

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

Farm name: Charles Frye OHI 10H Operator Well No.: 833122

LOCATION: Elevation: 1260 Quadrangle: Valley Grove, WV.

District: Triadelphia County: Ohio  
Latitude: 10350' Feet South of 40 Deg. 05 Min. 00 Sec.  
Longitude 10950' Feet West of 80 Deg. 32 Min. 30 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<br>Oklahoma City, OK 73154-0496   | 20"             | 100'             | 100'         | 157 Cu. Ft.            |
| Agent: Eric Gillespie  | 13 3/8"         | 678'             | 678'         | 784 Cu. Ft.            |
| Inspector: <b>Derek Haught</b>   | 9 5/8"          | 2218'            | 2218'        | 1083 Cu. Ft.           |
| Date Permit Issued: 7-11-2011  | 5 1/2"          | 12745'           | 12745'       | 3046 Cu. Ft.           |
| Date Well Work Commenced: 7-20-2011  |                 |                  |              |                        |
| Date Well Work Completed: 3-7-2012   |                 |                  |              |                        |
| Verbal Plugging:   |                 |                  |              |                        |
| Date Permission granted on:  |                 |                  |              |                        |
| Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/> |                 |                  |              |                        |
| Total Vertical Depth (ft): 6599'   |                 |                  |              |                        |
| Total Measured Depth (ft): 12747'  |                 |                  |              |                        |
| Fresh Water Depth (ft.): 78', 300'   |                 |                  |              |                        |
| Salt Water Depth (ft.): 1135'  |                 |                  |              |                        |
| Is coal being mined in area (N/Y)? N   |                 |                  |              |                        |
| Coal Depths (ft.): 632'  |                 |                  |              |                        |
| Void(s) encountered (N/Y) Depth(s) Y 632'  |                 |                  |              |                        |

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

Producing formation Marcellus Pay zone depth (ft) 6,800' - 12,602'

Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow 2,790\* MCF/d Final open flow 178 Bbl/d

Time of open flow between initial and final tests 47 Hours \*Calculated

Static rock Pressure 4,283\* psig (surface pressure) after \_\_\_\_\_ 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

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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

9-10-2012  
Date

Were core samples taken? Yes \_\_\_\_\_ No **X** \_\_\_\_\_

Were cuttings caught during drilling? Yes **X** \_\_\_\_\_ No \_\_\_\_\_

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list **Yes,** \_\_\_\_\_

Resistivity and porosity from wireline tools to the base of the Big Injun, MWD GR in the lateral.

**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)

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

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**Formations Encountered:** \_\_\_\_\_ **Top Depth** \_\_\_\_\_ / \_\_\_\_\_ **Bottom Depth**  
Surface: \_\_\_\_\_

(See Attached)

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PERFORATION RECORD ATTACHMENT

