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

DATE: 2/13/12 API #: 4709101233 RECEIVED

Well Operator's Report of Well Work

WV GEOLOGICAL SURVEY

MAR 29 2012

Farm name:	G	RAGG, JA	MES	Operator Well	No.:		10WN, WY			
LOCATION	I: Elevation:	1300'		Quadrangle:		THORNTON				
	District:	KNOT	TSVILLE	County:		TAY	LOR			
	Latitude:	2,300	Feet South of	39 Deg.	20	Min. 0				
	Longitude:	560	Feet West of	79 Deg.		Min. 30				
Company:	Texas Keystone	. Inc.	•							
Address:	560 Epsilon Dri	ve		Casing & Tubing	Used in drilling	Left i	in well	Cement Cu. Ft.	fill up	
	Pittsburgh, PA 1	.5238								
	Jon Farmer			13 3/8"	42		42	Sande	d In	
	Bryan Harris									
Date Permi		07/2		9 5/8"	462		462	180)	
	Work Commenc		2/11							
	Work Complete	d: 12/1	9/11	7"	156	7 :	1567	220)	
Verbal Plug										
	ssion granted o			4 1/2"	0		5265	182	2	
		Rig								
	cal Depth (ft.):									
	ured Depth(ft.)									
	er Depth (ft.):									
		none repo								
	g mined in the a									
	s (ft.):		, 445',							
Void(s) enc	ountered (N/Y)	Depth(s):	N							
OPEN FLO	W DATA (If r	nore than t	wo producing form	ations please in	clude addi	tional data o	on separat	e sheet)		
	Producing form		3RD ELK		Pay zone	Depth (ft)	4	5126 - 51	40	
	Gas: Initial oper		G/S TSTM		MCF/D	Oil: Initial	open flow	r: 0	Bbl/d	
	Final open flow		158		MCF/D	Oil: Final o	pen flow:	0	Bbl/d	
	-		n initial and final te	ests: <u>N/A</u>	Hours					
	Static rock Pres	sure:	680	,	_psig(surf	ace pressure	e) after	48	_Hours	
	Second Produci	ng formatio	on: 3RD ELK		Pay zone	Depth (ft)	4	5068 - 50	72	
	Gas: Initial oper	n flow:	Co-mingled			Oil: Initial			Bbl/d	
	Final open flow	'	Co-mingled			Oil: Final o			_ Bbl/d	
	Time of open flo	ow between	n initial and final te	ests:	Hours				_	
	Static rock Pres	sure:	Co-mingled		psig(surf	ace pressure	e) after	_	Hours	
document a	nd all the attac	hments an	ave personally exa d that, based on the information is	my inquiry of	those indi	ividuals im				

Third Producing formation		Pay zone Depth (ft) 4794 - 4804				
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	en initial and final tests:	Hours	<u> </u>			
Static rock Pressure:	Co-mingled	psig(surface pressure) after	- Hours			
		<u> </u>				
Fourth Producing formati	on: BALLTOWN C	Pay zone Depth (ft) 312	24 - 3130			
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	en initial and final tests:	Hours				
Static rock Pressure:	Co-mingled	psig(surface pressure) after	- Hours			

Were co	ore sam	ples taken?	Yes_	No X	Were	cuttings caught during drilling?	Yes	No_	<u>X</u>
Were	N	_Electrical,	NN	Iechanical, _	Y	or Geophysical logs recorded or	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 3rd Elk 5126' - 5140' (18 shots). BD 4050 #. NO SAND. 71 bbl. Gel Frac.

Perfed 3rd Elk 5068' - 5072' (16 shots). BD 2400 #. 150 sks 40/70 & 115 sks 20/40. 615 bbl. Gel Frac.

Perfed 2nd Elk 4794' - 4804' (34 shots). BD 3600 #. 250 sks 40/70 & 114 sks 20/40. 693 bbl. Gel Frac.

Perfed Balltown C 3124' - 3130' (24 shots). BD 2250 #. 250 sks 40/70 & 113 sks 20/40. 663 bbl. Gel Frac.

Formations Encountered:	Top Depth	Bottom Depth	Notes:	
FILL	0	15		
SHALE	. 15	25		
SANDY SHALE	25	38		
SANDSTONE	38	. 110		
SANDY SHALE	110	160		
SHALE	160	220		
SANDSTONE	220	350		•
SANDY SHALE	350	385		
COAL	385	390		
SANDSTONE	390	410		
COAL	410	416		
SANDY SHALE	416	445		
COAL	445	450		
SANDSTONE	450	590		
SANDY SHALE	590	670		
SANDSTONE	670	765		
RED ROCK	765	800		
SANDY SHALE	800	1082		
LITTLE LIME	1082	1095		
PENCIL CAVE SHALE	1095	1118		
BIG LIME	1118	1420		
WEIR SANDSTONE	1420	1462		
SHALE	1462	1559		
BEARA	1559	1581		
UPPER GANTZ	1581	1606		
GANTZ	1606	1650		
LOWER GANTZ	1650	1701		
SANDY SHALE	1701	2212		
FIFTH SAND	2212	2375		
SPEECHLEY A	2375	2425		
SPEECHLEY B	2425	2572		
SPEECHLEY C	2572	2611		
SHALE	2611	2873		
BALLTOWN A SANDSTONE	2873	2942		•
SANDY SHALE	2942	3108		
BALLTOWN C SANDSTONE	3108	3137		
SHALE	3137	· 3835		
UPPER RILEY SILTSTONE	3835	. 3949		
SHALE	3949	4343		
SANDY SHALE	4343	4532		
1ST ELK SILTSTONE	4532	4597	•	
SANDY SHALE	4597	4761		
2ND ELK SILTSTONE	4761	4810		
SANDY SHALE	4810	5042		
3RD ELK SILTSTONE	5042	5156		
SANDY SHALE	5156	5835	TD	