WR-35 Rev (9-11)

## State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	9/22/2014				
API#:	47-085-10084				

Farm name: James T. &	Mary Lou A	dkins		Oper	ator Well No.: V	V-1645	
LOCATION: Elevation	n: 1064'			Quad	rangle: Harrisville	9	
District: Unio	on			Coun	ity: Ritchie		
Latitude: 144		Feet South of 39	Deg.		Min. 30	Sec.	
Langituda 48	70	Foot West of 81	Dog	02	Min 30	Coo	

Address: 12864 Staunton Turnpike	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Smithville, WV 26178	13-3/8"	40'	40'	
Agent: Warren R. Haught	9-5/8"	336'	336'	Surface (120 Sks)
Inspector: David Cowan	7"	2154'	2154'	Surface (300 Sks)
Date Permit Issued: December 11, 2013	4-1/2"	6088'	6088'	2000' (136 Sks)
Date Well Work Commenced: 3/24/2014				
Date Well Work Completed: 9/17/2014				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig 🗸				
Total Vertical Depth (ft): 6,115'				
Total Measured Depth (ft): 6,158'				
Fresh Water Depth (ft.): 175'				
Salt Water Depth (ft.): None				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): None				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more Producing formation Bensor	than two producing formations plea	ase include additional da epth (ft) 4400,4950	ta on separate sheet)
	MCF/d Oil: Initial open flow	Bbl/d	
Final open flow 300		Bbl/d	
Time of open flow between	een initial and final tests 12	Hours	
Static rock Pressure 1000	psig (surface pressure) after 24	Hours	
Second producing formation	1 Hamilton Shale Pay zone dept	h (ft) 5600'-5880'	
	MCF/d Oil: Initial open flow	Bbl/d	
Final open flow 300	MCF/d Final open flow	Bbl/d	
	_MCF/d Final open floween initial and final tests 12	Bbl/d Hours	RECEIVED Office of Oil and Gas

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.

WV Department of wiconmental Protection 10/31/2014

Were core samples taken? Yes1	лоX	Were cutti	ngs caught during	drilling? Yes	NoX
Were Electrical, Mechanical or Geophysi	cal logs recorded o	on this well? If yes	s, please list Gamma I	Rey, Neutron, Density, Induc	ation, Temp., Audio
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECOI COAL ENCOUNTERED BY THE WI	PHYSICAL CHARD OF THE TO	ANGE, ETC. 2). T OPS AND BOTT	THE WELL LOC OMS OF ALL	G WHICH IS A SY FORMATIONS, 1	STEMATIC
Perforated Intervals, Fracturing, or Stimu	lating:				
Perforated by Superior Well Servi	ces 4/8/2014				
Perforations at: 4530' - 4550'; 469	0' - 4730'; 569	)' - 5814'; 5860	' - 5962'		
Fractured by Universal Well Servi	ces 04/9/2014		_		<del></del>
3 Stage Nitrogen Frac totaling 2,4	00,000 cubic fe	et			
Plug Back Details Including Plug Type ar	nd Depth(s): NA				
Formations Encountered: Surface:	Top	o Depth	. /	Bottom D	)epth
See attached worksheet					
				Office of (	EIVED Oil and Ga
				CCT	<b>0 1</b> 2014

WV Department of Environmental Protection

## Spruce Grove W-1645 API # 47-085-10084

Formation	Тор	Bottom	Remarks
Red Rock & Shale	0	642	
Sand	642	677	
Red Rock	627	757	
Sand	757	777	
Red Rock	777	842	
Slate	842	957	
Dunkard Sand	957	1077	
Slate & Shells	1077	1302	
Gas Sand	1302	1417	
Slate	1417	1477	
1st Salt Sand	1477	1538	
Shale	1538	1578	
2nd Salt Sand	1578	1596	
Shale	1596	1622	
3rd Salt Sand	1622	1737	
Slate	1737	1822	
Maxon Sand	1822	1857	
Shale	1857	1932	-
Little lime	1932	1954	
Pencil Cave	1954	1966	
Big Lime	1966	2064	
Big Injun Sand	2064	2112	
Slate Break	2112	2117	
Squaw Sand	2117	2125	
Slate & Shells	2125	2850	
Gordon	2878	2896	
Slate & Shells	2896	4530	
Riley	4530	4550	
Slate & Shells	4550	4687	
Benson Sand	4687	4700	
Slate & Shells	4700	5020	
Alexander Sand	5020	5038	
Slate & Shells	5038	5665	
Hamilton Shale	5665	5704	
Slate & Shells	5704	5740	
Elk	5740	5812	
Slate & Shells	5812	6158	
TD	6158		