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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: | 12/7/2013 |
|-------|--------------|
| API#: | 47-017-06187 |

| Farm name: Davis, Jonathan | | | Operator | Well | No.: Dots | son Unit | 1H | _ V |
|----------------------------|----------------------|------|------------------|--------|------------------|----------|--------------|---------------------------|
| LOCATION: Elevation: 1,146 | 6' | | Quadran | gle: V | Vest Union | 7.5' | | |
| District: Central | | | County: | Doddi | ridge | | | |
| Latitude: 10,566' | Feet South of 39 | Deg. | 20 | Min. | 00 | Sec. | | |
| Longitude 12,386' | Feet West of 80 | Deg. | 47 | _Min. | 30 | Sec. | | |
| Company: Antero Re | esources Corporation | | | | | | | |
| Address: 1625 17th | 1 Street | | Casing of Tubing | & | Used in drilling | | Left in well | Cement fill up Cu. Ft. |

| Address: 1625 17th Street | Casing & Tubing | Used in drilling | Left in well | Cement fill up Cu. Ft. |
|---|--------------------|------------------|--------------|---------------------------|
| Denver, CO 80202 | 20" 94# | 67' | 67' | 64 Cu Ft. Class A |
| 'Agent: CT Corporation System | 13 3/8" 48# | 460' | 460' | 639 Cu Ft. Class A |
| Inspector: Douglas Newlon | 9 5/8" 36# | 2,622' | 2,622' | 1068 Cu Ft. Class A |
| Date Permit Issued: 2/22/2013 | 5 1/2" 20# | 13,521' | 13,521' | 3273 Cu Ft. Class H |
| Date Well Work Commenced: 3/5/2013 | | | | |
| Date Well Work Completed: 7/9/2013 | 2 3/8" 4.7# | 6879' | | |
| Verbal Plugging: N/A | | | | |
| Date Permission granted on: N/A | | | | |
| Rotary Cable Rig | | | | |
| Total Vertical Depth (ft): 6813' TVD | | | | |
| Total Measured Depth (ft): 13,521' MD | | | | |
| Fresh Water Depth (ft.): 200' | | | | |
| Salt Water Depth (ft.): 700' | | | | |
| Is coal being mined in area (N/Y)? No | | | | |
| Coal Depths (ft.): 824' | | 5 | | |
| Void(s) encountered (N/Y) Depth(s) None | | | DES. | |

| OPEN FLOW DATA (If more Producing formation Marce | than two producing formations ple | | |
|---|--|----------------|--------------------------------|
| Gas: Initial open flow Final open flow 6,730 | MCF/d Oil: Initial open flow MCF/d Final open flow een initial and final tests | Bbl/d Bbl/d | RECEIVED Office of Oil and Gas |
| Static rock Pressure 3600 | | | FEB 1 2 2014 |
| Second producing formatio | nPay zone dep | th (ft) | W/V Den |
| Gas: Initial open flow | MCF/d Oil: Initial open flow_ | Bbl/d | WV Department of |
| Final open flow | MCF/d Final open flow | Bbl/d | Environmental Protection |
| Time of open flow betw | een 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.

2/10/2014
Date

06/27/2017

| Were core samples taken? YesNo_> | Were | cuttings caught during drilling? Yes X No | | |
|---|--|---|-----|--|
| Were Electrical, Mechanical or Geophysical l | logs recorded on this well? I | f yes, please list Yes - CBL | | |
| This is a subsequent well. Antero only runs wireline logs on the first well on | a multi-well pad (Valentine Unit 1H API# 47-017- | 06083). Please reference the wireline logs submitted with Form WR-35 for Valentine Unit | 1H. | |
| FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATI | | | | |
| Perforated Intervals, Fracturing, or Stimulating | ıg: | | | |
| Perforations: 6,910'-13,466' (2,460 H | oles) | | | |
| Frac'd w/ 21,168 gals 15% HCL Acid | , 188,084 bbls Slick Wa | ater carrying 472,060# 100 mesh, | | |
| 3.425.656# 40/70 sand and 2.292.16 | 0# 20/40 sand. | | | |
| · · · · · · · · · · · · · · · · · · · | | | | |
| | | | — | |
| | | | | |
| N. D. I.D., 'I. I. I.'., N. T., J. | No. 114 (-). | | | |
| Plug Back Details including Plug Type and L | eptn(s): N/A | | | |
| Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes - CBL This is a subsequent well. Annote only runs whethe logs on the first well on a multi-well and Childrento Unit III. APPIN 47-017-056831, Peason retorework has winthe logs and white first wint. III. 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: Perforated Intervals, Fracturing, Person No. 100 mesh, | | | | |
| | | | | |
| Formations Encountered: | Top Depth | / Rottom Denth | | |
| Surface: | Top Depui | T Bottom Depth | | |
| | | | | |
| | | | | |
| Big Lime | est. 2066' | 2176' | | |
| Big Injun | est. 2177' | 2574' | | |
| Gantz Sand | est. 2575' | 2717' | | |
| Fifty Foot Sandstone | est. 2718' | 2808' | | |
| Gordon | est. 2809' | 3122' | | |
| Fifth Sandstone | est. 3123' | 3147' | | |
| Bayard | est. 3148' | 3911' | | |
| Speechley | est. 3912' | 4176' | | |
| Baltown | est. 4177' | 4632' | | |
| Bradford | est. 4633' | 5063' | | |
| Benson | est. 5064' | 5324' | | |
| Alexander | est. 5325' | 5507' | | |
| Elk | est. 5508' | 5998' | | |
| Rhinestreet | est. 5999' | 6300' | | |
| Sycamore | 6301' | 6470' | | |
| • | 6471' | 6592' | | |
| Burkett | 6593' | 6622' | | |
| Tully | 6623' | 6651' | | |
| Hamilton | 6652' | 6660' | | |
| Marcellus | 6661' | 6813' TVD | | |

