

1C1 22 0

# Department of Environmental Protection

#### Office of Oil and Gas

# Well Operator's Report of Well Work

			perator's Report	of Well W	ork	√ Departn	nent of	
Farm Name: Operator Well No.:		Flinner, David				010/18/2012 Protectio		
		Copenhaver #1			API#:	47-3906338		
LOCATIO								
			Quadrangle:		Big Chimney			
			County:	County: NAD 83		Kanawha		
Latitude:			NAD 83					
Longitude:	81.548680		NAD 83					
	FORMATIO					3-37 12	1000	
Company:			Casing &	Used in	Left in	Cement Fill up		
Address:		929 Charleston Road		Drilling:	Well:	Cu. F		
	Spencer, WV 25276		13 3/8"	21.20	21.20	cts		
Agent:	J. Scott Freshwater		9 5/8"	294.85	294.85	cts		
Inspector: Terry Urba		an	7"	1859.90	1859.90	cts		
Date Permit		4/27/2012	4 1/2"	4630.35	4630.35	175 sl	ks	
Date Work Commenced:		5/20/2012						
Date Work C	Completed:	6/13/2012						
Verbal Plugg	100							
Date Permiss	sion Granted:							
Rotary Rig:		CSi Rig #10						
Cable Rig:								
Total Vertical Depth (FT):		4674		Total Me	easured Depth (FT)	: 4674		
Fresh Water	Depth (FT):	66						
Salt Water D	epth (FT):	1080						
Is coal being	mined in area	(N/Y): No						
Coal Depths	(FT):	N/A	Void(s	) Encountere	d (N/Y) / Depth(s):	N/A		
OPEN FLO	OW DATA				. , 1 . , ,			
Producing Formation:		Devonian Shale	Pay Zone Depth (FT):		3120	to	4604	
Gas		Territoria de la companya della companya de la companya della comp	Oil			· · · · · · · · ·		
Initial Open Flow:		21	Initial Open Flow: N/A					
Final Open Flow:		258	Final Open Flow:		N/A			
Time of open	flow between	initial and final tests:				Hours.		
			face Pressure) after:	ce Pressure) after:		24 Hours.		
2nd Producing Formation:		Pay Zone Depth (FT):			to			
Gas		Oil	Oil		-			
Initial Open Flow:			Initial Open Flo	ow:				
Final Open F	low:		Final Open Flor	w:				
Time of oper	flow between	initial and final tests:				Hours.	$\ddot{\omega}$	
Static Rock Pressure:			ace Pressure) after:		Hours.		6338	
Signed:		Just S. Kalling	the				$\infty$	
By: J. Scott Freshwater						Date:		
and the second second	enalty of law that I	have personally examined and am	familiar with the inform	ation submitted				
		ose individuals immediately respo						

and complete.

#### State of West Virginia

# Department of Environmental Protection

#### Office of Oil and Gas

# Well Operator's Report of Well Work

#### Continued

# **FORMATIONS**

Formation:	From	То		Water:			
Sub	0	7	Depth:	Amount:	Type:		
Rock	7	60	66	damp	fresh water		
Sand/Shale	60	930	180	1/2" stream	fresh water		
Salt Sand	930	1510	1080	soap on hole	salt water		
Maxton	1510	1534					
Little Lime	1534	1585					
Big Lime	1585	1747					
Injun	1747	1776					
Sand/Shale	1776	2050		Gas Checks:			
Shale	2050	2150	Depth:	Depth: Remarks:			
Coffee Shale	2150	2160	2370	2370 smell gas			
Shale	2160	4674					
					·		
				Oil Shows:			
			Depth:		Remarks:		
FRACTURING	•						
Perforations:			Stimulation:				
Stage 1:							
Number of Perforations: 40			Remarks: Totals				
Depth From (FT):		3968	2,002,900 scf N2				
Depth To (FT):	•	4604	1500 gallons 7 1/2% HCL Acid				
			2 Ilono I 7I - Iron contro	Additive			
_			3 gallons I-7L - Iron control Additive 2 gallons Cla Chek LP - Permanent Clay Stabilizer				
Stage 2:							
Number of Perforations: 40			1 1/2 gallons Unihib-G 1 3 3/4" #5 Frac Ball				
Depth From (FT): 3120			102 1.1 S.G. 7/8" RCN Ball Sealers				
Depth To (FT):		3912	102 1.1 S.G. //8" RCIV Bai	Sealers	0550		
Were Core Samples Taken (N	N/Y):	No					
Were Cuttings Caught Durin			No				
were Cuttings Caught During	5 <del></del>	<i>y</i> -					

Yes

Yes

Electrical (N/Y): Mechanical (N/Y):