

WR-35
Rev (9-11)

Final Completion Report
State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 08-09-2013
API #: 47-009-00112

Farm name: John Harwatt BRK 3H Operator Well No.: 834170

LOCATION: Elevation: 1135' Quadrangle: Bethany WV

District: Buffalo County: Brooke
Latitude: 2850' Feet South of 40 Deg. 12 Min. 30 Sec.
Longitude 10230' Feet West of 80 Deg. 35 Min. 00 Sec.

Company: Chesapeake Appalachia, L.L.C.

| Address: | Casing & Tubing | Used in drilling | Left in well | Cement fill up Cu. Ft. |
|--|-----------------|------------------|--------------|------------------------|
| P.O. Box 18496 Oklahoma City, OK 73154-0496 | 13 3/8" | 371' | 371' | 499.646 Cu. Ft. |
| Agent: Eric Gillespie | 9 5/8" | 1810' | 1810' | 814 Cu. Ft. |
| Inspector: Bill Hendershot | 5 1/2" | 10030' | 10030' | 2408 Cu. Ft. |
| Date Permit Issued: 11-21-2011 | | | | |
| Date Well Work Commenced: 2-21-2012 | | | | |
| Date Well Work Completed: 8-16-2012 | | | | |
| Verbal Plugging: | | | | |
| Date Permission granted on: | | | | |
| Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/> | | | | |
| Total Vertical Depth (ft): 5980' | | | | |
| Total Measured Depth (ft): 10039' | | | | |
| Fresh Water Depth (ft.): 70', 300' | | | | |
| Salt Water Depth (ft.): 1090' | | | | |
| Is coal being mined in area (N/Y)? N | | | | |
| Coal Depths (ft.): 319' | | | | |
| 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 Marcellus Pay zone depth (ft) 6,237'-9,888'
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1,189* MCF/d Final open flow 190 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 3,887* psig (surface pressure) after 48 Hours *Calculated

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

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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.

Marlene Williams
Signature

8-12-2013
Date Office of Oil and Gas
Dept. of Environmental Protection 09/13/2013

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Were core samples taken? Yes _____ No

Were cuttings caught during drilling? Yes _____ No

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GR MWD from 5,303'-9,987' MD

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:

(See attached)

Plug Back Details Including Plug Type and Depth(s):

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

(See attached)

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PERFORATION RECORD ATTACHMENT

Well Number and Name: 834170 John Harwatt BRK 3H

| PERFORATION RECORD | | | STIMULATION RECORD | | | | | | | |
|--------------------|---------------------|-------|--------------------|------------------|-------|---------|----------------|--------|-------------------|----|
| Date | Interval Perforated | | Date | Interval Treated | Fluid | | Propping Agent | | Average Injection | |
| | From | To | | | Type | Amount | Type | Amount | | |
| 6/27/2012 | 9,352 | 9,898 | 7/12/2012 | 9,352 | 9,898 | Sik wtr | 12,633 | Sand | 630,240 | 80 |
| 7/12/2012 | 8,729 | 9,275 | 7/12/2012 | 8,729 | 9,275 | Sik wtr | 12,622 | Sand | 623,540 | 80 |
| 7/12/2012 | 8,106 | 8,652 | 7/16/2012 | 8,106 | 8,652 | Sik wtr | 12,716 | Sand | 629,800 | 80 |
| 7/16/2012 | 7,483 | 8,029 | 7/16/2012 | 7,483 | 8,029 | Sik wtr | 12,637 | Sand | 628,340 | 80 |
| 7/16/2012 | 6,860 | 7,406 | 7/17/2012 | 6,860 | 7,406 | Sik wtr | 12,488 | Sand | 623,760 | 80 |
| 7/17/2012 | 6,237 | 6,783 | 7/17/2012 | 6,237 | 6,783 | Sik wtr | 12,554 | Sand | 625,700 | 80 |
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LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5980 ft TVD @ 6774 ft MD

| Formation/Lithology | Top Depth, MD (ft) | Top Depth, TVD (ft) | Bottom Depth, MD (ft) | Bottom Depth, TVD (ft) |
|---------------------|-----------------------|------------------------|--------------------------|---------------------------|
| LS/SS | 0 | 0 | 319 | 319 |
| PITTSBURG COAL | 319 | 319 | 327 | 327 |
| LS/SS | 327 | 327 | 760 | 760 |
| SS | 760 | 760 | 960 | 960 |
| SS/SH | 960 | 960 | 1090 | 1090 |
| SS | 1090 | 1090 | 1300 | 1300 |
| LS | 1300 | 1300 | 1330 | 1330 |
| BIG INJUN (SS) | 1330 | 1330 | 1630 | 1630 |
| SHALE | 1630 | 1630 | 5805 | 5779 |
| GENESEO (SH) | 5805 | 5779 | 5823 | 5794 |
| TULLY (LS) | 5823 | 5794 | 5896 | 5848 |
| HAMILTON (SH) | 5896 | 5848 | 6106 | 5947 |
| MARCELLUS (SH) | 6106 | 5947 | | |
| TD OF LATERAL | | | 10039 | 5935 |

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