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:  | 9-19-2012    |
|--------|--------------|
| API #: | 47-009-00097 |

| District: Buffolo   | Farm n   | ame: Linda Greathouse BRK 3H   | Operator Wel                    | l No.: 833467 |              |                      |
|---|--|--|---------------------------------|---------------|--------------|----------------------|
| Latitude: 88207 Feet South of 40 Deg. 12 Min. 30 Sec.  Longitude 15207 Feet West of 80 Deg. 25 Min. 00 Sec.  Company: Chesapeake Appalachia, L.L.C.    Address: P.O. Box 18496  | LOCATION: Elevation: 1150'                     |  | Quadrangle: 2                   | 247-Bethany   |              |                      |
| Company.  Address: P.O. Box 18496   |  | Latitude: 6620' Feet South of 40 Deg.  | 12 Min                          | <u>30</u> Sec |              |                      |
| Address: P.O. Box 18496  Oklahoma City, OK 73154-0496  26" 110' 110' Driven  Agent: Eric Gillespie 20" 343' 343' 544 Cu. Ft.  Inspector: Bill Hendershot 13 3/8" 731' 731' 931 Cu. Ft.  Date Permit Issued: 6-6-2011 95/8" 1781' 1781' 785 Cu. Ft.  Date Well Work Commenced: 11-19-2011 51/2" 12749' 12749' 3750 Cu. Ft.  Date Well Work Completed: 6-25-2012  Verbal Plugging:  Date Permission granted on:  Rotary ✓ Cable Rig Total Vertical Depth (ft): 5843'  Total Measured Depth (ft): 12749'  Fresh Water Depth (ft): 62', 94'  Salt Water Depth (ft): 62', 94'  Salt Water Depth (ft): 1025'  Is coal being mined in area (N/Y)? N  Coal Depths (ft): 300'  Void(s) encountered (N/Y) Depth(s) Y 300'  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft) 6.128-12.817  Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  Time of open flow between initial and final tests Hours  Static rock Pressure psig (surface pressure) after Hours  Second producing formation Pay zone depth (ft)  Gas: Initial open flow MCF/d Final open flow Bbl/d  Final 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  Second producing formation Pay zone depth (ft)  Gas: Initial open flow MCF/d Final open flow Bbl/d  Final open flow MCF/d Final open flow Bbl/d  Time of open flow between initial and final tests Hours  |  | Company: Chesapeake Appalachia, L.L.C.   |                                 |               |              |                      |
| Agent:       Eric Gillespie       20"       343'       343'       544 Cu. Ft.         Inspector:       Bill Hendershot       13 3/8"       731'       731'       931 Cu. Ft.         Date Permit Issued:       6-6-2011       9 5/8"       1781'       1781'       785 Cu. Ft.         Date Well Work Commenced:       11-19-2011       5 1/2"       12749'       12749'       3750 Cu. Ft.         Date Well Work Completed:       6-25-2012   |  | Address: P.O. Box 18496  |                                 | 1             | Left in well |                      |
| Inspector: Bill Hendershot  Date Permit Issued: 6-6-2011  Date Well Work Commenced: 11-19-2011  Date Well Work Commenced: 11-19-2011  Date Well Work Completed: 6-25-2012  Verbal Plugging:  Date Permission granted on:  Rotary  |  | Oklahoma City, OK 73154-0496   | 26"                             | 110'          | 110'         | Driven               |
| Date Permit Issued: 6-6-2011 9 5/8" 1781' 1781' 785 Cu. Ft.  Date Well Work Commenced: 11-19-2011 5 1/2" 12749' 3750 Cu. Ft.  Date Well Work Completed: 6-25-2012  Verbal Plugging:  Date Permission granted on:  Rotary Cable Rig  Total Vertical Depth (ft): 5843'  Total Measured Depth (ft): 12749'  Fresh Water Depth (ft): 62', 94'  Salt Water Depth (ft.): 1025'  Is coal being mined in area (N/Y)? N  Coal Depths (ft.): 300'  Void(s) encountered (N/Y) Depth(s) Y 300'  OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)  Producing formation Marcellus Pay zone depth (ft): 6.128-12.617  Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  Time of open flow between initial and final tests Hours  Second producing formation Pay zone depth (ft) Bbl/d  Final open flow MCF/d Oil: Initial open flow Bbl/d  Time of open flow between initial and final tests Hours  Second producing formation Pay zone depth (ft) Bbl/d  Final open flow MCF/d Final open flow Bbl/d |  | Agent: Eric Gillespie  | 20"                             | 343'          | 343'         | 544 Cu. Ft.          |
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| Date Well Work Completed: 6-25-2012  Verbal Plugging:  Date Permission granted on:  Rotary  |  | Date Permit Issued: 6-6-2011   | 9 5/8"                          | 1781'         | 1781'        | 785 Cu. Ft.          |
| Verbal Plugging:  Date Permission granted on:  Rotary   |  | Date Well Work Commenced: 11-19-2011   | 5 1/2"                          | 12749'        | 12749'       | 3750 Cu. Ft.         |
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| 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   | 5  | poig (surface pressure) an   |                                 |               | e r          | 9                    |
| Time of open flow between initial and final testsHours  | Second producing formation Pay zone depth (ft) |  |                                 |               |              |                      |
| Time of open flow between initial and final testsHours  | G  |  |                                 |               |              | WALGORYEV<br>Coverse |
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|   | S  |  |                                 | :s            |              |                      |

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.

