

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

API 47 - 017 - 06240 County Doddridge District New Milton  
Quad New Milton 7.5' Pad Name Stewart Pad Field/Pool Name \_\_\_\_\_  
Farm name Stewart, Randall Well Number Cross Unit 2H  
Operator (as registered with the OOG) Antero Resources Corporation  
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,337,768m Easting 529,259m  
Landing Point of Curve Northing 4,337,933.60m Easting 529,278.33m  
Bottom Hole Northing 4,340,054m Easting 528,629m

Elevation (ft) 1,334' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine  
Mud Type(s) and Additive(s)  
Air- Foam & 4% KCL  
Mud- Polymer

Date permit issued 05/29/2013 Date drilling commenced 10/23/2013 Date drilling ceased 03/29/2014  
Date completion activities began 04/09/2014 Date completion activities ceased 07/09/2014  
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 372' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 962', 1217' Void(s) encountered (Y/N) depths None  
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths None  
Is coal being mined in area (Y/N) No

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JP 8/28 E  
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| CASING STRINGS            | Hole Size       | Casing Size | Depth   | New or Used | Grade wt/R | Basket Depth(s) | Did cement circulate (Y/N)<br>* Provide details below* |
|---------------------------|-----------------|-------------|---------|-------------|------------|-----------------|--|
| Conductor                 | 30"             | 20"         | 40'     | New         | 51#; J-55  | N/A             | Yes  |
| Surface                   | 17 1/2"         | 13 3/8"     | 447'    | New         | 48#; H-40  | N/A             | Yes  |
| Coal                      |                 |             |         |             |            |                 |  |
| Intermediate 1            | 12 1/4"         | 9 5/8"      | 2,595'  | New         | 36#; J-55  | N/A             | Yes  |
| Intermediate 2            |                 |             |         |             |            |                 |  |
| Intermediate 3            |                 |             |         |             |            |                 |  |
| Production                | 8 3/4" & 8 1/2" | 5 1/2"      | 14,978' | New         | 20#; P-110 | N/A             | Yes  |
| Tubing                    |                 | 2 3/8"      | 7,422'  | New         | 4.7#; N-80 | N/A             |  |
| Packer type and depth set |                 | N/A         |         |             |            |                 |  |

Comment Details \_\_\_\_\_

| CEMENT DATA    | Class/Type of Cement | Number of Sacks                  | Slurry wt (ppg)          | Yield (ft <sup>3</sup> /sks) | Volume (ft <sup>3</sup> ) | Cement Top (MD)                | WOC (hrs) |
|----------------|----------------------|----------------------------------|--------------------------|------------------------------|---------------------------|--------------------------------|-----------|
| Conductor      | Class A              | 100 sx                           | 15.6                     | 1.18                         | 109                       | 0'                             | 8 Hrs.    |
| Surface        | Class A              | 532 sx                           | 15.6                     | 1.18                         | 313                       | 0'                             | 8 Hrs.    |
| Coal           |                      |                                  |                          |                              |                           |                                |           |
| Intermediate 1 | Class A              | 1,017 sx                         | 15.6                     | 1.18                         | 813                       | 0'                             | 8 Hrs.    |
| Intermediate 2 |                      |                                  |                          |                              |                           |                                |           |
| Intermediate 3 |                      |                                  |                          |                              |                           |                                |           |
| Production     | Class H              | 1,167 sx (Lead); 1,184 sx (Tail) | 14.2 (Lead); 15.2 (Tail) | 1.3 (Lead); 1.86 (Tail)      | 2,951                     | ~500' into Intermediate Casing | 8 Hrs.    |
| Tubing         |                      |                                  |                          |                              |                           |                                |           |

Drillers TD (ft) 14,979' MD, 7,362' TVD (BHL & Deepest Point Drilled) Loggers TD (ft) 14,928'  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6.852'

\*\*This is a subsequent well. Arlens only runs wireline logs on one well on a multi-well pad (Cross Unit 1H, API #47-017-06238). Please reference the wireline logs submitted with Form WR-35 for the Cross Unit 1H. A Cement Bond Log has been included with this submittal.

Check all wireline logs run \*\*  
 caliper     density     deviated/directional     induction  
 neutron     resistivity     gamma ray     temperature     sonic

Well cored  Yes  No    Conventional    Sidewall    Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_

Conductor- 0  
 Surface- 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface  
 Intermediate- 1 above float joint, 1 above float collar, 1 every 4th joint to surface  
 Production- 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

WAS WELL COMPLETED AS SHOT HOLE  Yes  No    DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No    DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No    TYPE OF TRACER(S) USED \_\_\_\_\_

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**PERFORATION RECORD**

| Stage No. | Perforation date | Perforated from MD ft.                 | Perforated to MD ft. | Number of Perforations | Formation(s) |
|-----------|------------------|--|----------------------|------------------------|--------------|
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  | <b>* PLEASE SEE ATTACHED EXHIBIT 1</b> |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |
|           |                  |  |                      |                        |              |

Please insert additional pages as applicable.

**STIMULATION INFORMATION PER STAGE**

Complete a separate record for each stimulation stage.

| Stage No. | Stimulations Date | Ave Pump Rate (BPM)                    | Ave Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/other (units) |
|-----------|-------------------|--|------------------------------|------------------------------|------------|--------------------------|------------------------|----------------------------------|
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   | <b>* PLEASE SEE ATTACHED EXHIBIT 2</b> |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |
|           |                   |  |                              |                              |            |                          |                        |                                  |

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| PRODUCING FORMATION(S) | DEPTHS           |                 |
|------------------------|------------------|-----------------|
| Marcellus              | 7,294' (top) TVD | 7,408' (top) MD |
|                        |                  |                 |
|                        |                  |                 |
|                        |                  |                 |

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 3,950 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs

OPEN FLOW Gas 10,666 mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water \_\_\_\_\_ bpd GAS MEASURED BY  Estimated  Orifice  Pilot

| LITHOLOGY/<br>FORMATION                | TOP<br>DEPTH IN FT<br>NAME TVD | BOTTOM<br>DEPTH IN FT<br>TVD | TOP<br>DEPTH IN FT<br>MD | BOTTOM<br>DEPTH IN FT<br>MD | DESCRIBE ROCK TYPE AND RECORD QUANTITY AND<br>TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC) |
|--|--------------------------------|------------------------------|--------------------------|-----------------------------|--|
|  | 0                              |                              | 0                        |                             |  |
|  |                                |                              |                          |                             |  |
|  |                                |                              |                          |                             |  |
|  |                                |                              |                          |                             |  |
| <b>* PLEASE SEE ATTACHED EXHIBIT 3</b> |                                |                              |                          |                             |  |
|  |                                |                              |                          |                             |  |
|  |                                |                              |                          |                             |  |
|  |                                |                              |                          |                             |  |
|  |                                |                              |                          |                             |  |
|  |                                |                              |                          |                             |  |

Please insert additional pages as applicable.

Drilling Contractor Patterson - UTI Drilling Company LLC  
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Rush Wellsite Services  
Address 600 Alpha Drive City Canonsburg State PA Zip 15317

Cementing Company Nabors Completion & Production Services, Co.  
Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

Stimulating Company GoFrac  
Address 62787 Philips Rd. City Cambridge State OH Zip 43725

Please insert additional pages as applicable.

Completed by Megan Darling Telephone 303-357-7230  
Signature Megan C. Darling Title Permitting Agent Date 07/31/2015

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

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**EXHIBIT 1**

| Stage No. | Perforation Date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formations |
|-----------|------------------|------------------------|----------------------|------------------------|------------|
| 1         | 9-Apr-14         | 14,718                 | 14,888               | 60                     | Marcellus  |
| 2         | 26-Apr-14        | 14,516                 | 14,686               | 60                     | Marcellus  |
| 3         | 28-Apr-14        | 14,314                 | 14,484               | 60                     | Marcellus  |
| 4         | 29-Apr-14        | 14,112                 | 14,283               | 60                     | Marcellus  |
| 5         | 29-Apr-14        | 13,910                 | 14,081               | 60                     | Marcellus  |
| 6         | 30-Apr-14        | 13,709                 | 13,879               | 60                     | Marcellus  |
| 7         | 1-May-14         | 13,507                 | 13,677               | 60                     | Marcellus  |
| 8         | 1-May-14         | 13,305                 | 13,475               | 60                     | Marcellus  |
| 9         | 1-May-14         | 13,103                 | 13,273               | 60                     | Marcellus  |
| 10        | 2-May-14         | 12,901                 | 13,071               | 60                     | Marcellus  |
| 11        | 2-May-14         | 12,699                 | 12,870               | 60                     | Marcellus  |
| 12        | 2-May-14         | 12,497                 | 12,668               | 60                     | Marcellus  |
| 13        | 2-May-14         | 12,296                 | 12,466               | 60                     | Marcellus  |
| 14        | 2-May-14         | 12,094                 | 12,264               | 60                     | Marcellus  |
| 15        | 3-May-14         | 11,892                 | 12,062               | 60                     | Marcellus  |
| 16        | 3-May-14         | 11,690                 | 11,860               | 60                     | Marcellus  |
| 17        | 3-May-14         | 11,488                 | 11,658               | 60                     | Marcellus  |
| 18        | 3-May-14         | 11,286                 | 11,456               | 60                     | Marcellus  |
| 19        | 4-May-14         | 11,084                 | 11,255               | 60                     | Marcellus  |
| 20        | 4-May-14         | 10,882                 | 11,053               | 60                     | Marcellus  |
| 21        | 4-May-14         | 10,681                 | 10,851               | 60                     | Marcellus  |
| 22        | 4-May-14         | 10,479                 | 10,649               | 60                     | Marcellus  |
| 23*       | NA*              | NA*                    | NA*                  | NA*                    | NA*        |
| 24        | 5-May-14         | 10,075                 | 10,245               | 60                     | Marcellus  |
| 25        | 5-May-14         | 9,873                  | 10,043               | 60                     | Marcellus  |
| 26        | 5-May-14         | 9,671                  | 9,841                | 60                     | Marcellus  |
| 27        | 6-May-14         | 9,469                  | 9,640                | 60                     | Marcellus  |
| 28        | 6-May-14         | 9,267                  | 9,438                | 60                     | Marcellus  |
| 29        | 6-May-14         | 9,066                  | 9,236                | 60                     | Marcellus  |
| 30        | 6-May-14         | 8,864                  | 9,034                | 60                     | Marcellus  |
| 31        | 7-May-14         | 8,662                  | 8,832                | 60                     | Marcellus  |
| 32        | 7-May-14         | 8,460                  | 8,630                | 60                     | Marcellus  |
| 33        | 9-May-14         | 8,258                  | 8,428                | 60                     | Marcellus  |
| 34        | 9-May-14         | 8,056                  | 8,226                | 60                     | Marcellus  |
| 35        | 10-May-14        | 7,854                  | 8,025                | 60                     | Marcellus  |
| 36        | 10-May-14        | 7,653                  | 7,823                | 60                     | Marcellus  |
| 37        | 10-May-14        | 7,451                  | 7,621                | 60                     | Marcellus  |

