

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

DATE: 8-7-2012  
API #: 47-069-00079

Farm name: Charles Frye 3H Operator Well No.: 833118

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

District: Triadelphia County: Ohio  
Latitude: 9920' Feet South of 40 Deg. 05 Min. 00 Sec.  
Longitude 11010' 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"             | 90'              | 90'          | Driven                 |
| Agent: Eric Gillespie  | 13 3/8"         | 682'             | 682'         | 558 Cu. Ft.            |
| Inspector: Bill Hendershot   | 9 5/8"          | 2202'            | 2202'        | 948 Cu. Ft.            |
| Date Permit Issued: 4-8-2011   | 5 1/2"          | 12610'           | 12610'       | 3147 Cu. Ft.           |
| Date Well Work Commenced: 6-18-2011  |                 |                  |              |                        |
| Date Well Work Completed: 3-8-2012   |                 |                  |              |                        |
| Verbal Plugging:   |                 |                  |              |                        |
| Date Permission granted on:  |                 |                  |              |                        |
| Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/> |                 |                  |              |                        |
| Total Vertical Depth (ft): 6466'   |                 |                  |              |                        |
| Total Measured Depth (ft): 12618'  |                 |                  |              |                        |
| Fresh Water Depth (ft.): 30'   |                 |                  |              |                        |
| Salt Water Depth (ft.): 1135'  |                 |                  |              |                        |
| Is coal being mined in area (N/Y)? N   |                 |                  |              |                        |
| Coal Depths (ft.): 622'  |                 |                  |              |                        |
| Void(s) encountered (N/Y) Depth(s) Y 622'  |                 |                  |              |                        |

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

Producing formation Marcellus Pay zone depth (ft) 6,700' - 12,481'

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

Final open flow 2,316\* MCF/d Final open flow 178 Bbl/d

Time of open flow between initial and final tests 62 Hours \*Calculated

Static rock Pressure 4,169\* 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

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

11/09/2012



**PERFORATION RECORD ATTACHMENT**

Well Number and Name: 833118 Charles Frye3H

| PERFORATION RECORD |                     |        | STIMULATION RECORD |                  |        |         |        |                |         |                   |
|--------------------|---------------------|--------|--------------------|------------------|--------|---------|--------|----------------|---------|-------------------|
| Date               | Interval Perforated |        | Date               | Interval Treated |        | Fluid   |        | Propping Agent |         | Average Injection |
|                    | From                | To     |                    | Type             | Amount | Type    | Amount |                |         |                   |
| 12/9/2011          | 12,123              | 12,481 | 2/19/2012          | 12,123           | 12,481 | Slk wtr | 10,860 | Sand           | 572,080 | 70                |
| 2/19/2012          | 11,671              | 12,029 | 2/20/2012          | 11,671           | 12,029 | Slk wtr | 10,506 | Sand           | 571,900 | 77                |
| 2/20/2012          | 11,219              | 11,577 | 2/21/2012          | 11,219           | 11,577 | Slk wtr | 10,732 | Sand           | 570,740 | 84                |
| 2/21/2012          | 10,767              | 11,125 | 2/22/2012          | 10,767           | 11,125 | Slk wtr | 13,584 | Sand           | 570,240 | 76                |
| 2/22/2012          | 10,315              | 10,673 | 2/23/2012          | 10,315           | 10,673 | Slk wtr | 11,114 | Sand           | 572,480 | 79                |
| 2/23/2012          | 9,863               | 10,222 | 2/25/2012          | 9,863            | 10,222 | Slk wtr | 11,289 | Sand           | 572,220 | 76                |
| 2/25/2012          | 9,409               | 9,770  | 2/27/2012          | 9,409            | 9,770  | Slk wtr | 10,536 | Sand           | 571,020 | 80                |
| 2/27/2012          | 8,960               | 9,319  | 3/3/2012           | 8,960            | 9,319  | Slk wtr | 15,436 | Sand           | 569,960 | 80                |
| 3/3/2012           | 8,508               | 8,869  | 3/4/2012           | 8,508            | 8,869  | Slk wtr | 10,350 | Sand           | 377,260 | 83.3              |
| 3/4/2012           | 8,056               | 8,415  | 3/5/2012           | 8,056            | 8,415  | Slk wtr | 10,814 | Sand           | 571,660 | 79                |
| 3/5/2012           | 7,604               | 7,963  | 3/6/2012           | 7,604            | 7,963  | Slk wtr | 10,507 | Sand           | 570,420 | 79                |
| 3/6/2012           | 7,152               | 7,511  | 3/7/2012           | 7,152            | 7,511  | Slk wtr | 10,647 | Sand           | 571,260 | 83                |
| 3/7/2012           | 6,700               | 7,060  | 3/8/2012           | 6,700            | 7,060  | Slk wtr | 10,832 | Sand           | 573,500 | 85                |
|                    |                     |        |                    |                  |        |         |        |                |         |                   |
|                    |                     |        |                    |                  |        |         |        |                |         |                   |
|                    |                     |        |                    |                  |        |         |        |                |         |                   |
|                    |                     |        |                    |                  |        |         |        |                |         |                   |

