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#:	47-017-04108	F	

Farm name: Underwood, Richard A.	Operator Well No.: G Rogers 1			
LOCATION: Elevation: 956' GL	Quadrangle: _	Salem 7.5		·
District:	County:			
Latitude: 13,795 Feet South of 39 Deg.				
Longitude 8,584 Feet West of 80 Deg.	35Min.	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	16"	30'	30'	Sanded In
Agent: Bob Williamson	11 3/4***	177'	177'	130
Inspector: David Scranage	8 5/8"	1609'	1609'	511
Date Permit Issued: 03/22/2010	4 1/2"	5045'	5045'	929
Date Well Work Commenced: 04/05/2010				
Date Well Work Completed: 04/06/2010				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig 🗸			HEC	EIVED
Total Vertical Depth (ft): 5087'			Onice Of	Oil & Gas
Total Measured Depth (ft): 5087'			ncī 1	7 2012
Fresh Water Depth (ft.): 50', 270'				4 7015
Salt Water Depth (ft.): None Reported			WV Dena	artment of
Is coal being mined in area (N/Y)? N		En	vironmen	al Protection
Coal Depths (ft.): 200'				-0.001011
Void(s) encountered (N/Y) Depth(s) N				
OPEN FLOW DATA (If more than two producing formatic Producing formation Gordon Pay Gas: Initial open flow 84 MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests Static rock Pressure NT psig (surface pressure) a	zone depth (ft)_ llow Bi w Bb 24 Hours	2578, 2654 bl/d bl/d	ta on separate sh	eet)
Second producing formation Keener (commingled)  Gas: Initial open flow MCF/d Oil: Initial open flow  Final open flow MCF/d Final open flow  Time of open flow between initial and final tests	lowBl	bl/d bl/d		
Static rock Pressure psig (surface pressure) a				
I certify under penalty of law that I have personally examined all the attachments and that, based on my inquiry of those indithat the information is true, accurate, and complete.		ately responsible	e for obtaining th	
Signature		<del></del>	6/2012 Date	
oikustnie			DOTE.	

Were core samples taken? Yes	√o_XX	Were cuttings caught d	luring drilling? Yes	No XX
Were Electrical, Mechanical or Geophysi	cal logs recorded on this v	well? If yes, please list_	Plonser Wiretine GR/CCL	log from 2800' to
NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECOI COAL ENCOUNTERED BY THE WI	PHYSICAL CHANGE, RD OF THE TOPS A	, ETC. 2). THE WELL ND BOTTOMS OF A	LOG WHICH IS A SALL FORMATIONS.	SYSTEMATIC
Perforated Intervals, Fracturing, or Stimu	lating:			
MIRU Pioneer Wireline & Halliburton:	Pioneer ran a GR/CCL	to correlate. Set 4 1/	2" composite bridge	pìug @ 2730'.
Halliburton bullheaded 20% HCl sold into well and filled hole with w	rater to pressure test. Pressure tested ca	sing to 3500 psi. Well held pressure.	Bled off pressure and turned well be	uck over to perforators.
Proneer shal the GORDON formation with the following shots(HE	IC) 9 (2657-61") & 9 (2577-81").Hallibu	rton completed the GORDON format	ion. The formation was pumped wit	thout incident according
to schedule. The job was a N2 ASSIST, X-LINK ( 300 foam) with	300 sks of 20/40 mosh brown sand. The	breakdown pressure was 2484 psl. T	The well treated at an average foam (	ale of 21.9 bpm with an
overage treating pressure of 2700 psl. The final pressures were as follows:	18IP: 2179 psi. 2 min shut-in: 1886 psi. 5 mb	ı shut-in. 1736 psi, 10 min shut-in. 1639 psi.	15 min shall-in: 1570 psi. Spotted sold a	nd flushed for second stage
Pioneer set a 4-1/2** composite flow-through fracp	tug. Set plug @ 1940'. Chased	I the frac ball to plug and sho	ot The KEENER formation w	ith the following ***
Plug Back Details Including Plug Type at	nd Depth(s):			
Bridge plug set @ 2730', frac plu	g set @ 1940', both	drilled out & hole o	leaned to original	TD of 5089'.
Formations Encountered: Surface:	Top Depth	/	Bottom	Depth
See Attached WR-35 & "Well Log	" from original compl	etion of this well (/):	7.017.04109)	
	nom ongmar compr	Out of this well (4)	1-017-04 100).	
			——RECE —Office of (	IVED III & Gas
			OCT 1'	7 2012
			WV Depa	<del>rtment of</del> at <del>Protecti</del> or
*** shots(HSC): 12 (1906-12') & 4(1893-95').Hallibu	rton completed the KEENER fo	mation. The formation was r		
The job was a N2 ASSIST, X-LINK (30Q foam) w	<del></del>	<del></del>		
average foam rate of 14.8 bpm with an ave				
2 min shut-in:2069 psi, 5 min shut-				

## Glenn Rogers #1

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS		N2 (MCF)
lst	Benson	14 (4924'- 4978')	. 50	550	500	58

## WELL LOG

FORMATION	TOP FEET BO	TTOM FEET	REMARKS: FRESH & SALT WATER, COAL, OIL & GAS
KB - GL	0	10	Hole damp @ 50'
sand, shale, RR	10	1634	1/2 stream water @270'
Maxton	1634	1722	1/2 2220211 11202 (22/0
sand, shale	1722	1832	gas chk @ 1763' No Show
Big Lime	1832	1922	
sand, shale	1922	1925	gas chk @ 1919' No Show
Big Injun	1925	1974	
sand, shale	1974	2158	gas chk @2103' 10/10 thru 1"/water
Weir	2158	2262	gas chk @2259' 50/10 thru 1"/water
sand, shale	2262	2350	8 ( )
Berea	2350	2382	
sand, shale	2382	2656	gas chk @2506' 14/10 thru 1"/water
Gordon	2656	2680	gas sam Caboo 11/10 mile 1 / water
sand, shale	2680	2912	gas chk @2693' 6/10 thru 2"/water
5th .	2912	2980	
sand, shale	2980	3236	gas chk @3127' 6/10 <sup>-</sup> thru 2"/water
Warren	3236	3340	8
sand, shale	3340	3377	
Speechley	3377	3795	gas chk @3502' 4/10 thru 2"/water
sand, shale	3795	3850	8-1 Jun 63305 4/10 cliff 5 / water
Balltown	3850	4248	M-F
sand, shale	4248	4266	
Bradford	4266	4427	
sand, shale	4427	4638	The state of the s
Riley	4638	4861	gas chk @4809' 4/10 thru 2"/water
sand, shale	4861	4906	Soo our Groot Alto cuita 5 \Maret
Benson	4906	4962	gas chk @4965' 4/10 thru 2"/water
sand, shale		5089	Drillers TD
		5087	Logger TD