\*Engineer perforated stage 24 instead of 23, and was not caught until the stage was frac'ed, so stage 23 was skipped.

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**EXHIBIT 2**

| Stage No. | Stimulations Date | Avg Pump Rate | Avg Treatment Pressure (PSI) | Max Breakdown Pressure (PSI) | ISIP (PSI) | Amount of Proppant (lbs) | Amount of Water (bbls) | Amount of Nitrogen/ other (units) |
|-----------|-------------------|---------------|------------------------------|------------------------------|------------|--------------------------|------------------------|-----------------------------------|
| 1         | 25-Apr-14         | 73.9          | 7,742                        | 6,154                        | 5,244      | 168,065                  | 6,369                  | N/A                               |
| 2         | 26-Apr-14         | 37.8          | 8,359                        | 6,913                        | 4,875      | 3,700                    | 4,799                  | N/A                               |
| 3         | 28-Apr-14         | 77.1          | 7,615                        | 6,316                        | 4,853      | 235,625                  | 6,164                  | N/A                               |
| 4         | 29-Apr-14         | 76.7          | 7,712                        | 5,936                        | 4,414      | 235,635                  | 6,355                  | N/A                               |
| 5         | 30-Apr-14         | 70.1          | 7,336                        | 5,858                        | 5,298      | 145,204                  | 6,677                  | N/A                               |
| 6         | 30-Apr-14         | 74.1          | 7,839                        | 6,610                        | 4,290      | 235,615                  | 6,126                  | N/A                               |
| 7         | 1-May-14          | 68.9          | 7,411                        | 6,170                        | 4,406      | 182,870                  | 6,518                  | N/A                               |
| 8         | 1-May-14          | 75.6          | 7,265                        | 5,935                        | 4,851      | 165,385                  | 6,624                  | N/A                               |
| 9         | 1-May-14          | 77.0          | 7,706                        | 5,985                        | 5,032      | 191,535                  | 6,690                  | N/A                               |
| 10        | 2-May-14          | 78.4          | 7,683                        | 6,037                        | 4,481      | 235,610                  | 6,055                  | N/A                               |
| 11        | 2-May-14          | 80.6          | 7,725                        | 5,804                        | 4,617      | 235,625                  | 6,046                  | N/A                               |
| 12        | 2-May-14          | 77.3          | 7,716                        | 6,028                        | 5,105      | 132,580                  | 6,409                  | N/A                               |
| 13        | 2-May-14          | 79.3          | 7,518                        | 6,142                        | 4,806      | 235,710                  | 6,118                  | N/A                               |
| 14        | 2-May-14          | 73.3          | 7,386                        | 5,954                        | 4,738      | 235,620                  | 6,015                  | N/A                               |
| 15        | 3-May-14          | 77.5          | 7,328                        | 6,234                        | 5,029      | 234,925                  | 5,979                  | N/A                               |
| 16        | 3-May-14          | 76.1          | 7,540                        | 5,949                        | 4,812      | 161,630                  | 6,681                  | N/A                               |
| 17        | 3-May-14          | 77.1          | 7,262                        | 5,917                        | 4,242      | 235,620                  | 5,967                  | N/A                               |
| 18        | 4-May-14          | 78.8          | 7,305                        | 5,702                        | 4,838      | 226,325                  | 5,952                  | N/A                               |
| 19        | 4-May-14          | 69.6          | 7,867                        | 5,896                        | 4,422      | 200,310                  | 6,338                  | N/A                               |
| 20        | 4-May-14          | 72.2          | 7,676                        | 5,840                        | 4,726      | 219,965                  | 6,424                  | N/A                               |
| 21        | 4-May-14          | 73.3          | 7,340                        | 5,894                        | 4,794      | 156,660                  | 6,396                  | N/A                               |
| 22        | 5-May-14          | 75.2          | 7,010                        | 5,937                        | 4,754      | 235,595                  | 5,934                  | N/A                               |
| 23        | 5-May-14          | 76.6          | 7,305                        | 5,786                        | 4,658      | 228,405                  | 5,894                  | N/A                               |
| 24        | 5-May-14          | 76.6          | 7,305                        | 5,786                        | 4,658      | 228,405                  | 5,894                  | N/A                               |
| 25        | 5-May-14          | 71.6          | 7,289                        | 5,796                        | 5,608      | 219,465                  | 5,965                  | N/A                               |
| 26        | 6-May-14          | 73.9          | 7,200                        | 5,911                        | 4,758      | 199,210                  | 6,195                  | N/A                               |
| 27        | 6-May-14          | 74.5          | 7,234                        | 5,882                        | 4,729      | 235,620                  | 5,835                  | N/A                               |
| 28        | 6-May-14          | 75.5          | 7,266                        | 6,825                        | 5,434      | 175,600                  | 6,128                  | N/A                               |
| 29        | 6-May-14          | 74.6          | 7,513                        | 6,961                        | 4,838      | 235,595                  | 5,952                  | N/A                               |
| 30        | 7-May-14          | 75.0          | 7,158                        | 7,374                        | 5,587      | 199,250                  | 6,270                  | N/A                               |
| 31        | 7-May-14          | 73.7          | 7,150                        | 6,160                        | 4,597      | 125,885                  | 5,322                  | N/A                               |
| 32        | 9-May-14          | 71.8          | 7,448                        | 6,852                        | 4,907      | 116,510                  | 5,910                  | N/A                               |
| 33        | 9-May-14          | 78.1          | 7,569                        | 6,863                        | 5,213      | 240,045                  | 6,010                  | N/A                               |
| 34        | 10-May-14         | 77.8          | 7,363                        | 7,043                        | 5,091      | 235,625                  | 5,743                  | N/A                               |
| 35        | 10-May-14         | 77.1          | 7,544                        | 6,496                        | 5,170      | 235,785                  | 5,785                  | N/A                               |
| 36        | 10-May-14         | 80.6          | 7,315                        | 7,152                        | 5,162      | 234,465                  | 5,914                  | N/A                               |
| 37        | 10-May-14         | 78.6          | 7,290                        | 6,650                        | 5,231      | 202,155                  | 5,998                  | N/A                               |
|           | AVG=              | 74.5          | 7,467                        | 6,236                        | 4,872      | 7,421,829                | 225,451                | TOTAL                             |

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## EXHIBIT 3

| LITHOLOGY/ FORMATION                | TOP DEPTH (TVD) | BOTTOM DEPTH (TVD) | TOP DEPTH (MD) | BOTTOM DEPTH (MD) |
|-------------------------------------|-----------------|--------------------|----------------|-------------------|
|                                     | From Surface    | From Surface       | From Surface   | From Surface      |
| Fresh Water                         | 372'            | NA                 | 372'           | NA                |
| Shale/Siltstone                     | 0               | 447                | 0              | 447               |
| Sandstone                           | est. 447        | 467                | est. 447       | 467               |
| Shale/Siltstone                     | est. 467        | 687                | est. 467       | 687               |
| Sandstone                           | est. 687        | 727                | est. 687       | 727               |
| Shale                               | est. 727        | 827                | est. 727       | 827               |
| Sandstone                           | est. 827        | 887                | est. 827       | 887               |
| Shale                               | est. 887        | 1,127              | est. 887       | 1,127             |
| Sandstone                           | est. 1127       | 1,207              | est. 1127      | 1,207             |
| Shale                               | est. 1207       | 1,787              | est. 1207      | 1,787             |
| Sandstone/Siltstone                 | est. 1787       | 1,907              | est. 1787      | 1,907             |
| Sandstone/Siltstone with trace coal | est. 1907       | 1,967              | est. 1907      | 1,967             |
| Shale                               | est. 1967       | 2,410              | est. 1967      | 2,410             |
| Big Lime                            | 2,410           | 2,491              | 2,410          | 2,491             |
| Big Injun                           | 2,491           | 2,700              | 2,491          | 2,700             |
| Gantz Sand                          | 2,700           | 2,854              | 2,700          | 2,854             |
| Fifty Foot Sandstone                | 2,854           | 3,060              | 2,854          | 3,060             |
| Gordon                              | 3,060           | 3,401              | 3,060          | 3,401             |
| Fifth Sandstone                     | 3,401           | 3,478              | 3,401          | 3,478             |
| Bayard                              | 3,478           | 3,745              | 3,478          | 3,745             |
| Warren                              | 3,745           | 4,049              | 3,745          | 4,049             |
| Speechley                           | 4,049           | 4,234              | 4,049          | 4,234             |
| Baltown                             | 4,234           | 4,869              | 4,234          | 4,869             |
| Bradford                            | 4,869           | 5,328              | 4,869          | 5,328             |
| Benson                              | 5,328           | 5,581              | 5,328          | 5,581             |
| Alexander                           | 5,581           | 5,803              | 5,581          | 5,803             |
| Elk                                 | 5,803           | 6,324              | 5,803          | 6,325             |
| Rhinestreet                         | 6,324           | 6,855              | 6,325          | 6,855             |
| Sycamore                            | 6,855           | 7,014              | 6,855          | 7,028             |
| Middlesex                           | 7,014           | 7,159              | 7,028          | 7,199             |
| Burkett                             | 7,159           | 7,192              | 7,199          | 7,242             |
| Tully                               | 7,192           | 7,294              | 7,242          | 7,408             |
| Marcellus                           | 7,294           | NA                 | 7,408          | NA                |

