**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: | 1/11/2013    |
|-------|--------------|
| API#: | 47-033-05595 |

| Farm name: Tracey, Lloyd L.and Mary  | Operator Well                              | No.: Fittro Unit 1             | Н                                     | RECEIVED                  |
|--|--|--------------------------------|---------------------------------------|---------------------------|
| LOCATION: Elevation: 1304'   | Quadrangle: V                              | Volf Summit                    |                                       | JAN 14 2013               |
| District: Coal   | County: Harris                             | on.                            | WV                                    | GEOLOGICAL SURVEY         |
| Latitude: 986 Feet South of 39 Deg. 2  | Min.                                       | 00 Sec.                        |                                       | - PONCANI OWN, WY         |
| Longitude 10,862 Feet West of 80 Deg. 2  Company: Antero Resources Appalachian Corp  | <u>Min.</u>                                | oo Sec.                        |                                       |                           |
| Address: 1625 17th Street  | Casing &<br>Tubing                         | Used in drilling               | Left in well                          | Cement fill<br>up Cu. Ft. |
| Denver, CO 80202   | 20" 94#                                    | 40'                            | 40'                                   | 38 Cu. Ft. Class A        |
| Agent: CT Corporation System   | 13-3/8" 54.5#                              | 227'                           | 227'                                  | 1648 Cu. Ft. Class A      |
| Inspector: Tristan Jenkins   | 9-5/8" 36#                                 | 2556'                          | 2556'                                 | 1045 Cu. Ft. Class A      |
| Date Permit Issued: 01/17/2012   | 5-1/2" 20#                                 | 13,985'                        | 13,985'                               | 3436 Cu. Ft. Class H      |
| Date Well Work Commenced: 01/18/2012   |  |                                |                                       |                           |
| Date Well Work Completed: 04/02/2012   | 2-3/8" 4.7                                 | 7281'                          |                                       |                           |
| Verbal Plugging: N/A   |  |                                |                                       |                           |
| Date Permission granted on: N/A  |  |                                |                                       |                           |
| Rotary Cable Rig   |  |                                |                                       |                           |
| Total Vertical Depth (ft): 7,281' TVD  | -  |                                |                                       |                           |
| Total Measured Depth (ft): 13,985' MD, 7,230' TVD  | (BHL)                                      |                                |                                       |                           |
| Fresh Water Depth (ft.): 50'   |  |                                |                                       |                           |
| Salt Water Depth (ft.): 685', 917'   |  |                                |                                       |                           |
| Is coal being mined in area (N/Y)? N   |  |                                |                                       |                           |
| Coal Depths (ft.): 147'  |  |                                | · · · · · · · · · · · · · · · · · · · |                           |
| Void(s) encountered (N/Y) Depth(s) N, N/A  |  |                                |                                       |                           |
| OPEN FLOW DATA (If more than two producing formation Producing formation Marcellus Pay za Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow Time of open flow between initial and final tests N/A Static rock Pressure 3300 psig (surface pressure) after the producing formation open flow producing formation pr | one depth (ft) 7  ow N/A Bb  N/A Bb  Hours | 7,110' TVD (Top<br>bl/d<br>l/d | ta on separate s                      | sheet)                    |

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.

Pay zone depth (ft)

