### State of West Virginia

#### Department of Environmental Protection

#### Office of Oil and Gas

## Well Operator's Report of Well Work

Farm Name:		Reed, Andrew			Date:		11/17/201	
Operator Well No.:		Reed #1			API #:		47-3906312	
LOCATION	i de							ion diaze de la Mi
Elevation: 950			Quadrangle:		Big Chimney			
District:	Elk		County:		Kanaw	vha .		
Latitude:	38,402378	5	NAD 83					
Longitude:	81.599024	6	NAD 83					
WELL INFO	ORMATIO	N		47	4.1	100		
Company:	ry: Reserve Oil and Gas, Inc.		Casing &	Used in	Used in Le		Ceme	ent Fill up
Address: 929 Charl		ston Road	Tubing:	Drilling:	W	ell:	Cu. Ft.	
	Spencer, W	VV 25276	13 3/8"	21.00	2	1.00		cts
Agent:	J. Scott Freshwater		9 5/8"	336.40	33	6.40	cts	
Inspector:	Terry Urba	in	7"	2023.65	202	23.65		cts
Date Permit Is	sued:	9/14/2011	4 1/2"	4649.95	464	19.95	13	25 sks
Date Work Co	mmenced:	10/10/2011		VIII (120,000)				
Date Work Co	mpleted:	11/16/2011						
Verbal Plugging:								
Date Permission Granted:				- k		•		
Rotary Rig:		CSi Rig #10						
Cable Rig:								
Total Vertical Depth (FT):		4677		Total Me	easured De	pth (FT):	4677	
Fresh Water D	epth (FT):	50	<del>-</del>			• ` ' .		
Salt Water Dep	oth (FT):	1375	_					
Is coal being n	nined in area (	(N/Y): No	<del>-</del>					
Coal Depths (I	FT):	N/A	- Void(s	s) Encountere	ed (N/Y) / 1	Depth(s):	N/A	age to a con-
OPEN FLO	W DATA			7		6 2 4	7	
Producing Formation:		Devonian Shale	Pay Zone Depth (FT):			2880	to	4602
Gas			Oil					
Initial Open Flow:		25.8	Initial Open Flow:		N/A			
Final Open Flow:		343	Final Open Flow:		N/A	· · · · · · · · · · · · · · · · · · ·		<del>-</del> v
Time of open i	low between	initial and final tests:			· Francisco	672	Hours.	-
Static Rock Pressure:		530 PSIG (Surface	G (Surface Pressure) after:		- 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900 - 1900		Hours.	
2nd Producing Formation:			Pay Zone Depth (FT):		1		to	
Gas			Oil	• /				
Initial Open Flow:		Initial Open Flow:						
Final Open Flow:			Final Open Flor				-	
Time of open f	low between	initial and final tests:					Hours.	- 53
Static Rock Pr	essure:	PSIG (Surface	Pressure) after:				Hours.	6312
Signed:	N-1	TIM				:1. 1		2
	\ <b> </b> _	\$ H/#>				/17/11		
By:	Jv.	J. Scott Freshwater				Date	;	
I certify under nen	alty of lawthat I	have personally examined and am fam	ilian with the informa-	otion submitted	an thia daa		1	

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.

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FORMATIONS 1									
Formation:	From	То		Water:					
Sub	0	7	Depth:	Amount:	Type:				
Rock / Shale	7	35	50	Damp	fresh water				
Sand	35	90	788	Damp	fresh water - start soapin				
Sand / Shale	90	940	1375		salt water - switch to				
Salt Sand	940	1660			fluid at 1571				
Maxton	1660	1700							
Little Lime	1700	1735							
Big Lime	1735	1930	<u> </u>						
Injun	1930	1960		Gas Checks:					
Shale	1960	2210	Depth:	Remarks:					
Coffee Shale	2210	2230		smell gas					
Shale	2230	4677		3540 smell gas					
				2					
			<u> </u>						
			<u> </u>						
	Oil Shows:								
			Depth:		Remarks:				
					TCOTTOTTO TO				
FRACTURING				1					
Perforations:	S ZAMA DIMININA		ulation:	MINISTERNATION OF THE STREET	SARA SARAHAN PERMANAN SARAHAN				
Stage 1:			e 1:						
Number of Perforation	· •	40	arks:						
Depth From (FT):		3944	N2 = 1,002,024 SCF, to	otal-15% HCL tre	atment fluid =				
Depth To (FT):		4602	allons, total Ferrotrol 30						
Depth 10 (F1):	•	4002	1 gallon, total Gas Flo G = 1 gallon, total CI-14 = 1.5 gallons,						
			7/8 in. 1.3 sp gr. R ball s	sealers = 49 in 8 s	tages.				
Stage 2:			e 2:		•				
Number of Perforations: 39			arks:						
Depth From (FT): 2880			Total N2 = 1,001,506 SCF, total 15% HCL treatment fluid =						
Depth To (FT): 3855			1,000 Barrons, total 1 orron of 5002 Barrons, total 112 500						
	•		= 1 gallon, total Gas Flo G = 1 gallon, total CI-14 = 1.5						
			ns, total 7/8 in. 1.3 sp gr	. R ball sealers =	64 in 9 stages.				
Wara Cora Samples Taken	(N/V)•	No							
* ′ ′									
Were Cuttings Caught During Drilling (N/Y):									
		I-11 (NI/N)							
Were Geophysical Logs Re Electrical (N/Y):	ecorded on This W Yes	/ell (N/Y):	:						