\*Please note Antero determines formation tops based on mud logs that are only run on one well on a multi-well pad. The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.

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Antero Resources  
 Cross Unit 2H  
 Doddridge County WV  
 Northing: 14230769.12  
 Easting: 1736361.60  
 As Drilled

**WELL DETAILS: Cross Unit 2H**

|      |      |             |              |                                 |
|------|------|-------------|--------------|---------------------------------|
| ±U/S | ±E/W | Northing    | Ground Level | 1322.0                          |
| 0.0  | 0.0  | 14230769.12 | Latitude     | 39° 11' 18.711860" 39' 40.988 W |
|      |      |             | Longitude    | 80° 1' 58.111860" 80' 1.988 W   |
|      |      |             | SDI          |                                 |

**PROJECT DETAILS: Doddridge County, WV**

Geologic System: Unconformal Troughing Member (US Survey Feet)  
 Datum: NAD 1983 (NAD83) (CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Zone 17N (84 W to 78 W)  
 System Datum: Mean Sea Level

**REFERENCE INFORMATION**

Customer (N/A) Reference: Well/Comp Unit 2H, Original Wellpath, V0  
 Title: Cross Unit 2H, Original Wellpath, As Drilled V0  
 Author: (N/A)  
 Date: 11/20/13  
 Revision: (N/A)  
 Project: (N/A)  
 Location: (N/A)  
 Scale: (N/A)

**Scientific Drilling**

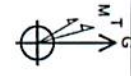
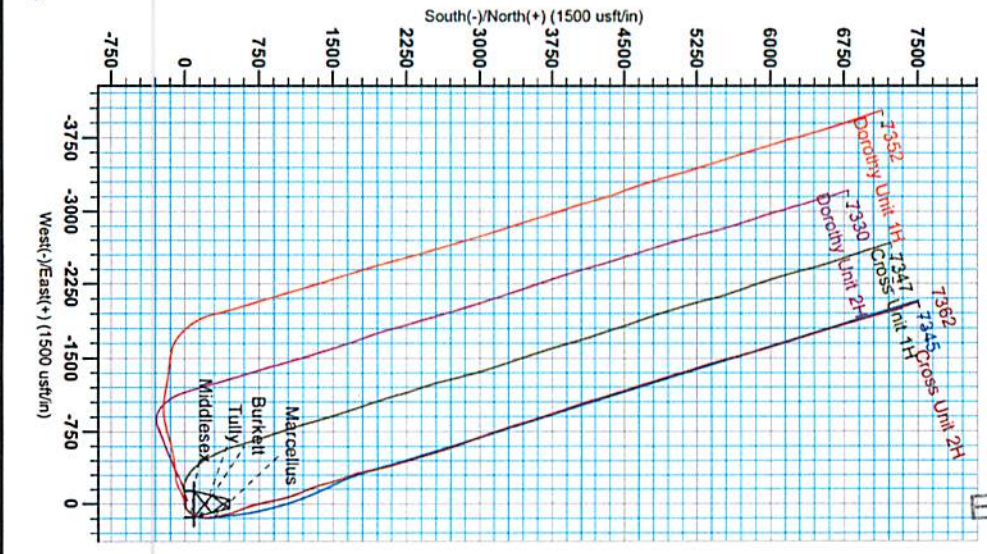
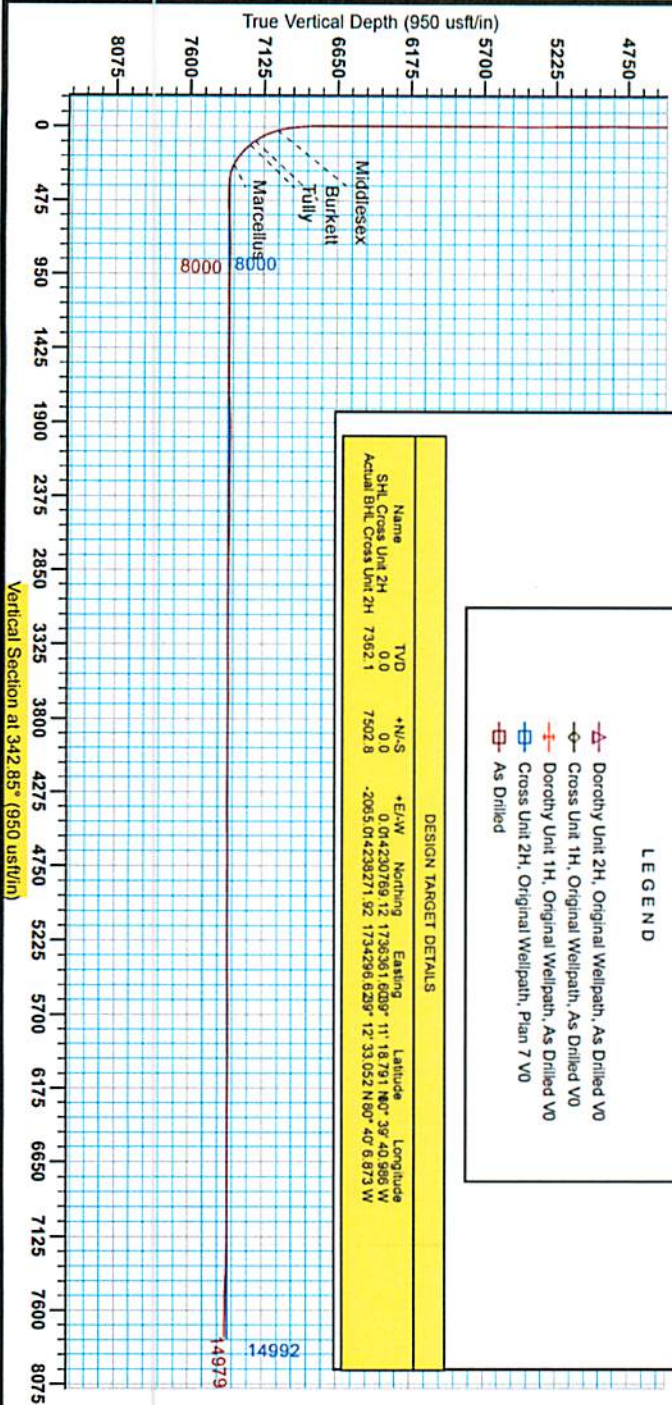
Genie Lightfoot  
 Scientific Drilling  
 421 South Eagle Lane  
 Oklahoma City Oklahoma  
 405-787-3663

**LEGEND**

- ▲ Dorothy Unit 2H, Original Wellpath, As Drilled V0
- ◊ Cross Unit 1H, Original Wellpath, As Drilled V0
- ◆ Dorothy Unit 1H, Original Wellpath, As Drilled V0
- ◓ Cross Unit 2H, Original Wellpath, Plan 7 V0
- ⊖ As Drilled

**DESIGN TARGET DETAILS**

| Name                      | TVD    | +N/S   | +E/W     | Northing    | Easting    | Latitude                    | Longitude         |
|---------------------------|--------|--------|----------|-------------|------------|-----------------------------|-------------------|
| S.H. Cross Unit 2H        | 0.0    | 0.0    | 0.0      | 14230769.12 | 1736361.60 | 39° 11' 18.711860"          | 80° 1' 58.111860" |
| Actual B.H. Cross Unit 2H | 7362.1 | 7502.8 | -2065.01 | 4238271.92  | 1734298.62 | 33° 05' 2 N 80° 40' 6.873 W |                   |



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Vertical Section at 342.85° (950 usft/in)