Hydraulic Fracturing Fluid Product Component Information Disclosure

| 6/30/2013 | Job Start Date: |
|------------------------------|--------------------------------|
| 7/9/2013 | Job End Date: |
| West Virginia | State: |
| Doddridge | County: |
| 47-017-06187-00-00 | API Number: |
| Antero Resources Corporation | Operator Name: |
| Dotson Unit 1H | Well Name and Number: |
| -80.82900280 | Longitude: |
| 39.29932780 | Latitude: |
| NAD27 | Datum: |
| NO | Federal/Tribal Well: |
| 6,814 | True Vertical Depth: |
| 7,899,528 | Total Base Water Volume (gal): |
| 311,488 | Total Base Non Water Volume: |
| | |







Hydraulic Fracturing Fluid Composition:

| Trade Name | Supplier | Purpose | Ingredients | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|---------------------------|----------------------------|------------------|----------------------------|---|--|--|----------|
| /ater | Antero Resources | Base Fluid | | | | | |
| | | | Water | 7732-18-5 | 100.00000 | 91.13810 | |
| and | U.S. Well Services, LLC | Proppant | | | | | |
| | | | Crystalline Silica, quartz | 14808-60-7 | 100.00000 | 8.56278 | |
| ICL Acid (12.6%- 8.0%) | U.S. Well Services, LLC | Bulk Acid | | | | | |
| | | | Water | 7732-18-5 | 87.50000 | 0.10674 | |
| | | | Hydrogen Chloride | 7641-01-1 | 18.00000 | 0.02550 | |
| GC-15 | U.S. Well Services, LLC | Gelling Agents | | | | | |
| | | | Guar Gum | 9000-30-0 | 50.00000 | 0.03419 | |
| | | | Petroleum Distillates | 64742-47-8 | 60.00000 | 0.03238 | |
| | | | Suspending agent (solid) | 14808-60-7 | 3.00000 | 0.00523 | |
| | | | Surfactant | 68439-51-0 | 3.00000 | 0.00205 | |
| WFRA-405 | U.S. Well Services, LLC | Friction Reducer | | | | | |
| | | | Anionic Polyacrylamide | Proprietary | 40.00000 | 0.02366 | |
| | | | Water | 7732-18-5 | 40.00000 | 0.02366 | |
| | | | Petroleum Distillates | 64742-47-8 | 40.00000 | 0.01905 | |
| | | | Ethoxylated alcohol blend | Proprietary | 5.00000 | 0.00296 | |

| | | | Crystalline Salt | 12125-02-9 | 5.00000 | 0.00296 | |
|------------|----------------------------|-----------------------------|--|-------------|-----------|---------|--|
| K-BAC 1020 | U.S. Well Services, LLC | Anti-Bacterial Agent | | | | | |
| | | | 2,2-dibromo-3- nitrilopropionamide | 10222-01-2 | 20.00000 | 0.00705 | |
| | | | Deionized Water | 7732-18-5 | 28.00000 | 0.00403 | |
| I-1000 | U.S. Well Services, LLC | Scale Inhibitor | | | | | |
| | | | Anionic Copolymer | Proprietary | | 0.00318 | |
| | | | Ethylene Glycol | 107-21-1 | 20.00000 | 0.00287 | |
| | | | Water | 7732-18-5 | 30.00000 | 0.00239 | |
| I-300 | U.S. Well Services, LLC | Acid Corrosion Inhibitor | | | | | |
| | | | Ethylene Glycol | 107-21-1 | 40.00000 | 0.00028 | |
| | | | N,N-Dimethylformamide | 68-12-2 | 20.00000 | 0.00009 | |
| | | | Cinnamaldehyde | 104-55-2 | 15.00000 | 0.00008 | |
| | | | Tar bases, quinoline derivs, benzyl chloride-quaternized | 72480-70-7 | 15.00000 | 0.00007 | |
| | | | 2-Butoxyethanol | 111-76-2 | 15.00000 | 0.00007 | |
| | | | Poly(oxy-1,2-ethanediyl), alpha- (4-nolylphenyl)-omega-hydroxy, branched | 127087-87-0 | 5.00000 | 0.00003 | |
| | | | 1-Decanol | 112-30-1 | 5.00000 | 0.00002 | |
| | | | 1-Octanol | 111-87-5 | 3.00000 | 0.00001 | |
| | | | Isopropyl Alcohol | 67-63-0 | 2.50000 | 0.00001 | |
| P One | U.S. Well Services, LLC | Gel Breakers | | | | | |
| | | | Ammonium Persulfate | 7727-54-0 | 100.00000 | 0.00059 | |

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

^{*} Total Water Volume sources may include fresh water, produced water, and/or recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%