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:	11/8/2011
API#:	47-085-09917

Farm name: Layfield, Ronald Ray & Sheila		_ Operator Well	l No.:_#1		
LOCATION: Elevation: 1,116 G.L.		_ Quadrangle: _	Harrisville		
District: Grant		_ County: Ritchi	е		
Latitude: 9,075 Feet	South of 39 Deg	. <u>12</u> Min	. <u>30</u> Se		
Longitude 11,575 Feet	West of 81 De	g. 02 Min	Se	ec.	
Company: Viking Internation	al Resources Co., Inc	2.			
Address: P.O. Box 100 Rer	no, Ohio 45773	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
7.1 1.00 1.1					
Agent: Lloyd Todd		13 3/8"	32'	32'	Driven
Inspector: Dave Cowan	····				
Date Permit Issued: 04/25/2	011	9 5/8"	421'	421'	177 cu. ft.
Date Well Work Commenced:	05/06/2011				
Date Well Work Completed:	06/01/2011	7"	2321'	2321'	437 cu. ft.
Verbal Plugging:	N/A				
Date Permission granted on:	N/A	4 1/2"	N/A	6,281'	282 cu. ft.
Rotary / Cable	Rig 🗌				
	325' DTD 6,317' LT	D			CEIVED
Total Measured Depth (ft): N	/A			Office	OI & Gas
Fresh Water Depth (ft.): Sur				NOV	1 4 004
	365'			NUV	1-4-2811
Is coal being mined in area (N/	Y)? No			MALDO	partment of
				Environme	ntal Protectio
Void(s) encountered (N/Y) De	pth(s) No				mai rioteful
Final open flow 175 MC Time of open flow between in	Pay CF/d Oil: Initial open CF/d Final open flo	zone depth (ft) flow trace Bb w trace Bb 36 Hours	ol/d l/d	lata on separate sh	neet)
Second producing formation	Pay z	one depth (ft)			
Gas: Initial open flowMC	-		ol/d		
Final open flow MC	•		1/d		
Time of open flow between ini Static rock Pressure psi			•e		
I certify under penalty of law that I have all the attachments and that, based on my that the information is true, accurate, an	personally examined y inquiry of those ind	l and am familiar			

Were core samples taken? YesNo_	X Were cuttings caught during drilling? Yes X No
Were Electrical, Mechanical or Geophysical I Caliper, Gamma Ray, & Temperature.	ogs recorded on this well? If yes, please list Schlumberger; Density, Comp. Neutron, Induction
FRACTURING OR STIMULATING, PH DETAILED GEOLOGICAL RECORD	THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVAINGS. YSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMAT OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING BORE FROM SURFACE TO TOTAL DEPTH.
Perforated Intervals, Fracturing, or Stimulating	j:
Perforations Marcellus Shale: 7	'3 holes from 6139' to 6207'
Frac Summary: Slick-Water Sand Co	mpletion
Average Treating Pressure = 3,460 p	si Total Fluid = 13,807 BBLS.
Average Treating Rate = 71 BPM	Total Sand = 631,240 LBS.
ISIP = 1353 psi 5 min 5	SIP = 1207 psi 10 min SIP = 1157 psi
Plug Back Details Including Plug Type and D	•
Formations Encountered: Surface:	Top Depth / Bottom Depth
	SEE ATTACHMENT
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Formation Name	Depths	Lithology	Shows/Remarks
	Surface - 1365'	Shale & Sand	Tr. Coal, Tr. Ls.
Second Salt Sand	1365' - 1452'	Sandstone	No Shows
	1452' - 1870'	Shale, Sand, Tr. Coal	
Maxton Stray	1870' - 1910'	Sandstone	No Shows
	1910' - 2014'	Shale & Sand	
Greenbrier	2014' - 2112'	Limestone	
	2112' - 2172'	Sandstone, Tr. Shale	Slight Show Gas
	2172' - 2542'	Shale, Siltstone	
Berea	2542' - 2556'	Siltstone, Shale	Poorly Developed
	2556' - 2930'	Siltstone, Shale	
Gordon	2930' - 2945'	Siltstone, Tr. Ss	No Shows
	2945' - 3596'	Shale, Siltstone	
First Warren	3596' - 3638'	Siltstone, Tr. Ss	No Shows
	3638' - 4562'	Siltstone Shale	
Second Riley	4562' - 4606'	Siltstone, Tr. Ss	Show of Gas
	4606' - 5668'	Shale, Siltstone	Trace Organic Shale
Genesee Fm.	5668' - 5917'	Shale, Org. Shale	Slight Show Gas
Mahantango Fm.	5917' - 6131'	Shale, tr. Org. Shale	
Marcellus Fm.	6131' - 6208'	Organic Shale	Show Gas
Onondaga Fm.	6208' - 6317'	Limestone, Tr. Cht.	No Shows
			Driller's T.D. = 6325'
			Logger's T.D. = 6317'

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