17.06240



## Antero Resources

Doddridge County WV  
Stewart Pad  
Cross Unit 2H  
Original Wellpath

Design: As Drilled

## EOW Completion Report

27 March, 2014

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EOW Completion Report



|                  |                     |                                     |                                   |
|------------------|---------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | Antero Resources    | <b>Local Co-ordinate Reference:</b> | Well Cross Unit 2H                |
| <b>Project:</b>  | Doddridge County WV | <b>TVD Reference:</b>               | 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Site:</b>     | Stewart Pad         | <b>MD Reference:</b>                | 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Well:</b>     | Cross Unit 2H       | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | Original Wellpath   | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | As Drilled          | <b>Database:</b>                    | Oklahoma District                 |

|                    |  |                      |                |
|--------------------|--|----------------------|----------------|
| <b>Project</b>     | Doddridge County WV, McClellan District      |                      |                |
| <b>Map System:</b> | Universal Transverse Mercator (US Survey Fee | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | NAD 1927 (NADCON CONUS)                      |                      |                |
| <b>Map Zone:</b>   | Zone 17N (84 W to 78 W)                      |                      |                |

|                              |             |                     |                    |                          |                  |
|------------------------------|-------------|---------------------|--------------------|--------------------------|------------------|
| <b>Site</b>                  | Stewart Pad |                     |                    |                          |                  |
| <b>Site Position:</b>        |             | <b>Northing:</b>    | 14,230,768.62 usft | <b>Latitude:</b>         | 39° 11' 18.788 N |
| <b>From:</b>                 | Map         | <b>Easting:</b>     | 1,736,331.61 usft  | <b>Longitude:</b>        | 80° 39' 41.367 W |
| <b>Position Uncertainty:</b> | 0.0 usft    | <b>Slot Radius:</b> | 13-3/16"           | <b>Grid Convergence:</b> | 0.21 °           |

|                             |                          |          |                            |                    |                      |                  |
|-----------------------------|--------------------------|----------|----------------------------|--------------------|----------------------|------------------|
| <b>Well</b>                 | Cross Unit 2H, Marcellus |          |                            |                    |                      |                  |
| <b>Well Position</b>        | <b>+N/-S</b>             | 0.0 usft | <b>Northing:</b>           | 14,230,769.12 usft | <b>Latitude:</b>     | 39° 11' 18.791 N |
|                             | <b>+E/-W</b>             | 0.0 usft | <b>Easting:</b>            | 1,736,361.60 usft  | <b>Longitude:</b>    | 80° 39' 40.986 W |
| <b>Position Uncertainty</b> |                          | 2.0 usft | <b>Wellhead Elevation:</b> | 1,345.0 usft       | <b>Ground Level:</b> | 1,332.0 usft     |

|                 |                   |  |  |  |  |
|-----------------|-------------------|--|--|--|--|
| <b>Wellbore</b> | Original Wellpath |  |  |  |  |
|-----------------|-------------------|--|--|--|--|

| Magnetics | Model | Name     | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|-----------|-------|----------|-------------|-----------------|---------------|---------------------|
|           |       | IGRF2010 | 11/5/2013   | -8.51           | 66.78         | 52,302              |

|               |            |  |  |  |  |
|---------------|------------|--|--|--|--|
| <b>Design</b> | As Drilled |  |  |  |  |
|---------------|------------|--|--|--|--|

|                          |     |                                |                     |                      |                      |
|--------------------------|-----|--------------------------------|---------------------|----------------------|----------------------|
| <b>Audit Notes:</b>      |     |                                |                     |                      |                      |
| <b>Version:</b>          | 1.0 | <b>Phase:</b>                  | ACTUAL              | <b>Tie On Depth:</b> | 0.0                  |
| <b>Vertical Section:</b> |     | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |
|                          |     | 0.0                            | 0.0                 | 0.0                  | 342.85               |

| <b>Survey Program</b> | Date 3/27/2014 |  |                     |  |  |
|-----------------------|----------------|--|---------------------|--|--|
| From (usft)           | To (usft)      | Survey (Wellbore)                        | Tool Name           | Description  |  |
| 109.5                 | 6,734.1        | Survey #4 Final Gyro (Original Wellpath) | SDI Standard Keeper | Scientific Drilling Intl. Standard Wireline Keeper |  |
| 6,734.1               | 14,979.0       | Survey #5 MWD (Original Wellpath)        | SDI MWD             | Scientific Drilling Intl. MWD - Standard ver 1.0.1 |  |

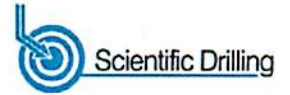
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | V. Sec (usft) | DLeg (°/100usft) |
|-----------|---------|-------------------|------------|------------|------------|---------------|------------------|
| 0.0       | 0.00    | 0.00              | 0.0        | 0.0        | 0.0        | 0.0           | 0.00             |
| 109.5     | 0.38    | 83.23             | 109.5      | 0.0        | 0.4        | -0.1          | 0.35             |
| 209.5     | 0.28    | 81.09             | 209.5      | 0.1        | 0.9        | -0.2          | 0.10             |
| 309.5     | 0.21    | 83.16             | 309.5      | 0.2        | 1.4        | -0.2          | 0.07             |
| 409.5     | 0.21    | 123.62            | 409.5      | 0.1        | 1.7        | -0.4          | 0.15             |
| 509.5     | 0.17    | 83.59             | 509.5      | 0.0        | 2.0        | -0.6          | 0.14             |
| 609.5     | 0.16    | 132.73            | 609.5      | -0.1       | 2.2        | -0.7          | 0.14             |
| 709.5     | 0.19    | 115.69            | 709.5      | -0.2       | 2.5        | -1.0          | 0.06             |
| 809.5     | 0.17    | 165.12            | 809.5      | -0.4       | 2.7        | -1.2          | 0.15             |
| 909.5     | 0.18    | 133.01            | 909.5      | -0.7       | 2.8        | -1.5          | 0.10             |
| 1,009.5   | 0.19    | 164.99            | 1,009.5    | -1.0       | 3.0        | -1.8          | 0.10             |

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EOW Completion Report



|                                     |   |
|-------------------------------------|---|
| <b>Company:</b> Antero Resources    | <b>Local Co-ordinate Reference:</b> Well Cross Unit 2H  |
| <b>Project:</b> Doddridge County WV | <b>TVD Reference:</b> 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Site:</b> Stewart Pad            | <b>MD Reference:</b> 1332' GL + 22.5' RKB @ 1354.5usft  |
| <b>Well:</b> Cross Unit 2H          | <b>North Reference:</b> Grid                            |
| <b>Wellbore:</b> Original Wellpath  | <b>Survey Calculation Method:</b> Minimum Curvature     |
| <b>Design:</b> As Drilled           | <b>Database:</b> Oklahoma District                      |

