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WR-35
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WV GEOLOGICAL SURVEY
MORGANTOWN, WV

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

API 47-017-06436 County Doddridge District Central
Quad Pennsboro 7.5' Pad Name Alvadore Field/Pool Name ---
Farm name McCloy, Alvadore, Jr., et ux Well Number Hudkins Unit 2H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop St. 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 4347122m Easting 510124m
Landing Point of Curve Northing 4346863.15m Easting 510668.33m
Bottom Hole Northing 4345198m Easting 511461m

Elevation (ft) 1057' 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 1/30/2014 Date drilling commenced 6/15/2014 Date drilling ceased 10/20/2014
Date completion activities began 12/9/2014 Date completion activities ceased 3/13/2015
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 332' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1546', 1571' Void(s) encountered (Y/N) depths No
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:

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API 47-017 - 06436 Farm name McCloy, Alvadore, Jr., et ux Well number Hudkins Unit 2H

| CASING STRINGS | Hole Size | Casing Size | Depth | New or Used | Grade wt/ft | Basket Depth(s) | Did cement circulate (Y/N) * Provide details below* |
|---------------------------|-----------------|-------------|--------|-------------|-------------|-----------------|--|
| Conductor | 30" | 20" | 40' | New | 106.5# K-55 | N/A | Y |
| Surface | 17- 1/2" | 13- 3/8" | 452' | New | 54.50# J-55 | N/A | Y |
| Coal | | | | | | | |
| Intermediate 1 | 12-1/4" | 9-5/8" | 2549' | New | 36# J-55 | N/A | Y |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 8-3/4" & 8-1/2" | 5-1/2" | 13743' | New | 20# P-110 | N/A | Y |
| Tubing | | 2-3/8" | 6804' | | 4.70# 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 ³ /sks) | Volume (ft ³) | Cement Top (MD) | WOC (hrs) |
|----------------|----------------------|------------------------------|---------------------|------------------------------|---------------------------|--------------------------------|-----------|
| Conductor | Class A | 195 sx | 15.6 | 1.18 | 38 | 0' | 8 Hrs. |
| Surface | Class A | 540 sx | 15.6 | 1.18 | 314 | 0' | 8 Hrs. |
| Coal | | | | | | | |
| Intermediate 1 | Class A | 938 sx | 15.6 | 1.18 | 2549 | 0' | 8 Hrs. |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | Class H | 989 sx (Lead) 1106 sx (Tail) | 14.5 Lead 15.2 Tail | 1.30 Lead 1.86 Tail | 13743 | -500' into Intermediate Casing | 8 Hrs. |
| Tubing | | | | | | | |

Drillers TD (ft) 13747' MD, 6593' TVD (BHL), 6594' (Deepest Point Drilled) Loggers TD (ft) 13699'

Deepest formation penetrated Marcellus Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 6316'

Check all wireline logs run caliper density deviated/directional induction temperature sonic

neutron resistivity gamma ray

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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API 47- 017 - 06436

Farm name McCloy, Alvadore, Jr., et ux

Well number Hudkins Unit 2H

PRODUCING FORMATION(S)

DEPTHS

Marcellus

6448' (TOP)

TVD

6918' (TOP)

MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow

OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3600 psi

Bottom Hole --- psi

DURATION OF TEST --- hrs

OPEN FLOW

Gas

Oil

NGL

Water

GAS MEASURED BY

9431 mcfpd

20 bpd

--- bpd

2 bpd

Estimated Orifice Pilot

LITHOLOGY/
FORMATION

TOP

BOTTOM

TOP

BOTTOM

DEPTH IN FT

DEPTH IN FT

DEPTH IN FT

DEPTH IN FT

DESCRIBE ROCK TYPE AND RECORD QUANTITY AND

NAME TVD

TVD

MD

MD

TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)

0

0

***PLEASE SEE EXHIBIT 3**

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling Company, LP

Address 2640 Reach Rd.

City Williamsport

State PA

Zip 17701

Logging Company STRC

Address 1560 Good Hope Pike

City Clarksburg

State WV

Zip 26301

Cementing Company Nabors Completion & Production Services, Co.

