

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

Well Operator's Report of Well Work

Farm name: HARKER, ARTHUR Operator Well No.: 5

LOCATION: Elevation: 1626 Quadrangle: THORNTON

District: COVE County: BARBOUR
Latitude: 4,090 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude: 3,680 Feet West of 79 Deg. 52 Min. 30 Sec.

Company: Texas Keystone, 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: 02/15/11	9 5/8"	466	466	180
Date Well Work Commenced: 07/28/11				
Date Well Work Completed: 08/04/11	7"	1857	1857	255
Verbal Plugging:				
Date Permission granted on:	4 1/2"	0	5621	205
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft.): 5766				
Total Measured Depth(ft.): 5766				
Fresh Water Depth (ft.): 670				
Salt Water Depth (ft.): none reported				
Is coal being mined in the area (N/Y)? N				
Coal Depths (ft.): 295, 415, 425, 555				
Void(s) encountered (N/Y) Depth(s): N				

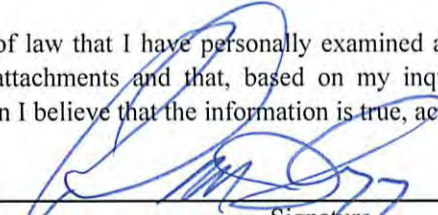
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OCT 7 2011
WV Department of Environmental Protection

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

Producing formation: 5TH ELK Pay zone Depth (ft) 5514 - 5526
Gas: Initial open flow: G/S TSTM MCF/D Oil: Initial open flow: 0 Bbl/d
Final open flow 215 MCF/D Oil: Final open flow: 0 Bbl/d
Time of open flow between initial and final tests: N/A Hours
Static rock Pressure: 840 psig(surface pressure) after 48 Hours

Second Producing formation: 3RD ELK Pay zone Depth (ft) 5159' - 5179
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

9-30-11

Date

Were core samples taken? Yes ___ 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 5514' - 5526' (18 shots). BD 3421 #. 150 sks 40/70 & 110 sks 20/40. 554 bbl. Gel Frac.
 Perfed 3rd Elk 5159' - 5179' (15 shots). BD 3150 #. 100 sks 40/70 & 110 sks 20/40. 518 bbl. Gel Frac.
 Perfed Alexander 4499' - 4506' (21 shots). BD 4148 #. 200 sks 40/70 & 100 sks 20/40. 574 bbl. Gel Frac.
 Perfed Balltown B 3212' - 3222' (20 shots). BD 3600 #. 100 sks 40/70 & 107 sks 20/40. 419 bbl. Gel Frac.
 Perfed Balltown A 3154' - 3164' (20 shots). BD 2895 #. 100 sks 40/70 & 105 sks 20/40. 448 bbl. Gel Frac.

Formations Encountered:	Top Depth	Bottom Depth	Notes:
FILL	0	15	
SANDY SHALE	15	42	
SHALE	42	60	
SANDSTONE	60	85	
SHALE	85	175	
SANDY SHALE	175	270	
SANDSTONE	270	295	
COAL	295	300	
SHALE	300	322	
SANDSTONE	322	400	
SANDY SHALE	400	415	
COAL	415	420	
SHALE	420	425	
COAL	425	430	
SANDY SHALE	430	555	
COAL	555	560	
SANDY SHALE	560	735	DAMP FW @ 670'
SANDSTONE	735	850	
SANDY SHALE	850	970	
RED ROCK SHALE	970	1030	
SANDY SHALE	1030	1150	
SANDSTONE	1150	1210	
SANDY SHALE	1210	1250	
RED ROCK SHALE	1250	1315	
SANDY SHALE	1315	1350	
LITTLE LIME	1350	1365	
PENCIL CAVE SHALE	1365	1390	
BIG LIME	1390	1607	
SHALE	1607	1631	
SQUAW SANDSTONE	1631	1641	
SHALE	1641	1665	
WEIR SANDSTONE	1665	1711	
SHALE	1711	1808	
BEREA SANDSTONE	1808	1832	
SHALE	1832	1850	
GANTZ SANDSTONE	1850	1893	
LOWER GANTZ SANDSTONE	1893	1956	
SANDY SHALE	1956	2530	
BAYARD SANDSTONE	2530	2566	
SANDY SHALE	2566	3150	
BALLTOWN A SANDSTONE	3150	3223	
SHALE	3223	4272	
BENSON SILTSTONE	4272	4278	
SANDY SHALE	4278	4454	
ALEXANDER	4454	4510	
SHALE	4510	4664	
1ST ELK SILTSTONE	4664	4700	
SANDY SHALE	4700	5159	
3RD ELK SILTSTONE	5159	5207	
SANDY SHALE	5207	5481	
5TH ELK SILTSTONE	5481	5531	
SHALE	5531	5766	TD

10/14/2011

Third Producing formation:	<u>ALEXANDER</u>	Pay zone Depth (ft)	<u>4499 - 4506</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>BALLTOWN B</u>	Pay zone Depth (ft)	<u>3212 - 3222</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 A</u>	Pay zone Depth (ft)	<u>3154 - 3164</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