| Survey    |         |                   |            |            |            |               |                  |  |  |
|-----------|---------|-------------------|------------|------------|------------|---------------|------------------|--|--|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | V. Sec (usft) | DLeg (°/100usft) |  |  |
| 1,109.5   | 0.19    | 129.21            | 1,109.5    | -1.2       | 3.2        | -2.1          | 0.12             |  |  |
| 1,209.5   | 0.16    | 170.64            | 1,209.5    | -1.5       | 3.3        | -2.4          | 0.13             |  |  |
| 1,309.5   | 0.24    | 140.22            | 1,309.5    | -1.8       | 3.5        | -2.7          | 0.13             |  |  |
| 1,409.5   | 0.12    | 142.44            | 1,409.5    | -2.0       | 3.7        | -3.0          | 0.12             |  |  |
| 1,509.5   | 0.25    | 148.07            | 1,509.5    | -2.3       | 3.8        | -3.3          | 0.13             |  |  |
| 1,609.5   | 0.26    | 143.57            | 1,609.5    | -2.6       | 4.1        | -3.7          | 0.02             |  |  |
| 1,709.5   | 0.40    | 143.03            | 1,709.5    | -3.1       | 4.4        | -4.3          | 0.14             |  |  |
| 1,809.5   | 0.32    | 125.33            | 1,809.5    | -3.6       | 4.9        | -4.8          | 0.14             |  |  |
| 1,909.5   | 0.31    | 138.09            | 1,909.5    | -3.9       | 5.3        | -5.3          | 0.07             |  |  |
| 2,009.5   | 0.42    | 123.84            | 2,009.5    | -4.3       | 5.8        | -5.8          | 0.14             |  |  |
| 2,109.5   | 0.29    | 128.25            | 2,109.5    | -4.7       | 6.3        | -6.3          | 0.13             |  |  |
| 2,209.5   | 0.48    | 126.28            | 2,209.5    | -5.1       | 6.8        | -6.9          | 0.19             |  |  |
| 2,309.5   | 0.35    | 125.66            | 2,309.5    | -5.5       | 7.4        | -7.4          | 0.13             |  |  |
| 2,409.5   | 0.38    | 123.42            | 2,409.5    | -5.9       | 7.9        | -7.9          | 0.03             |  |  |
| 2,509.5   | 0.22    | 106.04            | 2,509.5    | -6.1       | 8.4        | -8.3          | 0.18             |  |  |
| 2,609.5   | 0.14    | 124.92            | 2,609.5    | -6.2       | 8.7        | -8.5          | 0.10             |  |  |
| 2,709.5   | 0.17    | 86.60             | 2,709.5    | -6.3       | 8.9        | -8.6          | 0.11             |  |  |
| 2,809.5   | 0.02    | 17.45             | 2,809.5    | -6.3       | 9.1        | -8.7          | 0.16             |  |  |
| 2,909.5   | 0.09    | 260.41            | 2,909.5    | -6.3       | 9.0        | -8.6          | 0.10             |  |  |
| 3,009.5   | 0.09    | 271.99            | 3,009.5    | -6.3       | 8.8        | -8.6          | 0.02             |  |  |
| 3,109.5   | 0.16    | 333.85            | 3,109.5    | -6.1       | 8.7        | -8.4          | 0.14             |  |  |
| 3,209.5   | 0.09    | 353.69            | 3,209.5    | -5.9       | 8.6        | -8.2          | 0.08             |  |  |
| 3,309.5   | 0.03    | 301.57            | 3,309.5    | -5.8       | 8.6        | -8.1          | 0.08             |  |  |
| 3,409.5   | 0.08    | 276.40            | 3,409.5    | -5.8       | 8.5        | -8.1          | 0.05             |  |  |
| 3,509.5   | 0.04    | 42.07             | 3,509.5    | -5.8       | 8.5        | -8.0          | 0.11             |  |  |
| 3,609.5   | 0.12    | 295.00            | 3,609.5    | -5.7       | 8.4        | -7.9          | 0.14             |  |  |
| 3,709.5   | 0.17    | 312.39            | 3,709.5    | -5.6       | 8.2        | -7.7          | 0.07             |  |  |
| 3,809.5   | 0.15    | 322.84            | 3,809.5    | -5.4       | 8.0        | -7.5          | 0.04             |  |  |
| 3,909.5   | 0.08    | 22.16             | 3,909.5    | -5.2       | 7.9        | -7.3          | 0.13             |  |  |
| 4,009.5   | 0.10    | 231.90            | 4,009.5    | -5.2       | 7.9        | -7.3          | 0.17             |  |  |
| 4,109.5   | 0.24    | 300.80            | 4,109.5    | -5.1       | 7.7        | -7.2          | 0.22             |  |  |
| 4,209.5   | 0.12    | 294.20            | 4,209.5    | -5.0       | 7.4        | -6.9          | 0.12             |  |  |
| 4,309.5   | 0.15    | 280.35            | 4,309.5    | -4.9       | 7.2        | -6.8          | 0.04             |  |  |
| 4,409.5   | 0.34    | 252.79            | 4,409.5    | -5.0       | 6.7        | -6.8          | 0.22             |  |  |
| 4,509.5   | 0.56    | 251.17            | 4,509.5    | -5.2       | 6.0        | -6.8          | 0.22             |  |  |
| 4,609.5   | 0.83    | 247.31            | 4,609.5    | -5.7       | 4.9        | -6.9          | 0.27             |  |  |
| 4,709.5   | 1.11    | 241.06            | 4,709.4    | -6.4       | 3.4        | -7.1          | 0.30             |  |  |
| 4,809.5   | 1.18    | 246.66            | 4,809.4    | -7.3       | 1.6        | -7.4          | 0.13             |  |  |
| 4,909.5   | 1.20    | 243.35            | 4,909.4    | -8.2       | -0.3       | -7.7          | 0.07             |  |  |
| 5,009.5   | 0.55    | 281.51            | 5,009.4    | -8.5       | -1.7       | -7.7          | 0.84             |  |  |
| 5,109.5   | 2.65    | 32.60             | 5,109.4    | -6.5       | -1.0       | -5.9          | 2.89             |  |  |
| 5,209.5   | 4.63    | 63.43             | 5,209.2    | -2.8       | 3.9        | -3.8          | 2.72             |  |  |
| 5,309.5   | 5.61    | 73.47             | 5,308.8    | 0.4        | 12.2       | -3.0          | 1.32             |  |  |
| 5,409.5   | 4.05    | 76.93             | 5,408.4    | 2.6        | 20.3       | -3.5          | 1.59             |  |  |

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EOW Completion Report



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| <b>Company:</b> Antero Resources    | <b>Local Co-ordinate Reference:</b> Well Cross Unit 2H  |
| <b>Project:</b> Doddridge County WV | <b>TVD Reference:</b> 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Site:</b> Stewart Pad            | <b>MD Reference:</b> 1332' GL + 22.5' RKB @ 1354.5usft  |
| <b>Well:</b> Cross Unit 2H          | <b>North Reference:</b> Grid                            |
| <b>Wellbore:</b> Original Wellpath  | <b>Survey Calculation Method:</b> Minimum Curvature     |
| <b>Design:</b> As Drilled           | <b>Database:</b> Oklahoma District                      |

| Survey           |         |                   |            |            |            |               |                  |  |
|------------------|---------|-------------------|------------|------------|------------|---------------|------------------|--|
| MD (usft)        | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | V. Sec (usft) | DLeg (°/100usft) |  |
| 5,509.5          | 3.01    | 79.72             | 5,508.2    | 3.9        | 26.3       | -4.0          | 1.05             |  |
| 5,609.5          | 2.27    | 73.34             | 5,608.1    | 4.9        | 30.8       | -4.4          | 0.80             |  |
| 5,709.5          | 1.44    | 80.72             | 5,708.1    | 5.7        | 34.0       | -4.6          | 0.86             |  |
| 5,809.5          | 0.83    | 88.23             | 5,808.0    | 5.9        | 35.9       | -4.9          | 0.63             |  |
| 5,909.5          | 0.57    | 100.41            | 5,908.0    | 5.9        | 37.1       | -5.3          | 0.30             |  |
| 6,009.5          | 0.56    | 78.33             | 6,008.0    | 5.9        | 38.1       | -5.6          | 0.22             |  |
| 6,109.5          | 0.40    | 83.44             | 6,108.0    | 6.0        | 38.9       | -5.7          | 0.17             |  |
| 6,209.5          | 0.41    | 71.25             | 6,208.0    | 6.2        | 39.6       | -5.8          | 0.09             |  |
| 6,309.5          | 0.26    | 128.87            | 6,308.0    | 6.1        | 40.1       | -6.0          | 0.35             |  |
| 6,409.5          | 0.36    | 62.77             | 6,408.0    | 6.1        | 40.6       | -6.1          | 0.35             |  |
| 6,509.5          | 0.15    | 80.29             | 6,508.0    | 6.3        | 41.0       | -6.1          | 0.22             |  |
| 6,609.5          | 0.14    | 96.25             | 6,608.0    | 6.3        | 41.3       | -6.1          | 0.04             |  |
| 6,709.5          | 0.16    | 59.87             | 6,708.0    | 6.4        | 41.5       | -6.1          | 0.10             |  |
| 6,734.1          | 0.14    | 112.74            | 6,732.6    | 6.4        | 41.6       | -6.2          | 0.55             |  |
| 6,758.0          | 0.62    | 65.27             | 6,756.5    | 6.4        | 41.7       | -6.2          | 2.24             |  |
| 6,790.0          | 2.99    | 45.15             | 6,788.5    | 7.1        | 42.4       | -5.7          | 7.55             |  |
| 6,821.0          | 5.80    | 46.29             | 6,819.4    | 8.7        | 44.2       | -4.7          | 9.07             |  |
| 6,852.0          | 9.58    | 46.29             | 6,850.1    | 11.6       | 47.1       | -2.8          | 12.19            |  |
| 6,882.0          | 12.75   | 47.26             | 6,879.5    | 15.6       | 51.4       | -0.3          | 10.58            |  |
| 6,912.0          | 15.65   | 49.01             | 6,908.6    | 20.5       | 56.9       | 2.8           | 9.77             |  |
| 6,943.0          | 18.91   | 51.30             | 6,938.2    | 26.4       | 64.0       | 6.3           | 10.74            |  |
| 6,974.0          | 22.42   | 50.86             | 6,967.2    | 33.2       | 72.5       | 10.4          | 11.33            |  |
| 7,004.0          | 24.71   | 47.96             | 6,994.7    | 41.0       | 81.6       | 15.2          | 8.55             |  |
| 7,035.0          | 25.59   | 41.90             | 7,022.8    | 50.4       | 90.8       | 21.3          | 8.78             |  |
| 7,051.0          | 26.19   | 38.52             | 7,037.2    | 55.7       | 95.3       | 25.1          | 9.96             |  |
| <b>Middlesex</b> |         |                   |            |            |            |               |                  |  |
| 7,066.0          | 26.82   | 35.48             | 7,050.6    | 61.1       | 99.4       | 29.0          | 9.96             |  |
| 7,096.0          | 28.14   | 28.89             | 7,077.2    | 72.8       | 106.7      | 38.1          | 11.04            |  |
| 7,126.0          | 30.25   | 22.91             | 7,103.4    | 85.9       | 113.1      | 48.8          | 11.99            |  |
| 7,156.0          | 32.92   | 19.91             | 7,129.0    | 100.5      | 118.8      | 61.0          | 10.32            |  |
| 7,186.0          | 35.53   | 17.73             | 7,153.8    | 116.5      | 124.2      | 74.7          | 9.61             |  |
| 7,217.0          | 38.60   | 15.44             | 7,178.5    | 134.4      | 129.6      | 90.2          | 10.86            |  |
| 7,222.0          | 39.15   | 14.95             | 7,182.4    | 137.5      | 130.4      | 92.9          | 12.56            |  |
| <b>Burkett</b>   |         |                   |            |            |            |               |                  |  |
| 7,247.0          | 41.91   | 12.65             | 7,201.4    | 153.2      | 134.2      | 106.8         | 12.56            |  |
| 7,265.0          | 43.96   | 10.44             | 7,214.6    | 165.2      | 136.7      | 117.6         | 14.12            |  |
| <b>Tully</b>     |         |                   |            |            |            |               |                  |  |
| 7,278.0          | 45.46   | 8.94              | 7,223.8    | 174.3      | 138.2      | 125.7         | 14.12            |  |
| 7,309.0          | 47.57   | 3.49              | 7,245.2    | 196.6      | 140.6      | 146.4         | 14.45            |  |
| 7,339.0          | 50.32   | 358.64            | 7,264.9    | 219.2      | 141.0      | 167.9         | 15.25            |  |
| 7,370.0          | 53.02   | 354.35            | 7,284.1    | 243.5      | 139.5      | 191.5         | 13.91            |  |
| 7,401.0          | 56.98   | 351.18            | 7,301.9    | 268.6      | 136.3      | 216.8         | 15.27            |  |
| 7,431.0          | 62.61   | 349.69            | 7,317.0    | 294.2      | 132.0      | 242.2         | 19.25            |  |
| <b>Marcellus</b> |         |                   |            |            |            |               |                  |  |
| 7,462.0          | 69.94   | 349.78            | 7,329.4    | 322.1      | 127.0      | 270.3         | 23.65            |  |