Bbl/d

Bbl/d

Hours

\_Hours

MCF/d Oil: Initial open flow\_

\_psig (surface pressure) after \_\_\_

Final open flow \_\_\_\_

MCF/d

Time of open flow between initial and final tests

Second producing formation

Gas: Initial open flow

Final open flow

Static rock Pressure

| Were core samples taken? YesN   | lo_X Were                                     | Were cuttings caught during drilling? Yes X NoNo |                      |  |  |
|---|---|--|----------------------|--|--|
| Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes-CBL  This is a subsequent well. Antero only runs wireline logs on the first well on a multi-pad (Genrard Unit 11 APIN 47-033-05429). Please reference whether logs submitted with Form WR-35 for Gerrard Unit 11 |   |  |                      |  |  |
| NOTE: IN THE AREA BELOW FRACTURING OR STIMULATING, DETAILED GEOLOGICAL RECORCOAL ENCOUNTERED BY THE WE  | PHYSICAL CHANGE, ETC.<br>D OF THE TOPS AND BO | 2). THE WELL LOG WHOTTOMS OF ALL FOR             | ICH IS A SYSTEMATION |  |  |
| Perforated Intervals, Fracturing, or Stimula  | ating:  |  |                      |  |  |
| Perforations: 7382' - 13,919' MD (  | 1,368 holes)                                  |  |                      |  |  |
| Frac'd w/ 10,000 gals 15% HCL Ad  | zid, 143,272 bbls Slick Wa                    | ater carrying 690,632#                           | 100 mesh,            |  |  |
| 3,195,167# 40/70 and 2,173,270#   | 20/40 sand.                                   |  |                      |  |  |
|   |   |  |                      |  |  |
| Plug Back Details Including Plug Type an  | d Depth(s): N/A                               |  |                      |  |  |
| Formations Encountered: Surface:  | Top Depth                                     |  | Bottom Depth         |  |  |
| Big Lime est.   | 1,551'  | 1,613'   |                      |  |  |
| Big Injun est.  | 1,614'  | 1,983'   |                      |  |  |
| Gantz Sand est.   | 1,984'  | 2,069'   |                      |  |  |
| Fifty Foot Sandstone est.   | 2,070'  | 2,269'   |                      |  |  |
| Gordon est.   | 2,270'  | 2,507'   |                      |  |  |
| Fifth Sandstone est.  | 2,508'  | 3,225'   |                      |  |  |
| Speechley est.  | 3,226'  | 3,440'   |                      |  |  |
| Balltown est.   | 3,441'  | 3,917'   |                      |  |  |
| Bradford est.   | 3,918'  | 4,559'   |                      |  |  |
| Benson est.   | 4,560'  | 4,886  |                      |  |  |
| Alexander est.  | 4,887'  | 5,137'   |                      |  |  |
| Elk est.  | 5,138'  | 6,413'   |                      |  |  |
| Sycamore  | 6,414'  | 6,690'   |                      |  |  |
| Sonyea  | 6,691'  | 6,691'   |                      |  |  |
| Middlesex   | 6,692'  | 6,830'   |                      |  |  |

6,831'

6,867'

6,892'

7,025'

7,110'

Genundewa

Burket

Marcellus

Tully Hamilton 6,866'

6,891'

7,024'

7,109'

7,281' TVD

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WELL NAME: Fittro 1H API #: 47-033-05595

## List of Additives Used for Fracturing Or Stimulating Well

| ADDITIVES                                      | CHEMICAL ABSTRACT SERVICE<br>NUMBER (CAS #) |
|--|---|
| ALPHA 1427                                     | Mixture                                     |
| Gluaraldehyde                                  | 111-30-8                                    |
| Quaternary Ammonium Chloride                   | 7173-51-5                                   |
| Alkyl (C12-16) Dimethylbenzylammonium Chloride | 68424-85-1                                  |
| Ethanol  | 64-17-5                                     |
| Water  | 7732-18-5                                   |
| CL-14  | Mixture                                     |
| Methanol                                       | 67-56-1                                     |
| Polyoxyalkylenes                               | 25322-68-3                                  |
| Fatty Acids                                    | 61790-12-3                                  |
| Propargyl Alcohol                              | 107-19-7                                    |
| Olefin   | 64743-02-8                                  |
| Ferrotrol (Citric Acid)                        | 77-92-9                                     |
| FRW-18<br>(Petroleum Distillate hydrotreated)  | 64742-47-8                                  |
| GBW-5 (Ammonium Persulfate)                    | 7727-54-0                                   |
| GW-3LDF  | Mixture                                     |
| Guar Gum                                       | 9000-30-0                                   |
| Petroleum distillate hydrotreated              | 64742-47-8                                  |
| Silica, Crystalline Quartz                     | 14808-60-7                                  |
| Paraffinic Petroleum Distillate                | 64742-55-8                                  |
| 1-Butoxy-2-Propanol                            | 5131-66-8                                   |
| Isotridecanol, Ethoxylated                     | 9043-30-5                                   |
| HCL (Hydrochloric Acid)                        | 7647-01-0                                   |
| Scaletrol 720                                  | Mixture                                     |
| Ethylene Glycol                                | 107-21-1                                    |
| Calcium chloride, anhydrous                    | 10043-52-4                                  |