**LATERAL WELLBORE**

**Maximum TVD of wellbore: 6466 ft TVD @ 7905 ft MD**

| Formation/Lithology  | Top Depth, MD (ft) | Top Depth, TVD (ft) | Bottom Depth, MD (ft) | Bottom Depth, TVD (ft) |
|----------------------|--------------------|---------------------|-----------------------|------------------------|
| LS/SHALE             | 0                  | 0                   | 190                   | 190                    |
| SHALE/LS             | 190                | 190                 | 220                   | 220                    |
| LS/SHALE             | 220                | 220                 | 300                   | 300                    |
| SHALE/LS             | 300                | 300                 | 350                   | 350                    |
| SHALE/COAL           | 350                | 350                 | 380                   | 380                    |
| LS/SHALE             | 380                | 380                 | 530                   | 530                    |
| SHALE/SS             | 530                | 530                 | 560                   | 560                    |
| LS/SS                | 560                | 560                 | 620                   | 620                    |
| ABANDONED MINE SHAFT | 620                | 620                 | 636                   | 636                    |
| NO SAMPLES           | 636                | 636                 | 683                   | 683                    |
| SHALE                | 683                | 683                 | 950                   | 950                    |
| SHALE/SS             | 950                | 950                 | 1050                  | 1050                   |
| SHALE                | 1050               | 1050                | 1100                  | 1100                   |
| SHALE/SS             | 1100               | 1100                | 1200                  | 1200                   |
| SS/SHALE             | 1200               | 1200                | 1250                  | 1250                   |
| SS                   | 1250               | 1250                | 1300                  | 1300                   |
| SHALE/SS             | 1300               | 1300                | 1350                  | 1350                   |
| SS/SHALE             | 1350               | 1350                | 1400                  | 1400                   |
| SHALE/SS             | 1400               | 1400                | 1430                  | 1430                   |
| SS/SHALE             | 1430               | 1430                | 1600                  | 1600                   |
| SHALE/SS             | 1600               | 1600                | 1620                  | 1620                   |
| SS/SHALE             | 1620               | 1620                | 1650                  | 1650                   |
| SS/LS                | 1650               | 1650                | 1750                  | 1750                   |
| SS/SHALE             | 1750               | 1750                | 1810                  | 1810                   |
| BIG INJUN            | 1810               | 1810                | 2020                  | 2020                   |
| SHALE                | 2020               | 2020                | 2350                  | 2350                   |
| SHALE/SS             | 2350               | 2350                | 2400                  | 2400                   |
| SHALE                | 2400               | 2400                | 3250                  | 3250                   |
| SHALE/SS             | 3250               | 3250                | 3300                  | 3300                   |
| SHALE                | 3300               | 3300                | 4270                  | 4270                   |
| SHALE/SS             | 4270               | 4270                | 4300                  | 4300                   |
| SHALE                | 4300               | 4300                | 5990                  | 5989                   |
| SHALE/LS             | 5990               | 5989                | 6080                  | 6076                   |
| SHALE                | 6080               | 6076                | 6240                  | 6222                   |
| SHALE/LS             | 6240               | 6222                | 6354                  | 6316                   |
| TULLY                | 6354               | 6316                | 6390                  | 6343                   |
| HAMILTON             | 6390               | 6343                | 6641                  | 6454                   |
| MARCELLUS            | 6641               | 6454                | 12618                 | 6413                   |

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12618

6413

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11/09/2012