Address 1650 Hackers Creek

City Jane Lew

State WV

Zip 26378

Stimulating Company Baker Hughes

Address 837 Philippi Pike

City Clarksburg

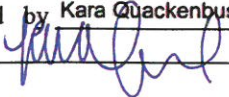
State WV

Zip 26301

Please insert additional pages as applicable.

Completed by Kara Quackenbush

Telephone 303-357-7233

Signature 

Title Permitting Agent

Date 7/21/2015

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

API 47-017-06436 Farm Name McCloy, Alvadore, Jr., et ux Well Number Hudkins Unit 2H

EXHIBIT 1

| Stage No. | Perforation Date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formations |
|-----------|------------------|------------------------|----------------------|------------------------|------------|
| 1 | 9-Dec-14 | 13,490 | 13,657 | 60 | Marcellus |
| 2 | 28-Dec-14 | 13,292 | 13,459 | 60 | Marcellus |
| 3 | 29-Dec-14 | 13,094 | 13,261 | 60 | Marcellus |
| 4 | 31-Dec-14 | 12,896 | 13,063 | 60 | Marcellus |
| 5 | 30-Dec-14 | 12,698 | 12,865 | 60 | Marcellus |
| 6 | 30-Dec-14 | 12,500 | 12,667 | 60 | Marcellus |
| 7 | 31-Dec-14 | 12,302 | 12,469 | 60 | Marcellus |
| 8 | 31-Dec-14 | 12,104 | 12,271 | 60 | Marcellus |
| 9 | 1-Jan-15 | 11,906 | 12,073 | 60 | Marcellus |
| 10 | 1-Jan-15 | 11,708 | 11,875 | 60 | Marcellus |
| 11 | 2-Jan-15 | 11,510 | 11,677 | 60 | Marcellus |
| 12 | 3-Jan-15 | 11,312 | 11,479 | 60 | Marcellus |
| 13 | 3-Jan-15 | 11,114 | 11,281 | 60 | Marcellus |
| 14 | 3-Jan-15 | 10,916 | 11,083 | 60 | Marcellus |
| 15 | 3-Jan-15 | 10,719 | 10,886 | 60 | Marcellus |
| 16 | 4-Jan-15 | 10,521 | 10,688 | 60 | Marcellus |
| 17 | 4-Jan-15 | 10,323 | 10,490 | 60 | Marcellus |
| 18 | 5-Jan-15 | 10,125 | 10,292 | 60 | Marcellus |
| 19 | 5-Jan-15 | 9,927 | 10,094 | 60 | Marcellus |
| 20 | 6-Jan-15 | 9,729 | 9,896 | 60 | Marcellus |
| 21 | 7-Jan-15 | 9,531 | 9,698 | 60 | Marcellus |
| 22 | 6-Jan-15 | 9,333 | 9,500 | 60 | Marcellus |
| 23 | 9-Jan-15 | 9,135 | 9,302 | 60 | Marcellus |
| 24 | 9-Jan-15 | 8,937 | 9,104 | 60 | Marcellus |
| 25 | 10-Jan-15 | 8,739 | 8,906 | 60 | Marcellus |
| 26 | 11-Jan-15 | 8,541 | 8,708 | 60 | Marcellus |
| 27 | 11-Jan-15 | 8,343 | 8,510 | 60 | Marcellus |
| 28 | 12-Jan-15 | 8,145 | 8,312 | 60 | Marcellus |
| 29 | 12-Jan-15 | 7,947 | 8,114 | 60 | Marcellus |
| 30 | 13-Jan-15 | 7,749 | 7,916 | 60 | Marcellus |
| 31 | 13-Jan-15 | 7,551 | 7,718 | 60 | Marcellus |
| 32 | 15-Jan-15 | 7,353 | 7,520 | 60 | Marcellus |
| 33 | 16-Jan-15 | 7,155 | 7,322 | 60 | Marcellus |
| 34 | 17-Jan-15 | 6,957 | 7,124 | 60 | Marcellus |

