# Farm Name:

### State of West Virginia

### Department of Environmental Protection

# Office of Oil and Gas

# Well Operator's Report of Well Work

Farm Name:		Smith, Mitchell			Date:	11/1//201	l .	
Operator Well No.:		Broome #1			API #:		47-3906310	
LOCATIO	V de							
Elevation:	614		Quadrangle:		Big Chimney			
District:	Elk		County:		Kanawha			
Latitude:	38.445634	6	NAD 83					
Longitude:	81.525354	5	NAD 83					
WELL INF	ORMATIO	N						
Company:	Reserve Oi	I and Gas, Inc.	Casing &	Used in	Left in	Ceme	nt Fill up	
Address:	929 Charle	ston Road	Tubing:	Drilling:	Well:	Cı	ı. Ft.	
	Spencer, W	VV 25276	13 3/8"	28.00	28.00		cts	
Agent:	J. Scott Fre	eshwater	9 5/8"	209.65	209.65		cts	
Inspector:	Terry Urba	<b>n</b>	7"	1603.15	1603.15		cts	
Date Permit Is	ssued:	8/18/2011	4 1/2"	4306.85	4306.85	11	5 sks	
Date Work Co	ommenced:	8/30/2011						
Date Work Co	ompleted:	10/6/2011						
Verbal Pluggi	ing:							
Date Permissi								
Rotary Rig:		CSi Rig #10						
Cable Rig:								
Total Vertical Depth (FT):		4365	·	Total Me	easured Depth (FT):	4365		
Fresh Water I		154	•					
Salt Water De		305	•		•			
	mined in area (	(N/Y): No	-					
Coal Depths (		300-303	· Void(:	s) Encountere	ed (N/Y) / Depth(s):	N/A		
OPEN FLO				,		1.0		
Producing Formation:		Devonian Shale	Pay Zone Depth (FT):		2835	to	4286	
Gas			Oil			•		
Initial Open Flow:		21	Initial Open Flow:		N/A			
Final Open Flow:		404	Final Open Flow:		N/A		<del>-</del>	
Time of open	flow between	initial and final tests:	Historia e Hijipa de		720	Hours.	· <b>-</b>	
Static Rock Pressure:		495 PSIG (Surface	ace Pressure) after:		24	Hours.		
2nd Producing Formation:			Pay Zone Depth (FT):			to		
Gas			Oil			•		
Initial Open Flow:			Initial Open Flow:					
Final Open Flow:			Final Open Flow:				-	
•		initial and final tests:	•			Hours.	6310	
Static Rock Pressure:		and the second s	e Pressure) after:		Hours.		<del>-</del>	
		1 11	,				0	
Signed:	\W/ <i> </i> €	X. XX			11/17/11			
By:	<del>- \\/</del>	J. Scott Freshwater	· · · · · · · · · · · · · · · · · · ·		Date	<b>:</b>	-	

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.

# State of West Virginia

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# Well Operator's Report of Well Work

Continued

Formation:	From	То	Water:				
Sub	0	7	Depth:	Amount:	Type:		
Blue Clay	7	15	154	3-4" stream	freshwater		
Rock	15	28	305	soap on hole	saltwater		
Sand & Shale	28	300					
Coal	300	303					
Sand & Shale	303	750					
Salt Sand	750	1250					
Maxton	1250	1280					
Little Lime	1280	1315		Gas Checks:			
Big Lime	1315	1490	Depth:		Remarks:		
lnjun -	1490	1522					
Sand & Shale	1522	1875					
Coffee Shale	1875	1905					
Shale	1905	4365					
		vár sa a a s					
			Oil Shows:				
			Depth:		Remarks:		
FRACTURING				W. L.	Section 22 April 12 A		
Perforations:			Stimulation:				
Stage 1:			Stage 1:				
Number of Perforation	s:	40	Remarks:		e e energia		
Depth From (FT):		3790	Total $N2 = 1,004,663$ SCF, to				
Depth To (FT):		4286		gallons, total Ferrotrol 300L = 3 gallons, total NE-900 = allon, total GasFlo G 330 = 1 gallon, total CI-14 = 1.5			
			gallons, total 7/8 in 1.3 sp gr				
Store 2				ic ball scalors o	i ii io siagos		
Stage 2:	ie.	40	Stage 2: Remarks:				
			Total N2 = $1,003,553$ SCF, to	ntal 15% HCL tres	atment fluid =		
1				08 gallons, total Ferrotrol 300L = 3 gallons, total NE-900			
Depth To (FT):		3/1/		= 1 gallon, total GasFlo G 330 = 1 gallon, total CI-14 = 1.5			
			gallons, total 7/8 in 1.3 sp gr	R ball sealers = 7	4 in 9 stages		
		<b>\T</b>					
Were Core Samples Taken	, ,	No	- No				
Were Cuttings Caught Dur.							

Yes

Mechanical (N/Y):