

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 #: 47-033-03404 F

Farm name: Lee, Florence G. Et Al Operator Well No.: Lee 1

LOCATION: Elevation: 1337 GL Quadrangle: Clarksburg 7.5

District: Clark County: Harrison
Latitude: 8.280 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude: 2.040 Feet West of 80 Deg. 20 Min. 00 Sec.

Company: Petroleum Development Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
120 Genesis Boulevard Bridgeport, WV 26330	11 3/4"	290'	290'	351
Agent: <u>Bob Williamson</u>	8 5/8"	1363'	1363'	351
Inspector: <u>Tim Bennett</u>	4 1/2"	4834'	4834'	722
Date Permit Issued: <u>3-5-2010</u>				
Date Well Work Commenced: <u>3/15/2010</u>				
Date Well Work Completed: <u>3/15/2010</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Vertical Depth (ft): <u>4868'</u>				
Total Measured Depth (ft): <u>4868'</u>				
Fresh Water Depth (ft.): <u>200', 400'</u>				
Salt Water Depth (ft.): <u>None</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>250-54, 390-94, 1118-20</u>				
Void(s) encountered (N/Y) Depth(s) <u>None</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation 5th Sand Pay zone depth (ft) 2701
Gas: Initial open flow 103 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 63 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 70 psig (surface pressure) after 24 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/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.


Signature

10/16/2012
Date

Were core samples taken? Yes _____ No XX

Were cuttings caught during drilling? Yes _____ No XX

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list JW Wireline GR/CCL from 4868-2300.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

3/15/2010: MIRU JW Wireline & run GR/CCL log from 4868-2300. Set Bridge Plug at 2750 and RU Halliburton & bullhead 20% HCl into well & filled hole w/water to pressure test. Press. test csg to 3500 psi. Test OK. Bleed off pressure & Perforate from 2701-2706 (10) & 2715-2720 (10) (Fifth SS). Halliburton pumped an N2 assist X-link with 302 sks of 20/40 brown sand. Break at 1778 psi & avg treating foam rate was 19.6 BPM & ATP was 2153 psi. ISIP = 1844psi, 5min = 1571 psi, 10 min = 1448 psi, 15 min = 1305 psi RDMO Halliburton. 3/16/2010: RU EC & RU swab tools and swab to TD and RU to run tubing & release and trip Bridge Plug out. Release Energy Contractors. 4/7/2012: RU PDC Rig #223 & tag TD at 4800' & swab dry & TIL. Plug Back Details Including Plug Type and Depth(s): Temp RBP at 2750' pulled after frac.

Formations Encountered: _____ Top Depth _____ / _____ Bottom Depth _____
Surface: _____

See Attached WR-35 & "Well Log" from original completion of this well (47-033-3404).

10/19/2012

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

STAGE	FORMATION	PERFS	80/100 SKS	20/40 SKS	ACID GAL	N2 (MCF)
1ST	BENSON	13 (4753 - 4757)	100	500	500	69

648 BRLS SAND LADEN FLUID

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fies and salt water, coal, oil and ga
KB - GL			0	10	
sand, shale, RR			10	1660	1/2" stream H2O @ 200'
Little Lime			1660	1676	1/2" stream H2O @ 400'
sand, shale			1676	1700	
Big Lime			1700	1764	
Big Injun			1764	1853	
sand, shale			1853	2202	
Gantz			2202	2214	
50 ft			2214	2260	gas check @ 2281' no show
30 ft			2260	2300	
sand, shale			2300	2334	
Gordon			2334	2408	gas check @ 2406' 6/10 - 1" H2O
sand, shale			2408	2590	
4th			2590	2640	
sand, shale			2640	2694	
5th			2694	2732	gas check @ 2720' 6/10 - 1" H2O
sand, shale			2732	3289	
Speechley			3289	3412	
sand, shale			3412	3534	
Balltown			3534	3626	gas check @ 3588' 18/10 - 2" H2O
sand, shale			3626	3790	
Bradford			3790	4070	
sand, shale			4070	4538	gas check @ 4304' 16/10 - 2" H2O
Riley			4538	4606	gas check @ 4584' 16/10 - 2" H2O
sand, shale			4606	4736	
Benson			4736	4788	gas check @ 4772' 26/10 - 2" H2O
sand, shale			4788	4868	Driller TD 12/10 - 2" H2O
				4864	Logger TD

(Attach separate sheets as necessary)

PETROLEUM DEVELOPMENT CORP.
 Well Operator
 By: [Signature]
 Date: 4/21/87

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
 coal, encountered in the drilling of a well."