				
Date Permit Issued: 06/29/10	9 5/8"	463	463	180
Date Well Work Commenced: 09/13/11				
Date Well Work Completed: 09/20/11	7"	1982	1982	270
Verbal Plugging:				
Date Permission granted on:	4 1/2"	0	5730	210
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft.): 5871				
Total Measured Depth (ft.): 5871				
Fresh Water Depth (ft.): 130.920				
Salt Water Depth (ft.): none reported				
Is coal being mined in the area (N/Y)? N				
Coal Depths (ft.): 770				
Void(s) encountered (N/Y) Depth(s): N				

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

Producing formation: 5TH ELK Pay zone Depth (ft) 5633 - 5642
 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: 1140 psig(surface pressure) after 144 Hours

Second Producing formation: 3RD ELK Pay zone Depth (ft) 5266 - 5294
 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.


Signature

10/28/11
Date

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

Were N Electrical, N Mechanical, Y or Geophysical logs recorded on this well?
 Y/N Y/N Y/N

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 5th Elk 5633' - 5642' (18 shots). BD 3700 #. 100 sks 40/70 & 112 sks 20/40. 460 bbl. Gel Frac.
Perfed 3rd Elk 5266' - 5294' (20 shots). BD 2400 #. 200 sks 40/70 & 107 sks 20/40. 613 bbl. Gel Frac.
Perfed Alexander 4602' - 4611' (27 shots). BD 3262 #. 200 sks 40/70 & 109 sks 20/40. 597 bbl. Gel Frac.
Perfed Benson 4381' - 4387' (18 shots). BD 4448 #. 150 sks 40/70 & 112 sks 20/40. 477 bbl. Gel Frac.
Perfed Balltown C 3512' - 3525' (21 shots). BD 3693 #. 150 sks 40/70 & 117 sks 20/40. 451 bbl. Gel Frac.

Formations Encountered:	Top Depth	Bottom Depth	Notes:
FILL	0	16	
SANDY SHALE	16	30	
SANDSTONE	30	42	
SANDY SHALE	42	200	DAMP @ 130'
SANDSTONE	200	240	
SANDY SHALE	240	440	
SANDSTONE	440	515	
SHALE	515	680	
SANDSTONE	680	770	
COAL	770	780	
SANDY SHALE	780	865	
SANDSTONE	865	1115	1/4" FW @ 920'
SANDY SHALE	1115	1190	
RED ROCK	1190	1250	
SANDSTONE	1250	1375	
RED ROCK	1375	1544	
LITTLE LIME	1544	1559	
PENCIL CAVE SHALE	1559	1590	
BIG LIME	1590	1805	
SQUAW SANDSTONE	1805	1812	
SHALE	1812	1825	
WEIR SANDSTONE	1825	1975	
BEREA SANDSTONE	1975	2006	
SHALE	2006	2027	
GANTZ SANDSTONE	2027	2066	
LOWER GANTZ SANDSTONE	2066	2098	
SANDY SHALE	2098	2687	
BAYARD SANDSTONE	2687	2702	
SANDY SHALE	2702	2718	
SPEECHLEY A SANDSTONE	2718	2833	
SPEECHLEY B SANDSTONE	2833	2844	
SANDY SHALE	2844	3511	
BALLTOWN C SANDSTONE	3511	3528	
SANDY SHALE	3528	4376	
BENSON SILTSTONE	4376	4390	
SANDY SHALE	4390	4579	
ALEXANDER	4579	4619	
SHALE	4619	4788	
1ST ELK SILTSTONE	4788	4818	
SANDY SHALE	4818	5049	
2ND ELK SILTSTONE	5049	5091	
SANDY SHALE	5091	5268	
3RD ELK SILTSTONE	5268	5310	
SANDY SHALE	5310	5604	
5TH ELK SILTSTONE	5604	5658	
SHALE	5658	5871	

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Third Producing formation:	<u>ALEXANDER</u>	Pay zone Depth (ft)	<u>4602 - 4611</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:	<u> </u>	Hours	
Static rock Pressure:	<u>Co-mingled</u>	psig(surface pressure) after	<u> - </u> Hours
Fourth Producing formation:	<u>BENSON</u>	Pay zone Depth (ft)	<u>4381 - 4387</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:	<u> </u>	Hours	
Static rock Pressure:	<u>Co-mingled</u>	psig(surface pressure) after	<u> - </u> Hours
Fifth Producing formation:	<u>BALLTOWN C</u>	Pay zone Depth (ft)	<u>3512 - 3525</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:	<u> </u>	Hours	
Static rock Pressure:	<u>Co-mingled</u>	psig(surface pressure) after	<u> - </u> Hours

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