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EOW Completion Report



|                  |                     |                                     |                                   |
|------------------|---------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | Antero Resources    | <b>Local Co-ordinate Reference:</b> | Well Cross Unit 2H                |
| <b>Project:</b>  | Doddridge County WV | <b>TVD Reference:</b>               | 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Site:</b>     | Stewart Pad         | <b>MD Reference:</b>                | 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Well:</b>     | Cross Unit 2H       | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | Original Wellpath   | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | As Drilled          | <b>Database:</b>                    | Oklahoma District                 |

Survey

| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | E/W (usft) | V. Sec (usft) | DLeg (°/100usft) |
|-----------|---------|-------------------|------------|------------|------------|---------------|------------------|
| 7,476.0   | 73.47   | 350.40            | 7,333.8    | 335.2      | 124.7      | 283.5         | 25.56            |
| 7,514.0   | 82.22   | 347.93            | 7,341.8    | 371.6      | 117.7      | 320.4         | 23.89            |
| 7,609.0   | 87.76   | 344.33            | 7,350.1    | 463.5      | 95.0       | 414.8         | 6.95             |
| 7,703.0   | 92.59   | 337.87            | 7,349.8    | 552.3      | 64.6       | 508.7         | 8.58             |
| 7,798.0   | 94.18   | 341.25            | 7,344.2    | 641.2      | 31.5       | 603.4         | 3.93             |
| 7,893.0   | 93.74   | 344.50            | 7,337.7    | 731.7      | 3.6        | 698.1         | 3.44             |
| 7,988.0   | 87.61   | 349.12            | 7,336.5    | 824.1      | -18.1      | 792.8         | 8.08             |
| 8,082.0   | 87.67   | 347.93            | 7,340.4    | 916.2      | -36.8      | 886.3         | 1.27             |
| 8,177.0   | 87.23   | 345.65            | 7,344.6    | 1,008.6    | -58.5      | 981.0         | 2.44             |
| 8,268.0   | 88.90   | 339.67            | 7,347.7    | 1,095.3    | -85.6      | 1,071.9       | 6.82             |
| 8,360.0   | 91.98   | 336.59            | 7,347.0    | 1,180.7    | -119.8     | 1,163.5       | 4.73             |
| 8,452.0   | 92.59   | 337.65            | 7,343.3    | 1,265.4    | -155.6     | 1,255.0       | 1.33             |
| 8,542.0   | 89.43   | 343.80            | 7,341.7    | 1,350.3    | -185.3     | 1,344.9       | 7.68             |
| 8,634.0   | 89.13   | 343.49            | 7,342.9    | 1,438.6    | -211.2     | 1,436.9       | 0.47             |
| 8,726.0   | 89.52   | 342.31            | 7,344.0    | 1,526.5    | -238.2     | 1,528.8       | 1.35             |
| 8,817.0   | 89.08   | 340.28            | 7,345.1    | 1,612.7    | -267.4     | 1,619.8       | 2.28             |
| 8,909.0   | 92.93   | 339.83            | 7,343.5    | 1,699.1    | -298.8     | 1,711.7       | 4.21             |
| 9,000.0   | 95.06   | 347.67            | 7,337.1    | 1,786.2    | -324.1     | 1,802.4       | 8.91             |
| 9,091.0   | 91.28   | 348.90            | 7,332.1    | 1,875.1    | -342.6     | 1,892.8       | 4.37             |
| 9,183.0   | 88.90   | 346.96            | 7,332.0    | 1,965.1    | -361.8     | 1,984.4       | 3.34             |
| 9,273.0   | 88.37   | 343.62            | 7,334.1    | 2,052.1    | -384.7     | 2,074.3       | 3.76             |
| 9,367.0   | 88.99   | 343.71            | 7,336.3    | 2,142.3    | -411.1     | 2,168.3       | 0.67             |
| 9,462.0   | 89.16   | 342.31            | 7,337.8    | 2,233.1    | -438.9     | 2,263.2       | 1.48             |
| 9,557.0   | 90.13   | 343.10            | 7,338.4    | 2,323.8    | -467.1     | 2,358.2       | 1.32             |
| 9,651.0   | 91.01   | 343.89            | 7,337.5    | 2,414.0    | -493.8     | 2,452.2       | 1.26             |
| 9,746.0   | 88.37   | 342.57            | 7,338.0    | 2,504.9    | -521.2     | 2,547.2       | 3.11             |
| 9,841.0   | 88.99   | 343.45            | 7,340.2    | 2,595.7    | -549.0     | 2,642.2       | 1.13             |
| 9,935.0   | 87.76   | 340.90            | 7,342.8    | 2,685.2    | -577.7     | 2,736.1       | 3.01             |
| 10,030.0  | 89.78   | 341.43            | 7,344.9    | 2,775.1    | -608.4     | 2,831.1       | 2.20             |
| 10,125.0  | 89.50   | 340.11            | 7,345.5    | 2,864.8    | -639.7     | 2,926.0       | 1.42             |
| 10,220.0  | 89.60   | 338.97            | 7,346.2    | 2,953.8    | -672.9     | 3,020.8       | 1.20             |
| 10,314.0  | 90.22   | 340.11            | 7,346.4    | 3,041.8    | -705.7     | 3,114.7       | 1.38             |
| 10,409.0  | 90.04   | 340.99            | 7,346.1    | 3,131.4    | -737.4     | 3,209.6       | 0.95             |
| 10,504.0  | 90.48   | 342.88            | 7,345.7    | 3,221.7    | -766.8     | 3,304.6       | 2.04             |
| 10,599.0  | 90.40   | 342.92            | 7,345.0    | 3,312.5    | -794.8     | 3,399.6       | 0.09             |
| 10,694.0  | 90.57   | 343.27            | 7,344.2    | 3,403.4    | -822.4     | 3,494.6       | 0.41             |
| 10,788.0  | 90.66   | 343.80            | 7,343.2    | 3,493.5    | -849.0     | 3,588.6       | 0.57             |
| 10,883.0  | 89.43   | 341.95            | 7,343.1    | 3,584.3    | -877.0     | 3,683.6       | 2.34             |
| 10,978.0  | 89.19   | 342.53            | 7,344.2    | 3,674.8    | -906.0     | 3,778.5       | 0.66             |
| 11,073.0  | 90.75   | 342.57            | 7,344.3    | 3,765.4    | -934.5     | 3,873.5       | 1.64             |
| 11,168.0  | 88.90   | 340.81            | 7,344.6    | 3,855.6    | -964.3     | 3,968.5       | 2.69             |
| 11,263.0  | 88.72   | 340.55            | 7,346.5    | 3,945.2    | -995.7     | 4,063.4       | 0.33             |
| 11,358.0  | 89.08   | 342.57            | 7,348.4    | 4,035.3    | -1,025.8   | 4,158.4       | 2.16             |
| 11,452.0  | 90.22   | 343.45            | 7,348.9    | 4,125.2    | -1,053.2   | 4,252.4       | 1.53             |

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EOW Completion Report



|                  |                     |                                     |                                   |
|------------------|---------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | Antero Resources    | <b>Local Co-ordinate Reference:</b> | Well Cross Unit 2H                |
| <b>Project:</b>  | Doddridge County WV | <b>TVD Reference:</b>               | 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Site:</b>     | Stewart Pad         | <b>MD Reference:</b>                | 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Well:</b>     | Cross Unit 2H       | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | Original Wellpath   | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | As Drilled          | <b>Database:</b>                    | Oklahoma District                 |