Well Number and Name: 833122 Charles Frye OHI 10H

| PERFORATION RECORD |                     |        | STIMULATION RECORD |          |         |         |        |                |         |                   |
|--------------------|---------------------|--------|--------------------|----------|---------|---------|--------|----------------|---------|-------------------|
| Date               | Interval Perforated |        | Date               | Interval | Treated | Fluid   |        | Propping Agent |         | Average Injection |
|                    | From                | To     |                    |          |         | Type    | Amount | Type           | Amount  |                   |
| 12/10/2011         | 12,242              | 12,602 | 2/24/2012          | 12,242   | 12,602  | Slk wtr | 10,444 | Sand           | 570,220 | 84                |
| 2/24/2012          | 11,788              | 12,149 | 2/25/2012          | 11,788   | 12,149  | Slk wtr | 10,838 | Sand           | 568,440 | 81                |
| 2/25/2012          | 11,337              | 11,695 | 2/26/2012          | 11,337   | 11,695  | Slk wtr | 10,279 | Sand           | 572,620 | 84                |
| 2/26/2012          | 10,881              | 11,242 | 2/27/2012          | 10,881   | 11,242  | Slk wtr | 11,518 | Sand           | 441,680 | 80                |
| 2/27/2012          | 10,428              | 10,788 | 2/28/2012          | 10,428   | 10,788  | Slk wtr | 12,372 | Sand           | 571,780 | 78                |
| 2/28/2012          | 9,974               | 10,335 | 2/29/2012          | 9,974    | 10,335  | Slk wtr | 11,093 | Sand           | 571,300 | 82                |
| 2/29/2012          | 9,521               | 9,881  | 3/1/2012           | 9,521    | 9,881   | Slk wtr | 11,500 | Sand           | 548,840 | 85                |
| 3/1/2012           | 9,067               | 9,431  | 3/2/2012           | 9,067    | 9,431   | Slk wtr | 11,649 | Sand           | 571,880 | 84                |
| 3/2/2012           | 8,614               | 8,974  | 3/3/2012           | 8,614    | 8,974   | Slk wtr | 10,670 | Sand           | 569,440 | 82                |
| 3/3/2012           | 8,160               | 8,521  | 3/4/2012           | 8,160    | 8,521   | Slk wtr | 12,878 | Sand           | 573,880 | 64                |
| 3/4/2012           | 7,708               | 8,067  | 3/5/2012           | 7,708    | 8,067   | Slk wtr | 10,470 | Sand           | 571,580 | 81                |
| 3/5/2012           | 7,253               | 7,616  | 3/6/2012           | 7,253    | 7,616   | Slk wtr | 10,583 | Sand           | 570,820 | 82                |
| 3/6/2012           | 6,800               | 7,160  | 3/6/2012           | 6,800    | 7,160   | Slk wtr | 11,188 | Sand           | 571,400 | 83                |
|                    |                     |        |                    |          |         |         |        |                |         |                   |
|                    |                     |        |                    |          |         |         |        |                |         |                   |
|                    |                     |        |                    |          |         |         |        |                |         |                   |
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**LATERAL WELLBORE****Maximum TVD of wellbore:** 6599 ft TVD @ 12300 ft MD

| Formation/Lithology | Top Depth,<br>MD (ft) | Top Depth, TVD<br>(ft) | Bottom Depth,<br>MD (ft) | Bottom Depth,<br>TVD (ft) |
|---------------------|-----------------------|------------------------|--------------------------|---------------------------|
| LS/SHALE            | 0                     | 0                      | 622                      | 622                       |
| PITTSBURGH COAL     | 622                   | 622                    | 630                      | 630                       |
| LS/SHALE            | 630                   | 630                    | 650                      | 650                       |
| SS/LS               | 650                   | 650                    | 690                      | 690                       |
| SHALE/LS            | 690                   | 690                    | 790                      | 790                       |
| SHALE               | 790                   | 790                    | 880                      | 880                       |
| SS/SHALE            | 880                   | 880                    | 940                      | 940                       |
| SHALE/SS            | 940                   | 940                    | 1240                     | 1240                      |
| SS/SHALE            | 1240                  | 1240                   | 1270                     | 1270                      |
| SHALE/SS            | 1270                  | 1270                   | 1480                     | 1480                      |
| SS/SHALE            | 1480                  | 1480                   | 1600                     | 1600                      |
| LS/SHALE            | 1600                  | 1600                   | 1650                     | 1650                      |
| BIG LIME            | 1650                  | 1650                   | 1700                     | 1700                      |
| LS/SHALE            | 1700                  | 1700                   | 1800                     | 1800                      |
| BIG INJUN           | 1800                  | 1800                   | 2040                     | 2040                      |
| SHALE               | 2040                  | 2040                   | 3500                     | 3500                      |
| SHALE/SS            | 3500                  | 3500                   | 3730                     | 3730                      |
| SHALE               | 3730                  | 3730                   | 6414                     | 6300                      |
| GENESEO             | 6414                  | 6300                   | 6445                     | 6323                      |
| TULLY               | 6445                  | 6323                   | 6495                     | 6357                      |
| HAMILTON            | 6495                  | 6357                   | 6735                     | 6472                      |
| MARCELLUS           | 6735                  | 6472                   | 12747                    | 6590                      |
| TD                  | 12747                 | 6590                   |                          | 0                         |
|                     |                       | 0                      |                          | 0                         |

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