Marlon Gilciama
Signature

9-19-2012 Date

| Were core samples taken? YesNo_N                    | Were cuttings caught during drilling? Yes Y NoNo   |
|---|--|
|   | n this well? If yes, please list GR, neutron, density, and resistivity   |
| FRACTURING OR STIMULATING, PHYSICAL CHA             | LOWING: 1). DETAILS OF PERFORATED INTERVALS<br>INGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATION<br>PS AND BOTTOMS OF ALL FORMATIONS, INCLUDING<br>I SURFACE TO TOTAL DEPTH.  |
| Perforated Intervals, Fracturing, or Stimulating:   |  |
| (See Attached)                                      |  |
|   |  |
|   |  |
| <u> </u>  |  |
| ·   |  |
| Plug Back Details Including Plug Type and Depth(s): |  |
|   |  |
| Formations Encountered: Top Surface:                | Depth / Bottom Depth   |
| (See Attached)                                      |  |
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|   | SVV GSG(r)   |
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## PERFORATION RECORD ATTACHMENT

Well Number and Name: 833467 Linda Greathouse BRK 3H

| PERFORATION RECORD |            | STIMULATION RECORD |           |                      |         |         |        |           |         |           |
|--------------------|------------|--------------------|-----------|----------------------|---------|---------|--------|-----------|---------|-----------|
|                    | Interval F | erforated          |           | Fluid Propping Agent |         | Fluid   |        | ing Agent | Average |           |
| Date               | From       | To                 | Date      | Interval             | Treated | Type    | Amount | Туре      | Amount  | Injection |
| 6/4/2012           | 12,116     | 12,617             | 6/20/2012 | 12,116               | 12,617  | Slk wtr | 12,423 | Sand      | 601,920 | 77.5      |
| 6/20/2012          | 11,517     | 12,018             | 6/21/2012 | 11,517               | 12,018  | Slk wtr | 12,487 | Sand      | 599,920 | 77        |
| 6/21/2012          | 10,918     | 11,422             | 6/21/2012 | 10,918               | 11,422  | Slk wtr | 12,425 | Sand      | 601,740 | 79.8      |
| 6/21/2012          | 10,321     | 10,820             | 6/23/2012 | 10,321               | 10,820  | Slk wtr | 12,127 | Sand      | 598,120 | 80        |
| 6/23/2012          | 9,716      | 10,221             | 6/23/2012 | 9,716                | 10,221  | Slk wtr | 12,330 | Sand      | 600,760 | 80        |
| 6/23/2012          | 9,120      | 9,622              | 6/24/2012 | 9,120                | 9,622   | Slk wtr | 11,907 | Sand      | 601,140 | 78.1      |
| 6/24/2012          | 8,521      | 9,022              | 6/24/2012 | 8,521                | 9,022   | Slk wtr | 12,055 | Sand      | 602,280 | 80        |
| 6/24/2012          | 7,922      | 8,420              | 6/24/2012 | 7,922                | 8,420   | Slk wtr | 12,253 | Sand      | 601,860 | 79.8      |
| 6/24/2012          | 7,323      | 7,824              | 6/25/2012 | 7,323                | 7,824   | Slk wtr | 11,950 | Sand      | 601,420 | 78.5      |
| 6/25/2012          | 6,724      | 7,225              | 6/25/2012 | 6,724                | 7,225   | Slk wtr | 11,850 | Sand      | 600,260 | 79.9      |
| 6/25/2012          | 6,125      | 6,626              | 6/25/2012 | 6,125                | 6,626   | Slk wtr | 12,066 | Sand      | 599,220 | 79.9      |
|                    |            |                    |           |                      |         |         |        |           |         |           |
|                    |            |                    |           |                      |         |         |        |           |         |           |
|                    |            |                    |           |                      |         |         |        |           |         |           |
|                    |            |                    |           |                      |         |         |        |           |         |           |
|                    |            |                    |           |                      |         |         |        |           |         |           |
|                    |            |                    |           |                      |         |         |        |           |         |           |
|                    |            |                    |           |                      |         |         |        |           |         |           |



## LATERAL SIDETRACK WELLBORE (no vertical pilot hole associated with this well)

Maximum TVD of wellbore: 5843 ft TVD @ 6200 ft MD

| Formation/Lithology | Top Depth, MD<br>(ft) | Top Depth,<br>TVD (ft) | Bottom Depth,<br>MD (ft) | Bottom Depth,<br>TVD (ft) |
|---------------------|-----------------------|------------------------|--------------------------|---------------------------|
| SH/LS/SS            | 0                     | 0                      | 300                      | 300                       |
| PITTSBURG COAL      | 300                   | 300                    | 307                      | 307                       |
| LS/SH               | 307                   | 307                    | 360                      | 360                       |
| SS ·                | 360                   | 360                    | 1290                     | 1290                      |
| BIG LIME (LS)       | 1290                  | 1290                   | 1420                     | 1420                      |
| BIG INJUN (SS)      | 1420                  | 1420                   | 1630                     | 1630                      |
| SHALE               | 1630                  | 1630                   | 5689                     | 5661                      |
| GENESEO (SH)        | 5689                  | 5661                   | 5703                     | 5672                      |
| TULLY (LS)          | 5703                  | 5672                   | 5794                     | 5732                      |
| HAMILTON (SH)       | 5794                  | 5732                   | 5988                     | 5816                      |
| MARCELLUS (SH)      | 5988                  | 5816                   |                          |                           |
| TD OF LATERAL       |                       |                        | 12749                    | 5778                      |

