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:	10/16/2012
API #:	47-017-04035 - R

Farm name: Shatley, Fletcher G.	_ Operator Well	No.: Bates 2		
LOCATION: Elevation: 1245'GL	Quadrangle: _	Smithburg 7.5		
District: Mcclellan	County:Doc	idridge		
Latitude: 2,240 Feet South of 39 Deg	g. 22 Min	. 30 Se		<del>- :</del>
Longitude 11.150 Feet West of 80 De	g. <u>37</u> Min	Se	c.	
Company: Petroleum Development Corporation				
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	11 3/4"	174'	174'	230
Agent: Bob Williamson	8 5/8°	1869'	1869'	618
Inspector: David Scranage	4 1/2"	5481'	5481'	921
Date Permit Issued: 02/10/2010				
Date Well Work Commenced: 03/25/2010				
Date Well Work Completed: 03/30/2010				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig 🗸				
Total Vertical Depth (ft): 5516'				
Total Measured Depth (ft): 5516'				
Fresh Water Depth (ft.): 140'				
Salt Water Depth (ft.): None Reported				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 136'-39', 445'-448'				
Void(s) encountered (N/Y) Depth(s) N				
Gas: Initial open flow NT MCF/d Oil: Initial open	y zone depth (ft)_	2988'	•	
Final open flow 60 MCF/d Final open flo		1/d -	n Din Sakas insk S	y to some which is a first
Time of open flow between initial and final tests  Static rock Pressure NT psig (surface pressure)				
State tock ressurepsig (surface pressure)	after Hou	rs	,-1.45  -1.45	117 (1.1
·	zone depth (ft)	<del></del>	Úl.	1 Administration
Gas: Initial open flow MCF/d Oil: Initial open		Ы∕d		•
Final open flowMCF/d Final open flowMcF/d Final open flow between initial and final tests		ol/d		
Static rock Pressurepsig (surface pressure)				
I certify under penalty of law that I have personally examine all the attachments and that, based on my inquiry of those in that the information is true, accurate, and complete.	d and am familiar dividuals immedia	with the infor ately responsib	mation submitted	l on this document and he information 1 believ
The state of the s		40	16/2012	
Signature			Date	

Were core samples taken? Yes No	<u> </u>	Were cuttings ca	ught during drillín	g? YesNo_X	<u>X</u>
Were Electrical, Mechanical or Geophysica 2500.	l logs recorded on this	well? If yes, pleas	se list Ploneer Wireli	ne GR/CCL log from 3100	' to
NOTE: IN THE AREA BELOW P FRACTURING OR STIMULATING, P DETAILED GEOLOGICAL RECORI COAL ENCOUNTERED BY THE WEI	HYSICAL CHANGI O OF THE TOPS A	E, ETC. 2). THE VAND BOTTOMS	WELL LOG WHI OF ALL FORM	ICH IS A SYSTEMA	TIC
Perforated Intervals, Fracturing, or Stimula	ting:				
2010/03/26: JW ran a gamma/ccl log to correlate. Ra	in in hole with 4-1/2" comp	osite bridge plug. Set p	olug @ 3030°. JW shot	the GORDON formation will	th the
following shots(HSC): 12 (2988-94'). RDMOL. 2010/03/	29: MIRU Service rig. Run is	hole with 2-3/8" Blue D	ot packer on 2-7/8" tubi	ng. Set packer depth at botto	m of
tubing run @ 2445'. RDFN. 2010/03/30: Hailiburton	completed the GORDON for	rmation. The formation	n was pumped without	incident according to sched	ule.
The job was a N2 ASSIST, X-LINK with 250 sks of 20/	40 mesh white sands. The t	reakdown pressure wa	s 2466 psi. The well to	eated at an average foam ra	te of
12.8 bpm with an average treating pressure of 3,492 p	osi. The final pressures we	e as follows: ISIP: 252	29 psi, 2 min shut-in: 20	087 psi, 5 min shut-in: 1933	psi,
10 min shut-in: 1833 psi, 15 min shut-in: 1768 psi.					
Plug Back Details Including Plug Type and	Depth(s):				
2 7/8" packer was retrieved & b	ridge plug drille	d out & cleane	ed to 5380'.		
Formations Encountered: Surface:	Тор Дер	h /		Bottom Depth	
See Attached WR-35 & "Well Log" 1	from original comp	letion of this w	eii (47-017-040	35).	
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## BATES #2

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1ST	Benson	13(5332'-5335')	50	400	500	60
2nd	Big Injun	18(2355'-2361')	50	400	500	60

## WELL LOG

FORMATION	TOP FEET	BOTTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	1/2" water @ 140'
sand, shale, RR	10	2004	
Maxton	2004	2095	Coal @136'-139',445'-448'
sand, shale	2095	2178	
Big Lime	2178	2315	gas chk @ 2347' No Show
sand, shale	2315	2334	
Big Injun	2334	2408	gas chk @2378' 6/10 thru 2"/water
sand, shale	2408	2556	
Weir	2556	2641	•
sand, shale	2641	2764	
Berea	2764	2800	gas chk @2502' 6/10 thru 2"/water
sand, shale	2800	2959	
Gordon	2959	3004	
sand, shale	3004	3282	gas chk @2660' 4/10 thru 2"/water
5th	3282	3332	gas chk @2861' 6/10 thru 2"/water
sand, shale	3332	3633	gas chk @4029' 4/10 thru 2"/water
Warren	3633	3718	gas chk @5205' 4/10 thru 2"/water
sand, shale	3718	3740	
Speechley	3740	3982	gas chk @5297' 4/10 thru 2"/water
sand, shale	3982	4030	gas chk @5590' 4/10 thru 2"/water
Balltown	4030	4419	<b>3</b>
sand, shale	4419	4492	gas chk @5516' 6/10 thru 2"/water
Bradford	4492	4609	g,,
sand, shale	4609	4830	
Riley	4830	5263	
sand, shale	5263		
Benson	5329	5390	
sand, shale		5516	Drillers TD
		5517	Logger TD
		3311	TAPPAT 17