| Survey    |         |                   |            |            |           |               |                  |  |
|-----------|---------|-------------------|------------|------------|-----------|---------------|------------------|--|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | N/S (usft) | EW (usft) | V. Sec (usft) | DLeg (°/100usft) |  |
| 11,548.0  | 90.31   | 343.18            | 7,348.5    | 4,217.2    | -1,080.8  | 4,348.4       | 0.30             |  |
| 11,642.0  | 90.40   | 343.18            | 7,347.9    | 4,307.2    | -1,108.0  | 4,442.4       | 0.10             |  |
| 11,737.0  | 90.48   | 343.62            | 7,347.2    | 4,398.2    | -1,135.1  | 4,537.4       | 0.47             |  |
| 11,832.0  | 91.01   | 344.24            | 7,346.0    | 4,489.5    | -1,161.4  | 4,632.3       | 0.86             |  |
| 11,926.0  | 88.55   | 340.28            | 7,346.3    | 4,579.0    | -1,190.1  | 4,726.3       | 4.96             |  |
| 12,021.0  | 89.60   | 341.87            | 7,347.8    | 4,668.8    | -1,220.9  | 4,821.2       | 2.01             |  |
| 12,116.0  | 90.13   | 343.54            | 7,348.1    | 4,759.5    | -1,249.1  | 4,916.2       | 1.84             |  |
| 12,211.0  | 91.36   | 343.45            | 7,346.8    | 4,850.6    | -1,276.1  | 5,011.2       | 1.30             |  |
| 12,306.0  | 89.60   | 342.39            | 7,346.0    | 4,941.4    | -1,304.0  | 5,106.2       | 2.16             |  |
| 12,401.0  | 90.04   | 343.01            | 7,346.3    | 5,032.1    | -1,332.2  | 5,201.2       | 0.80             |  |
| 12,496.0  | 91.10   | 345.03            | 7,345.4    | 5,123.4    | -1,358.4  | 5,296.2       | 2.40             |  |
| 12,591.0  | 88.72   | 340.46            | 7,345.5    | 5,214.1    | -1,386.6  | 5,391.1       | 5.42             |  |
| 12,686.0  | 92.15   | 343.01            | 7,344.8    | 5,304.3    | -1,416.3  | 5,486.1       | 4.50             |  |
| 12,781.0  | 91.54   | 343.54            | 7,341.8    | 5,395.2    | -1,443.7  | 5,581.0       | 0.85             |  |
| 12,876.0  | 89.87   | 344.15            | 7,340.6    | 5,486.5    | -1,470.1  | 5,676.0       | 1.87             |  |
| 12,971.0  | 90.31   | 345.21            | 7,340.4    | 5,578.1    | -1,495.2  | 5,771.0       | 1.21             |  |
| 13,066.0  | 89.43   | 345.65            | 7,340.7    | 5,670.0    | -1,519.1  | 5,865.9       | 1.04             |  |
| 13,161.0  | 89.43   | 345.73            | 7,341.6    | 5,762.1    | -1,542.6  | 5,960.8       | 0.08             |  |
| 13,256.0  | 89.43   | 343.98            | 7,342.6    | 5,853.8    | -1,567.4  | 6,055.7       | 1.84             |  |
| 13,351.0  | 89.96   | 344.33            | 7,343.1    | 5,945.2    | -1,593.3  | 6,150.7       | 0.67             |  |
| 13,446.0  | 89.52   | 343.54            | 7,343.5    | 6,036.5    | -1,619.6  | 6,245.6       | 0.95             |  |
| 13,540.0  | 88.93   | 343.16            | 7,344.8    | 6,126.5    | -1,646.5  | 6,339.6       | 0.75             |  |
| 13,635.0  | 89.96   | 343.18            | 7,345.7    | 6,217.4    | -1,674.0  | 6,434.6       | 1.08             |  |
| 13,729.0  | 89.87   | 341.95            | 7,345.8    | 6,307.1    | -1,702.2  | 6,528.6       | 1.31             |  |
| 13,823.0  | 90.31   | 342.83            | 7,345.7    | 6,396.7    | -1,730.6  | 6,622.6       | 1.05             |  |
| 13,918.0  | 90.22   | 343.10            | 7,345.2    | 6,487.5    | -1,758.5  | 6,717.6       | 0.30             |  |
| 14,013.0  | 90.02   | 342.92            | 7,345.0    | 6,578.4    | -1,786.2  | 6,812.6       | 0.28             |  |
| 14,107.0  | 88.90   | 342.74            | 7,345.9    | 6,668.2    | -1,814.0  | 6,906.6       | 1.21             |  |
| 14,202.0  | 90.84   | 344.06            | 7,346.1    | 6,759.2    | -1,841.1  | 7,001.6       | 2.47             |  |
| 14,297.0  | 89.08   | 344.50            | 7,346.2    | 6,850.7    | -1,866.9  | 7,096.6       | 1.91             |  |
| 14,391.0  | 89.69   | 345.82            | 7,347.2    | 6,941.5    | -1,890.9  | 7,190.5       | 1.55             |  |
| 14,487.0  | 87.85   | 343.71            | 7,349.3    | 7,034.1    | -1,916.1  | 7,286.4       | 2.92             |  |
| 14,581.0  | 87.76   | 343.62            | 7,352.9    | 7,124.3    | -1,942.6  | 7,380.3       | 0.14             |  |
| 14,677.0  | 88.11   | 342.83            | 7,356.3    | 7,216.1    | -1,970.3  | 7,476.2       | 0.90             |  |
| 14,867.0  | 89.08   | 340.99            | 7,361.0    | 7,396.7    | -2,029.2  | 7,666.2       | 1.09             |  |
| 14,919.0  | 89.87   | 342.31            | 7,361.5    | 7,446.0    | -2,045.6  | 7,718.1       | 2.96             |  |
| 14,979.0  | 89.00   | 340.00            | 7,362.1    | 7,502.8    | -2,065.0  | 7,778.1       | 4.11             |  |

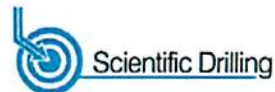
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EOW Completion Report



|                  |                     |                                     |                                   |
|------------------|---------------------|-------------------------------------|-----------------------------------|
| <b>Company:</b>  | Antero Resources    | <b>Local Co-ordinate Reference:</b> | Well Cross Unit 2H                |
| <b>Project:</b>  | Doddridge County WV | <b>TVD Reference:</b>               | 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Site:</b>     | Stewart Pad         | <b>MD Reference:</b>                | 1332' GL + 22.5' RKB @ 1354.5usft |
| <b>Well:</b>     | Cross Unit 2H       | <b>North Reference:</b>             | Grid                              |
| <b>Wellbore:</b> | Original Well path  | <b>Survey Calculation Method:</b>   | Minimum Curvature                 |
| <b>Design:</b>   | As Drilled          | <b>Database:</b>                    | Oklahoma District                 |

Design Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment   |
|-----------------------|-----------------------|-------------------|--------------|-----------|
|                       |                       | +N/-S (usft)      | +E/-W (usft) |           |
| 7,051.0               | 7,037.2               | 55.7              | 95.3         | Middlesex |
| 7,222.0               | 7,182.4               | 137.5             | 130.4        | Burkett   |
| 7,265.0               | 7,214.6               | 165.2             | 136.7        | Tully     |
| 7,431.0               | 7,317.0               | 294.2             | 132.0        | Marcellus |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

|                                |                              |
|--------------------------------|------------------------------|
| Job Start Date:                | 4/25/2014                    |
| Job End Date:                  | 5/9/2014                     |
| State:                         | West Virginia                |
| County:                        | Doddridge                    |
| API Number:                    | 47-017-06240-00-00           |
| Operator Name:                 | Antero Resources Corporation |
| Well Name and Number:          | Cross Unit 2H                |
| Longitude:                     | -80.66138600                 |
| Latitude:                      | 39.18855300                  |
| Datum:                         | NAD27                        |
| Federal/Tribal Well:           | NO                           |
| True Vertical Depth:           | 7,362                        |
| Total Base Water Volume (gal): | 9,221,268                    |
| Total Base Non Water Volume:   | 0                            |

## Hydraulic Fracturing Fluid Composition:

| Trade Name       | Supplier        | Purpose          | Ingredients                       | Chemical Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|------------------|-----------------|------------------|-----------------------------------|---------------------------------|--|--|----------|
| Freshwater       | Republic Energy | Frac Base        | Water                             | 7732-18-5                       | 100.00000  | 91.04913None   |          |
| 40/70 White Sand | US Silica       | Proppant         | Sand                              | 14808-60-7                      | 100.00000  | 5.13891None  |          |
| 20/40 White Sand | US Silica       | Proppant         | Sand                              | 14808-60-7                      | 100.00000  | 2.76324None  |          |
| 100 Mesh         | US Silica       | Proppant         | Sand                              | 14808-60-7                      | 100.00000  | 0.58203None  |          |
| SOS 1545         | Ultrablend      | Guar Gel         | Hydrocarbons                      | 64741-85-1                      | 70.00000   | 0.08238None  |          |
| Plexsick 953     | Chemplex        | Friction Reducer | Water                             | 7732-18-5                       | 35.00000   | 0.01954None  |          |
|                  |                 |                  | Polyacrylamide-co-acrylic acid    | Proprietary                     | 32.00000   | 0.01787None  |          |
|                  |                 |                  | Hydrotreated Petroleum Distillate | 64742-47-8                      | 30.00000   | 0.01675None  |          |
|                  |                 |                  | Alcohol Ethoxylate Surfactants    | Proprietary                     | 8.00000  | 0.00447None  |          |
| HCl Acid 10-15%  | GoFrac          | Acid             | Hydrochloric Acid                 | 7647-01-0                       | 15.00000   | 0.03407None  |          |
| Plexcide 15G     | Chemplex        | Biocide          | Water                             | 7732-18-5                       | 90.00000   | 0.01623None  |          |

