

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: 08/30/2012
API #: 47-091-00825 F

Farm name: Greathouse, Willa Jo Operator Well No.: Short #1

LOCATION: Elevation: 1410.00 Quadrangle: Grafton

District: Court House County: Taylor
Latitude: 7.500 Feet South of 39 Deg. 17 Min. 30 Sec.
Longitude 3.900 Feet West of 80 Deg. 02 Min. 30 Sec.

Company: Petroleum Development Corporation

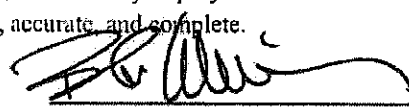
Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
120 Genesis Boulevard Bridgeport, WV 26330	11 3/4"	32'	32'	Sanded In
Agent: Bob Williamson	8 5/8"	1108'	1108'	345
Inspector: Bryan Harris	4 1/2"	4550'	4550'	245
Date Permit Issued: WorkOver:8/15/2005			Squeeze	319
Date Well Work Commenced: 10/06/2005				
Date Well Work Completed: 10/17/2005				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 4576'				
Total Measured Depth (ft): 4576'				
Fresh Water Depth (ft.): 70', 105', 360'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 70-73				
Void(s) encountered (N/Y) Depth(s) N				

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

Producing formation Benson Pay zone depth (ft) 4424-4425.5
Gas: Initial open flow 97 MCF/d Oil: Initial open flow --- Bbl/d
Final open flow 163 MCF/d Final open flow --- Bbl/d
Time of open flow between initial and final tests --- Hours
Static rock Pressure 1450 psig (surface pressure) after --- Hours

Second producing formation 4th Sand Pay zone depth (ft) 2410-2435
Gas: Initial open flow 20 MCF/d Oil: Initial open flow ----- Bbl/d
Final open flow Not Taken MCF/d Final open flow ----- Bbl/d
Time of open flow between initial and final tests ----- Hours
Static rock Pressure 100 psig (surface pressure) after 72 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

08/31/2012
Date

09/14/2012

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 Allegheny GR/PPT/TT

Cased Hole Bond Log from 2595' - 1900'

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:

Short #1 (47-091-00825) Re-completion: Original Benson perms from 4424-4426 and TOC at 3465. Set Bridge Plug at 2490' & cement squeeze over 4thSS. Run Allegheny Bond Log & new cmt. top at 2060'. RU Universal on 10/17/2005 & frac with energized cross link with 500 gal 15% HCl, 400 sks of 20/40 Sand, and 110,000 scf Nitrogen in 513 bbls treated fluid. Break at 2475, avg TP at 2371 psi. Treat at avg. rate of 23.1 bpm.

Plug Back Details Including Plug Type and Depth(s): CIBP set at 2490' & left in hole after work-over frac.

Formations Encountered:	Top Depth	Bottom Depth
<u>Surface:</u>		

See "Well Log" (pg. 2) on original Completion Form.