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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 | 27-Dec-14 | 63.0 | 6,879 | 5,656 | 3,948 | 245,519 | 7,136 | N/A |
| 2 | 28-Dec-14 | 55.0 | 6,473 | 5,423 | 7,259 | 195,135 | 6,952 | N/A |
| 3 | 29-Dec-14 | 61.0 | 6,505 | 5,694 | 5,156 | 251,880 | 7,430 | N/A |
| 4 | 31-Dec-14 | 62.0 | 6,564 | 5,020 | 4,937 | 243,392 | 6,426 | N/A |
| 5 | 30-Dec-14 | 61.0 | 6,308 | 5,573 | 5,103 | 242,944 | 6,565 | N/A |
| 6 | 30-Dec-14 | 66.0 | 6,623 | 5,470 | 5,378 | 234,441 | 7,036 | N/A |
| 7 | 31-Dec-14 | 67.0 | 6,600 | 5,507 | 4,943 | 245,170 | 6,484 | N/A |
| 8 | 31-Dec-14 | 65.0 | 6,642 | 5,377 | 4,805 | 246,997 | 6,411 | N/A |
| 9 | 1-Jan-15 | 61.0 | 6,325 | 5,695 | 4,904 | 243,325 | 6,452 | N/A |
| 10 | 1-Jan-15 | 63.0 | 6,158 | 5,502 | 5,162 | 247,832 | 6,356 | N/A |
| 11 | 2-Jan-15 | 66.0 | 6,491 | 5,795 | 4,955 | 241,595 | 6,312 | N/A |
| 12 | 3-Jan-15 | 62.0 | 6,418 | 5,558 | 5,039 | 249,173 | 6,285 | N/A |
| 13 | 3-Jan-15 | 63.0 | 6,454 | 6,032 | 4,911 | 244,581 | 6,311 | N/A |
| 14 | 3-Jan-15 | 62.0 | 6,336 | 5,589 | 4,911 | 244,972 | 6,288 | N/A |
| 15 | 3-Jan-15 | 62.0 | 6,206 | 5,394 | 5,072 | 245,225 | 6,710 | N/A |
| 16 | 4-Jan-15 | 63.0 | 6,252 | 5,456 | 5,123 | 248,802 | 6,283 | N/A |
| 17 | 4-Jan-15 | 63.0 | 6,743 | 5,950 | 5,124 | 247,820 | 6,294 | N/A |
| 18 | 5-Jan-15 | 60.0 | 6,229 | 6,151 | 5,042 | 244,567 | 6,220 | N/A |
| 19 | 5-Jan-15 | 68.0 | 6,398 | 5,865 | 4,754 | 247,231 | 6,220 | N/A |
| 20 | 6-Jan-15 | 64.0 | 6,223 | 5,301 | 4,971 | 244,826 | 6,201 | N/A |
| 21 | 7-Jan-15 | 62.0 | 6,171 | 5,302 | 4,928 | 248,352 | 6,256 | N/A |
| 22 | 6-Jan-15 | 64.0 | 6,315 | 5,475 | 5,420 | 246,702 | 6,122 | N/A |
| 23 | 9-Jan-15 | 69.0 | 6,299 | 5,072 | 5,067 | 247,919 | 6,741 | N/A |
| 24 | 9-Jan-15 | 63.0 | 6,087 | 5,823 | 5,288 | 235,336 | 6,756 | N/A |
| 25 | 10-Jan-15 | 63.0 | 6,087 | 5,302 | 4,847 | 248,125 | 6,137 | N/A |
| 26 | 11-Jan-15 | 63.0 | 6,143 | 5,560 | 4,628 | 246,962 | 6,128 | N/A |
| 27 | 11-Jan-15 | 65.0 | 6,002 | 5,475 | 4,714 | 247,349 | 6,172 | N/A |
| 28 | 12-Jan-15 | 63.0 | 5,974 | 5,142 | 5,215 | 244,221 | 6,067 | N/A |
| 29 | 12-Jan-15 | 64.0 | 6,044 | 5,403 | 4,831 | 249,105 | 6,214 | N/A |
| 30 | 13-Jan-15 | 67.0 | 6,039 | 5,525 | 5,115 | 195,489 | 6,462 | N/A |
| 31 | 13-Jan-15 | 63.0 | 6,274 | 5,753 | 4,514 | 249,127 | 6,031 | N/A |
| 32 | 15-Jan-15 | 63.0 | 5,963 | 5,974 | 5,233 | 245,658 | 6,000 | N/A |
| 33 | 16-Jan-15 | 62.7 | 5,796 | 5,779 | 5,253 | 243,446 | 5,962 | N/A |
| 34 | 17-Jan-15 | 62.0 | 5,831 | 5,508 | 4,413 | 249,701 | 6,055 | N/A |
