State of West Virginia Department of Environmental Protection

Office of Oil and Gas

WV GEOLOGICAL SURVEY MORGANTOWN, WV

Well Operator's Report of Well Work

Farm Name: Operator Well No.:		Gunnoe, Earl R.			Date:	2/17/2012 47-3906323	
		Gunnoe #1			API #:		
LOCATIO		andro Persentano alkaperia in Study especiala a 1911 y 1912 west					
Elevation:	954		Quadrangle:		Big Chimney		Salatari i
District:	Elk		County:		Kanawha		
Latitude:	38.408654	98	NAD 83				
Longitude:	81.580560	004	NAD 83				
	FORMATIO	N					
Company: Reserve Oil		il and Gas, Inc.	Casing &	Used in	Left in	Cement	Fill up
Address:	929 Charleston Road		Tubing:	Drilling:	Well:	Cu. I	rt.
•	Spencer, V	VV 25276	13 3/8"	21.00	21.00	cts	3
Agent:	J. Scott Fre	eshwater	9 5/8"	335.75	335.75	cts	S
Inspector:	Terry Urba	an	7"	1971.60	1971.60	cts	3
Date Permit	Issued:	10/24/2011	4 1/2"	4636.55	4636.55	150 :	sks
Date Work	Commenced:	11/4/2011					
Date Work Completed:		11/30/2011					
Verbal Plug	ging:						
_	sion Granted:		<u> </u>				
Rotary Rig:		CSi Rig #10					
Cable Rig:							
Total Vertical Depth (FT):		4677		Total M	easured Depth (FT)	: 4677	
	Depth (FT):	46	**********				
Salt Water I	Depth (FT):	1280					
Is coal being	g mined in area	(N/Y): No					
Coal Depths	s (FT):	N/A	Void	(s) Encounter	ed (N/Y) / Depth(s)): N/A	
OPEN FL	OW DATA						
Producing F	Formation:	Devonian Shale	Pay Zone Depth (FT):		2898	8 to	4632
Gas			Oil				
Initial Open	Flow:	23.5	Initial Open F	low:	N/A		
Final Open Flow:		382	Final Open Flow:		N/A		
Time of ope	n flow between	initial and final tests:			480	0 Hours.	
Static Rock Pressure: 521 PSIG (Surface			ace Pressure) after	*:	24	4 Hours.	
2nd Produci	ing Formation:		Pay Zone Depth (FT):			to	
Gas			Oil				
Initial Open Flow:			Initial Open F	low:			
Final Open	Flow:	agree steller graft, many all	Final Open Fl	ow:	The second secon		
Time of open flow between i		initial and final tests:	e este a ser esta a ser el mar		Hours.		\mathcal{C}_{i}
Static Rock	Pressure:	PSIG (Surfa	ice Pressure) after	T:		Hours.	2
Signed:	04	4 Fales			17 Fd 18	<u> </u>	33
By:		J. Scott Freshwater	-	•	Da	te:	
•	penalty of law that	I have personally examined and am f	amiliar with the infor	mation submitted	d on this document and a	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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Well Operator's Report of Well Work

Continued

Formation:	From	To		Water:			
Sub	0	7	Depth:	Amount:	Type:		
Rock / Shale	7	852	46	damp	fresh water		
Salt Sand	852	1620	1280	switch to fluid	salt water		
Maxton	1620	1650					
Little Lime	1650	1690					
Big Lime	1690	1865		.,			
Injun	1865	1900					
Shale	1900	2210	<u> </u>				
Coffee Shale	2210	2235		Gas Checks:			
Shale	2235	4677	Depth:	Depth: Remarks:			
			<u></u>	2280 smell gas			
							
		······································					
			<u> </u>				
			L	1			
				Oil Shows:			
			Depth:		Remarks:		
FRACTURING							
Perforations:			ılation:				
Stage 1:			: 1:				
Number of Perforation	ns:	3837	arks:				
Depth From (FT): 4632			N2 = 1,002,106 SCF,	Total 15% HCL Tro	eatment Fluid		
Depth To (FT):		40	gallons, Total Ferrotro				
1			llon, Total GasFlo G =				
٠			s, Total 7/8 in. 1.3 sp	gr. R ball sealers =	46 in 1 stage		
Stage 2:			2:				
Number of Perforations: 2898			ırks:		_		
Depth From (FT): 3722			N2 = 997,981 SCF, To		tment Fluid =		
Depth To (FT): 40			allons, Total Ferrotrol		Total NE-900 =		
			Total N2 = 997,981 SCF, Total 15% HCL Treatment Fluid = 998 gallons, Total Ferrotrol 300L = 3 gallons, Total NE-900 = 1 gallon, Total GasFlo G = 1 gallon, Total CI-14 = 1 1/2 gallons, Total 7/8 in. 1.3 sp gr. R ball sealers = 47 in 1 stage				
			s, 10tai 7/6 iii. 1.5 sp į	gr. it our scarcis	47 III I stage		
W Cara Carantas Talsan	01/01	No					
Were Core Samples Taken	` ′ —						
Were Cuttings Caught Dur							
Were Geophysical Logs Re		en (N/Y):					
Electrical (N/Y):	Yes						
Mechanical (N/Y):	Yes						