

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

DATE: 8-15-2012
API #: 47-069-00069

Farm name: Roy Ferrell 8H Operator Well No.: 832804

LOCATION: Elevation: 1210' Quadrangle: Valley Grove WV

District: Triadelphia County: Ohio
Latitude: 8650' Feet South of 40 Deg. 05 Min. 00 Sec.
Longitude 14610' Feet West of 80 Deg. 30 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 | 20" | 100' | 100' | Driven |
| Agent: Eric Gillespie | 13 3/8" | 735' | 735' | 830 Cu. Ft. |
| Inspector: Bill Hendershot | 9 5/8" | 2202' | 2202' | 976 Cu. Ft. |
| Date Permit Issued: 12/22/2010 | 5 1/2" | 12950' | 12950' | 2770 Cu. Ft. |
| Date Well Work Commenced: 2/1/2011 | | | | |
| Date Well Work Completed: 8/14/2011 | | | | |
| Verbal Plugging: | | | | |
| Date Permission granted on: | | | | |
| Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/> | | | | |
| Total Vertical Depth (ft): 6703' (cement plug @ 4898' - 6847') | | | | |
| Total Measured Depth (ft): 12960' | | | | |
| Fresh Water Depth (ft.): 230', 350' | | | | |
| Salt Water Depth (ft.): 970', 1179', 1330' | | | | |
| Is coal being mined in area (N/Y)? N | | | | |
| Coal Depths (ft.): 685' | | | | |
| 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 Macellus Pay zone depth (ft) 7,119' - 12,841'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 2,491* MCF/d Final open flow 61 Bbl/d
Time of open flow between initial and final tests 69 Hours *Calculated
Static rock Pressure 4,343* 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

8-15-2012
Date

01/11/2013

| VERTICAL PILOT HOLE | | | | |
|---------------------|--------------------|---------------------|-----------------------|------------------------|
| Formation/Lithology | Top Depth, MD (ft) | Top Depth, TVD (ft) | Bottom Depth, MD (ft) | Bottom Depth, TVD (ft) |
| SS | 0 | 0 | 120 | 120 |
| SHALE | 120 | 120 | 270 | 270 |
| SHALE/SS/LS | 270 | 270 | 330 | 330 |
| SHALE | 330 | 330 | 430 | 430 |
| SHALE/LS | 430 | 430 | 685 | 685 |
| PITTSBURGH COAL | 685 | 685 | 690 | 690 |
| SHALE/LS | 690 | 690 | 740 | 740 |
| SS | 740 | 740 | 770 | 770 |
| SHALE | 770 | 770 | 970 | 970 |
| LS | 970 | 970 | 1010 | 1010 |
| SHALE | 1010 | 1010 | 1160 | 1160 |
| SS | 1160 | 1160 | 1220 | 1220 |
| SHALE | 1220 | 1220 | 1430 | 1430 |
| SS | 1430 | 1430 | 1490 | 1490 |
| SHALE | 1490 | 1490 | 1566 | 1566 |
| MAXTON | 1566 | 1566 | 1640 | 1640 |
| SHALE | 1640 | 1640 | 1820 | 1820 |
| BIG INJUN | 1841 | 1841 | 2054 | 2054 |
| SHALE | 2054 | 2054 | 5974 | 5974 |
| RHINESTREET SHALE | 5974 | 5974 | 6370 | 6370 |
| MIDDLESEX SHALE | 6370 | 6370 | 6468 | 6468 |
| GENESEO SHALE | 6468 | 6468 | 6482 | 6482 |
| TULLY LIMESTONE | 6482 | 6482 | 6508 | 6508 |
| MAHANTANGO SHALE | 6508 | 6508 | 6628 | 6628 |
| MARCELLUS SHALE | 6628 | 6628 | 6685 | 6685 |
| ONONDAGA LS | 6685 | 6685 | | |
| TD OF PILOT HOLE | | | 6700 | 6700 |
| | | | | |

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| LATERAL WELLBORE | | | | |
|--------------------------|---------------------------|---------------------|-----------------------|------------------------|
| Maximum TVD of wellbore: | 6703 ft TVD @ 12123 ft MD | | | |
| Formation/Lithology | Top Depth, MD (ft) | Top Depth, TVD (ft) | Bottom Depth, MD (ft) | Bottom Depth, TVD (ft) |
| SS | 0 | 0 | 120 | 120 |
| SHALE | 120 | 120 | 270 | 270 |
| SHALE/SS/LS | 270 | 270 | 330 | 330 |
| SHALE | 330 | 330 | 430 | 430 |
| SHALE/LS | 430 | 430 | 685 | 685 |
| PITTSBURGH COAL | 685 | 685 | 690 | 690 |
| SHALE/LS | 690 | 690 | 740 | 740 |
| SS | 740 | 740 | 770 | 770 |
| SHALE | 770 | 770 | 970 | 970 |
| LS | 970 | 970 | 1010 | 1010 |
| SHALE | 1010 | 1010 | 1160 | 1160 |
| SS | 1160 | 1160 | 1220 | 1220 |
| SHALE | 1220 | 1220 | 1430 | 1430 |
| SS | 1430 | 1430 | 1490 | 1490 |
| SHALE | 1490 | 1490 | 1566 | 1566 |
| MAXTON | 1566 | 1566 | 1640 | 1640 |
| SHALE | 1640 | 1640 | 1820 | 1820 |
| BIG INJUN | 1841 | 1841 | 2054 | 2054 |
| SHALE | 2054 | 2054 | 5974 | 5947 |
| RHINESTREET SHALE | 5974 | 5947 | 6370 | 6295 |
| MIDDLESEX SHALE | 6370 | 6295 | 6468 | 6377 |
| GENESEO SHALE | 6574 | 6455 | 6607 | 6479 |
| TULLY LIMESTONE | 6607 | 6479 | 6654 | 6510 |
| MAHANTANGO SHALE | 6654 | 6510 | 6964 | 6631 |
| MARCELLUS SHALE | 6964 | 6631 | | |
| TD OF WELL | | | 12960 | 6682 |

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