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:	02/05/2013	
API #:	47-033-05140	

ATION: Elevation: 1402 GL	_ Quadrangle: _	Wolf Summit 7.5	5	
District: Tenmile Latitude: 12,010 Feet South of 39 Dcg Longitude 8,490 Feet West of 80 Deg		rrison 1. 30 Sec 30 Sec		
Company: Petroleum Development Corporation				
Address: 120 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	13 3/8"	19'	19'	Sanded In
Agent: Bob Williamson	9 5/8"	253'	253'	100
Inspector: Tristan Jenkins	7"	1822'	1822'	375
Date Permit Issued: 08/27/2008	4 1/2"	5354'	5354'	460
Date Well Work Commenced: 11/05/2008				
Date Well Work Completed: 11/20/2008				
Verbal Plugging:				
Date Permission granted on:				
Rotary Z Cable Rig			ECEIVED	700
Total Vertical Depth (ft): 5610'		Onic	e of Oil &	365
Total Measured Depth (ft): 5610'			EB 28 2013	
Fresh Water Depth (ft.): 45', 115'			•	
Salt Water Depth (ft.): 1883'		WV	Departmer	nt of
Is coal being mined in area (N/Y)? N		Environ	mental pro	rection
Coal Depths (ft.): 575'				
Void(s) encountered (N/Y) Depth(s) N				
PEN FLOW DATA (If more than two producing format Producing formation Benson, 5th & 4th Sands Pay Gas: Initial open flow 147 MCF/d Oil: Initial open Final open flow 291 MCF/d Final open flo Time of open flow between initial and final tests Static rock Pressure 560 psig (surface pressure) a Second producing formation Gordon (commingled) Pay z Gas: Initial open flow MCF/d Oil: Initial open Final open flow MCF/d Final open flow Time of open flow between initial and final tests	zone depth (ft) flow Show B w Show B for Hours fitter 744 Hours flow B flow Show B flow Show B flow Show Show B flow Show Show Show Show Show Show Show Sh	5254,3009 bl/d bl/d s s s s s s bl/d bl/d	ıta on separate sh	eet)

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.

> 02/07/2013 Date

Were core samples taken? YesN	lo_XXw	ere cuttings caught during dril	ling? Yes	No_XX
Were Electrical, Mechanical or Geophysic	cal logs recorded on this wel	? If yes, please list Weatherfor	d Photo Density	//Comp Neutron/
Array modelion from 30 to 1700. Superior Groce Beller	VDE HOIN 3300 - 1000.			
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECORCOAL ENCOUNTERED BY THE WE	PHYSICAL CHANGE, E TO OF THE TOPS AND	rc. 2). The well log w bottoms of all fol	HICH IS A	SYSTEMATIC
Perforated Intervals, Fracturing, or Stimul	ating:			
1/20/2008:MIRU BJ Serv. & Superior Wireline, ran GR	R/CCL/CBL from 5306'. Perf Benson	w/4 holes from 5254'-56' & 9 holes from	n 5259-62' RU B	J, test lines, & pump
an N2 assist Lightning gel system. Formation b	roke at 3086#. Start 80 bbl pad	, 473 bbls treating fluid, 35,000 lb	s of 30/50 Sand	l, 42 bbl of flush.
Stage sand at 1# ppg increments from 1#	# - 4# ppg. MTP - 3086 psi	ATP - 2605 psi. Shut down	, ISIP – 2033	psi. 2nd stage:
Perforated the 5th/4th Sand formation: 5 holes from 3009-	12, 5 holes from 3015-18, 10 holes from	n 3065-70, Pumped an N2 assist Lightning	g gel system. Form	ation broke at 3061#.
Start 74 bbl pad, 407 bbls treating fluid, 50,	100 lbs of 30/50 Sand, 49 bb	of flush. Stage sand at 1# ppg	increments fr	om 1# - 4# ppg.
MTP - 3061 psi, ATP - 2777 psi. Shut dow	n, ISIP - 2142 psi. Perf Gord	lon w/8 holes from 2935'-39'. P	umped an N2	assist Lightning
Plug Back Details Including Plug Type an	nd Dcpth(s): gel system. For	mation broke at 3063#. Start 55	bbl pad, 279 b	bls treating fluid,
25,0000 lbs of 30/50 Sand, 47 bbl of flush. Stage sa	and at 1# ppg increments from 1#	- 4# ppg. MTP – 3287psi, ATP – 306	3 psi. Shul dow	n, ISIP – 2609 psi.
Formations Encountered: Surface:	Top Depth		Bottom	ı <u>Depth</u>
Maxton	2162	2193		
Big Lime	2222	2264		
Keener	2268	2313		
Big Injun	2316	2360		
Gantz	2694	2739		
Fifty Foot	2810	2846		
Gordon Stray	2922	2943		
4th SS	2985	3021	Shov	v Gas
5th SS	3036	3077	Shov	v Gas
Speechley	3510	3940		
Balltown	4044	4248		
Bradford	4320	4478		
Riley	4779	5145		
Benson	5251	5294	Show	Gas
TD	5610			