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#:	47-033-03159	T

Farm name: Harron, Ray A.	Operator Well	No.: Harron 1		
LOCATION: Elevation: 1322 GL	Quadrangle: _	Clarksburg		non manaconneption
District: Simpson	Carratura Ham	rison		
Latitude: 7,580 Feet South of 38 Deg.	County			
Longitude 3.420 Feet West of 80 Deg.			•	
Company: Petrolcum Development Corporation				
Address: I20 Genesis Boulevard	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Bridgeport, WV 26330	11 3/4"	17'	Pulled	Tup Cu. 1 c.
Agent: Bob Williamson	8 5/8"	1179	1179	354
Inspector: Tim Bennett	4 1/2"	4684	4684'	820
	4 1/2	4004	4004	820
Date Permit Issued: 04/30/2009	<u> </u>	<u> </u>		
Date Well Work Commenced: 06/18/2009		ļ	 	
Date Well Work Completed: 06/18/2009		ļ <u></u>		
Verbal Plugging:			<u> </u>	<u> </u>
Date Permission granted on:			<u> </u>	
Rotary Cable Rig ✓				
Total Vertical Depth (ft): 4718			1	
Total Measured Depth (ft): 4718'				
Fresh Water Depth (ft.): 86', 361'				
Salt Water Depth (ft.): 920', 950'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 290', 697', 770'				
Void(s) encountered (N/Y) Depth(s) N				
OPEN FLOW DATA (If more than two producing formation Producing formation 5th Sand Pay z			ita on separate si	ncet)
Gas: Initial open flow 188 MCF/d Oil: Initial open fl	one depth (ft)_2			
Final open flow 442 MCF/d Final open flow				
Time of open flow between initial and final tests 4	B Hours			
Static rock Pressure 330 psig (surface pressure) after 24 Hours				
Second producing formation 4th Send (commingled) Pay zon	se denth (A) 230)2		
Gas: Initial open flowMCF/d Oil: Initial open flow Bbl/d				
Final open flow MCF/d Final open flow Bbl/d				
Time of open flow between initial and final tests Hours				
Static rock Pressure psig (surface pressure) after Hours				
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.				
Afolois		4014	6/0212	
Signature			Date	

Were core samples taken? Yes	No_XX	Were cu	ttings caught dur	ing drilling? Yes	No_XX
Were Electrical, Mechanical or C	icophysical logs recorded	on this well? If y	es, please list Hot	well Wireline GR/CCL fr	om 2710-1600.
NOTE: IN THE AREA BI FRACTURING OR STIMUL, DETAILED GEOLOGICAL COAL ENCOUNTERED BY Perforated Intervals, Fracturing,	ATING, PHYSICAL CH RECORD OF THE TO THE WELLBORE FRO	IANGE, ETC. 2). OPS AND BOT	THE WELL L TOMS OF AL	OG WHICH IS A S' L FORMATIONS.	VSTEMATIC
	U				
6/18/2009: MIRU Weatherford & Hotwell V					
pumped an N2 (35Q) assist Aquav					
& avg treating foam rate was 17.6					
RU Hotwell & set frac plug @ 2320'					
Aquavis 15# gel w/ 28,452 lbs of 20/40					
ATP was 2876 psi. ISIP = 16	363 psi, 5min = 1422 p	si,10 min = 141	9 psi,15 min =	1404 psi. RDMO V	Veatherford.
Plug Back Details Including Plug					
Drillable bridge & frac pl	ugs at 2550 & 233	0. Drilled & c	leaned out t	o original TD.	
Formations Encountered: Surface:		p Depth		-	<u>Depth</u>
See Attached WR-35 & "We	ell Log" from original	completion of	this well (47-0	33-3159).	
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DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. Perforated the Benson with 13 shots (4611'-15'). Performed gelled H2O frac w/N2 assist using 608 bbl of sand laden fluid (15,000# of 80/100 sand and 50,000# of 20/40 sand). Also used 71,000 scf of N2.

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fres and salt water, coal, oil and ga
KB - GL	0	10	
sand, shale	10	1406	%" stream H2O @ 86'; 3/4" stream
little lime	1406	1422	E20 @ 361'; 1 3/4" stream H20 @
sand, shale, redrock	1422		920'; 2 3/4" stream H20 @ 950'
big lime	1467	1524	coal @ 190!; 697'; 770'
big injun	1524	1630	Coar e 190., 697; 770
sand, shale	1630	1966	gas @ 1675'; 4/10 = 1"w/H20
50 foot	1966	2014	gas 6 10/3 ; 4/10 = 1 W/H20
sand, shale	2014	2017	
30 foot	2017	2034	
sand, shale	2034	2130	A 20001- //10 - 17 /700
gordon stray	2130	2136	gas $@ 2080^{\circ}; 4/10 = 1^{\circ}w/H20$
sand, shale	2136	2136	
gordon	2146	2140	
sand, shale	2160	2302	6 00(71 / /70 42 /
4th sand	2302	2302	gas @ 2267'; 4/10 = 1"\/H20
sand, shale	2302		
th 'A'		2353	
sand, shale	2353	2389	
oth sand	2389	2501	gas @ 2424'; 2/10 = 7"w/H20
sand, shale	2501	2526	
sand, share speechley	2526		gas @ 2612'; 2/10 = 7"w/H20
speeciney sand, shale	3090	3206	
palltown	3206	3293	
sand, shale	3293	3403	gas @ 3304'; 40/10 = 2"w/H20
iley	3403		gas @ 3584'; 42/10 = 2"w/H20
sand, shale	4374		gas @ 4054'; 36/10 = 2"w/H20
oenson	4440		gas @ 4364'; 40/10 = 2"w/H20
	4592		gas @ 4582'; 30/10 = 2"w/H20
sand, shale	4616		logger
9			driller
			gas @ 4643'; 40/10 = 2"w/H2O
			gas @ TD; 62/10 = 2" w/H20 1
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(Attach separate sheets as necessary)

PETROLEUM DEVELOPMENT CORPOR	RATION
Well Operator	
By: In Plus	
Date: 1/2-2/45	
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Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including con!, encountered in the drilling of a well."