

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 #: 47-033-03388 F

Farm name: Angotti, Michael, Et Al Operator Well No.: Jarvis 1-A

LOCATION: Elevation: 1201' GL Quadrangle: Clarksburg 7.5

District: Clark County: Harrison
Latitude: 8.430 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 3.630 Feet West of 82 Deg. 20 Min. 00 Sec.

Company: Petroleum Development Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>120 Genesis Boulevard</u> <u>Bridgeport, WV 26330</u>	<u>11 3/4"</u>	<u>38'</u>	<u>38'</u>	<u>Sanded In</u>
Agent: <u>Bob Williamson</u>	<u>8 5/8"</u>	<u>1225'</u>	<u>1225'</u>	<u>351</u>
Inspector: <u>Tim Bennett</u>	<u>4 1/2"</u>	<u>4691'</u>	<u>4691'</u>	<u>748</u>
Date Permit Issued: <u>06/06/2007</u>				
Date Well Work Commenced: <u>7/15/2008</u>				
Date Well Work Completed: <u>7/18/2008</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>4743'</u>				
Total Measured Depth (ft): <u>4743'</u>				
Fresh Water Depth (ft.): <u>990'</u>				
Salt Water Depth (ft.): <u>None Reported</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>None Reported</u>				
Void(s) encountered (N/Y) Depth(s) <u>N</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) 2535
Gas: Initial open flow 237 MCF/d Oil: Initial open flow Bbl/d
Final open flow 51 MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 90 psig (surface pressure) after 36 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

OCT 17 2012

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 Superior Wireline GR log from 2700' - 1500'

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:

7/15/2008: MIRU BJ Tools & Superior Wireline. Set a BJ retrievable bridge plug @ 2610' & RD BJ. RU Superior & run a correlation GR & perf the Fifth Sand with 20 holes from 2535 - 2569. RDMO Superior & RU BJ Services & pumped a N2 assist Lightning 1400 fluid system with 48,000 lbs of 30/50 sand & 534 bbls treated fluid & 89,339 SCF of N2. Break at 2,220 psi & avg. treating foam rate was 17 BPM & ATP was 1,957 psi. ISDP=1990psi, 5 min=1,742 psi.

Plug Back Details Including Plug Type and Depth(s): Retrievable bridge plug at 2610' pulled after job & cleaned to original TD.

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

See Attached WR-35 & "Well Log" from original completion of this well (47-033-3388).

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 (4585 - 4592)	100	400	500	60

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
KB - GL			0	10	
sand, shale, RR			10	1562	1/2" stream H2O @ 990
Big Lime			1562	1625	
sand, shale			1625	1630	
Keener			1630	1644	
sand, shale			1644	1649	
Big Injun			1649	1708	
sand, shale			1708	2133	gas check @ 1988' no show
30 ft			2133	2157	
sand, shale			2157	2182	
Gordon Stray			2182	2200	
sand, shale			2200	2215	
Gordon			2215	2248	
sand, shale			2248	2390	
4th			2390	2434	
sand, shale			2434	2470	
4th A			2470	2486	
sand, shale			2486	2540	gas check @ 2516' no show
5th			2540	2575	
sand, shale			2575	3008	
Upper Speechley			3008	3162	gas check @ 3028' 50/10 - 1" H2O
sand, shale			3162	3244	
Speechley			3244	3385	
sand, shale			3385	3446	
Balltown			3446	3638	gas check @ 3555' 80/10 - 1" H2O
sand, shale			3638	3840	
Bradford			3840	3924	
sand, shale			3924	4388	
Riley			4388	4442	
sand, shale			4442	4572	gas check @ 4553' 80/10 - 1" H2O
Benson			4572	4594	gas check @ 4647' 10/10 - 2" H2O
sand, shale			4594	4743	Driller TD 76/10 - 1" H2O
				4736	Logger TD

(Attach separate sheets as necessary)

PETROLEUM DEVELOPMENT CORPORATION
 Well Operator
 By: [Signature]
 Date: 1/2/87

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."

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