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|                   |          |                     |  |             |           |         |      |
|-------------------|----------|---------------------|--|-------------|-----------|---------|------|
|                   |          |                     | Glutaraldehyde                               | 111-30-8    | 14.00000  | 0.00252 | None |
|                   |          |                     | Ethanol                                      | 64-17-5     | 3.00000   | 0.00054 | None |
|                   |          |                     | Alkyl Dimethyl Benzyl Ammonium Chloride      | 68424-85-1  | 3.00000   | 0.00054 | None |
|                   |          |                     | Didecyl Dimethyl Ammonium Chloride           | 7173-51-5   | 3.00000   | 0.00054 | None |
| Plexaid 673       | Chemplex | Scale Inhibitor     | Water  | 7732-18-5   | 85.00000  | 0.01288 | None |
|                   |          |                     | Methyl Alcohol                               | 67-56-1     | 25.00000  | 0.00379 | None |
|                   |          |                     | Sodium Salt of Phosphonodimethylated Diamine | Proprietary | 5.00000   | 0.00076 | None |
| Sodium Persulfate | Chemplex | Active Breaker      | Sodium Persulfate                            | 7775-27-1   | 100.00000 | 0.00163 | None |
| Greenlush         | Chemplex | Cleaner             | Alcohol Ethoxyate Surfactants                | Proprietary | 10.00000  | 0.00099 | None |
| Ferrplex 66       | Chemplex | Iron Control        | Acetic Acid                                  | 64-19-7     | 50.00000  | 0.00025 | None |
|                   |          |                     | Water  | 7732-18-5   | 35.00000  | 0.00017 | None |
|                   |          |                     | Citric Acid                                  | 77-92-9     | 30.00000  | 0.00015 | None |
| Plexhib 256       | Chemplex | Corrosion Inhibitor | Methyl Alcohol                               | 67-56-1     | 70.00000  | 0.00026 | None |
|                   |          |                     | Alcohol Ethoxyate Surfactants                | Proprietary | 30.00000  | 0.00011 | None |
|                   |          |                     | Thiourea-formaldehyde copolymer              | 68527-49-1  | 30.00000  | 0.00011 | None |
|                   |          |                     | n-olefins                                    | Proprietary | 10.00000  | 0.00004 | None |
|                   |          |                     | Propargyl Alcohol                            | 107-19-7    | 8.00000   | 0.00003 | None |
| Plexbreak 145     | Chemplex | Non-Emulsifier      | Water  | 7732-18-5   | 66.00000  | 0.00027 | None |
|                   |          |                     | Ethylene Glycol Monobutyl Ether              | 111-76-2    | 15.00000  | 0.00006 | None |
|                   |          |                     | Methyl Alcohol                               | 67-56-1     | 15.00000  | 0.00006 | None |
|                   |          |                     | Cocamide Diethanolamine Salt                 | 68603-42-9  | 10.00000  | 0.00004 | None |
|                   |          |                     | Diethanolamine                               | 111-42-2    | 5.00000   | 0.00002 | None |

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-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%

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)

RECEIVED  
Office of Oil and Gas  
AUG 03 2015  
WV Department of  
Environmental Protection  
10/23/2015

LATITUDE 39°12'30"

10,314'

541' TO BOTTOM HOLE

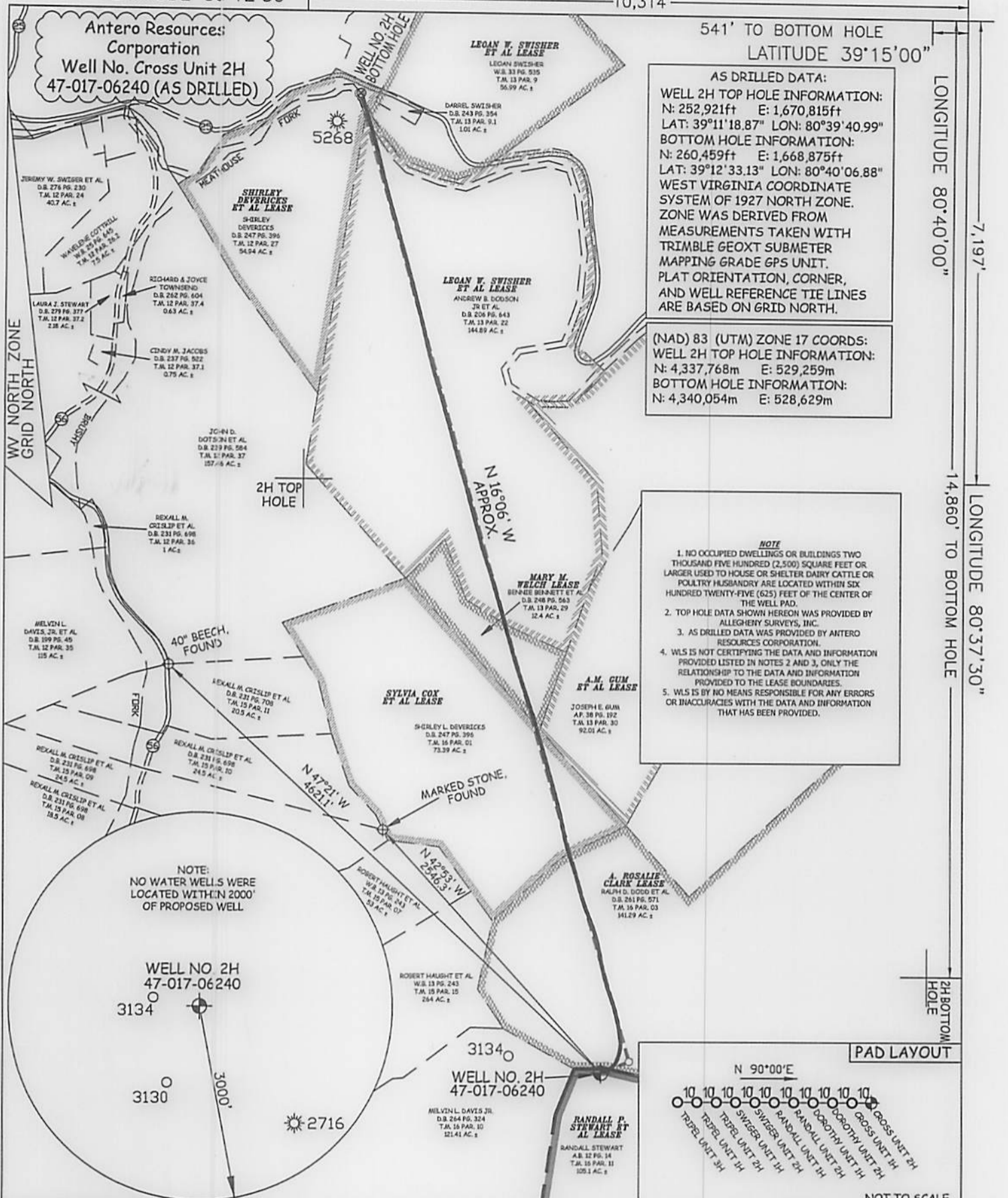
LATITUDE 39°15'00"

LONGITUDE 80°40'00"

7,197'

14,860' TO BOTTOM HOLE

LONGITUDE 80°37'30"



**AS DRILLED DATA:**  
**WELL 2H TOP HOLE INFORMATION:**  
 N: 252,921ft E: 1,670,815ft  
 LAT: 39°11'18.87" LON: 80°39'40.99"  
**BOTTOM HOLE INFORMATION:**  
 N: 260,459ft E: 1,668,875ft  
 LAT: 39°12'33.13" LON: 80°40'06.88"  
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

**(NAD) 83 (UTM) ZONE 17 COORDS:**  
**WELL 2H TOP HOLE INFORMATION:**  
 N: 4,337,768m E: 529,259m  
**BOTTOM HOLE INFORMATION:**  
 N: 4,340,054m E: 528,629m

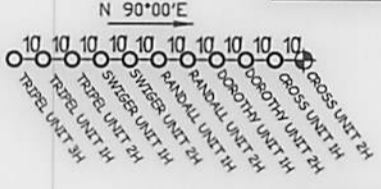
**NOTE**  
 1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.  
 2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.  
 3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.  
 4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.  
 5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

NOTE:  
 NO WATER WELLS WERE LOCATED WITHIN 2000' OF PROPOSED WELL

WELL NO 2H  
 47-017-06240

WELL NO. 2H  
 47-017-06240

PAD LAYOUT



NOT TO SCALE

JOB # 12-118WA  
 DRAWING # CROSS2HAD  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY SUBMETER  
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC  
 P.O. BOX 17  
 PENNSBORO, WV 26415

**LEGEND**  
 - - - - - Surface Owner Boundary Lines +/-  
 - - - - - Interior Surface Tracts +/-  
 x - x - x Existing Fence  
 Found monument, as noted  
 O - - - - - Proposed Well Path  
 O - - - - - As Drilled Well Path

DATE 04/22/15  
 OPERATOR'S WELL # CROSS UNIT #2H

API WELL # 47 - 017 - 06240  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1,361' ORIGINAL - 1,334' AS-DRILLED WATERSHED HEADWATERS MIDDLE ISLAND CREEK  
 QUADRANGLE E NEW MILTON 7.5' DISTRICT NEW MILTON COUNTY DODDRIDGE

SURFACE OWNER RANDALL STEWART ACREAGE 105.1 ACRES +/-  
 OIL & GAS ROYALTY OWNER RANDALL P. STEWART, ET AL.; A. ROSALIE CLARK; SYLVIA COX ET AL.; MARY M. WELCH; LEON W. SWISHER ET AL.; LEON W. SWISHER ET AL.; SHIRLEY DEVERICKS ET AL. LEASE ACREAGE 195 ACRES +/-; 141.46 ACRES +/-; 73 ACRES +/-; 12.4 ACRES +/-; 178.14 ACRES +/-; 56.99 ACRES +/-; 57.475 ACRES +/-

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_  
 PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) (X) AS DRILLED PLUG & ABANDON CLEAN OUT & REPLUG

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,362' TVD 14,979' MD  
 DIANNA STAMPER  
 CT CORPORATION SYSTEM

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313  
 ADDRESS 1615 WYNKOOP STREET DENVER, CO 80202

10/23/2015

COUNTY NAME PERMIT