| | AVG= | 63.3 | 6,290 | 5,562 | 5,028 | 8,252,919 | 217,475 | 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 | 332' | N/A | 332' | N/A |
| Shale/ Sandstone | 0 | 207 | 0 | 207 |
| Shale/ Trace Coal | est. 207 | 247 | est. 207 | 247 |
| Sandstone | est. 247 | 467 | est. 247 | 467 |
| Shale/ Limestone | est. 467 | 567 | est. 467 | 567 |
| Sandstone | est. 567 | 627 | est. 567 | 627 |
| Shale/ Trace Limestone | est. 627 | 787 | est. 627 | 787 |
| Siltstone | est. 787 | 812 | est. 787 | 812 |
| Shale/ Limestone | est. 812 | 967 | est. 812 | 967 |
| Sandstone | est. 967 | 1047 | est. 967 | 1047 |
| Shale/ Limestone | est. 1047 | 1147 | est. 1047 | 1147 |
| Shale/ Trace Coal | est. 1147 | 1187 | est. 1147 | 1187 |
| Sandstone/ Trace Coal | est. 1187 | 1247 | est. 1187 | 1247 |
| Shale/ Trace Limestone | est. 1247 | 1327 | est. 1247 | 1327 |
| Sandstone/ Shale | est. 1327 | 1427 | est. 1327 | 1427 |
| Sandstone/ Coal | est. 1427 | 1567 | est. 1427 | 1567 |
| Shale/ Trace Coal | est. 1567 | 1727 | est. 1567 | 1727 |
| Siltstone/ Trace Coal | est. 1727 | 1915 | est. 1727 | 1915 |
| Big Lime | 1915 | 2041 | 1915 | 2041 |
| Big Injun | 2041 | 2424 | 2041 | 2424 |
| Gantz Sand | 2424 | 2586 | 2424 | 2586 |
| Fifty Foot Sandstone | 2586 | 2679 | 2586 | 2679 |
| Gordon | 2679 | 2972 | 2679 | 2972 |
| Fifth Sandstone | 2972 | 3109 | 2972 | 3109 |
| Bayard | 3109 | 3427 | 3109 | 3427 |
| Warren | 3427 | 3806 | 3427 | 3811 |
| Speechley | 3806 | 4074 | 3811 | 4091 |
| Baltown | 4074 | 4504 | 4091 | 4564 |
| Bradford | 4504 | 4921 | 4564 | 5030 |
| Benson | 4921 | 5194 | 5030 | 5334 |
| Alexander | 5194 | 5353 | 5334 | 5511 |
| Elk | 5353 | 5840 | 5511 | 6048 |
| Rhonestreet | 5840 | 6110 | 6048 | 6349 |
| Sycamore | 6110 | 6270 | 6349 | 6555 |
| Middlesex | 6270 | 6385 | 6555 | 6745 |
| Burkett | 6385 | 6419 | 6745 | 6826 |
| Tully | 6419 | 6448 | 6826 | 6918 |
| Marcellus | 6448 | NA | 6918 | 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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Hydraulic Fracturing Fluid Product Component Information Disclosure



| | |
|--------------------------------|------------------------------|
| Job Start Date: | 12/27/2014 |
| Job End Date: | 1/17/2015 |
| State: | West Virginia |
| County: | Doddridge |
| API Number: | 47-017-06436-00-00 |
| Operator Name: | Antero Resources Corporation |
| Well Name and Number: | Hudkins Unit 2H |
| Longitude: | -80.88263100 |
| Latitude: | 39.27338900 |
| Datum: | NAD83 |
| Federal/Tribal Well: | NO |
| True Vertical Depth: | 6,594 |
| Total Base Water Volume (gal): | 6,882,708 |
| Total Base Non Water Volume: | 0 |

Hydraulic Fracturing Fluid Composition:

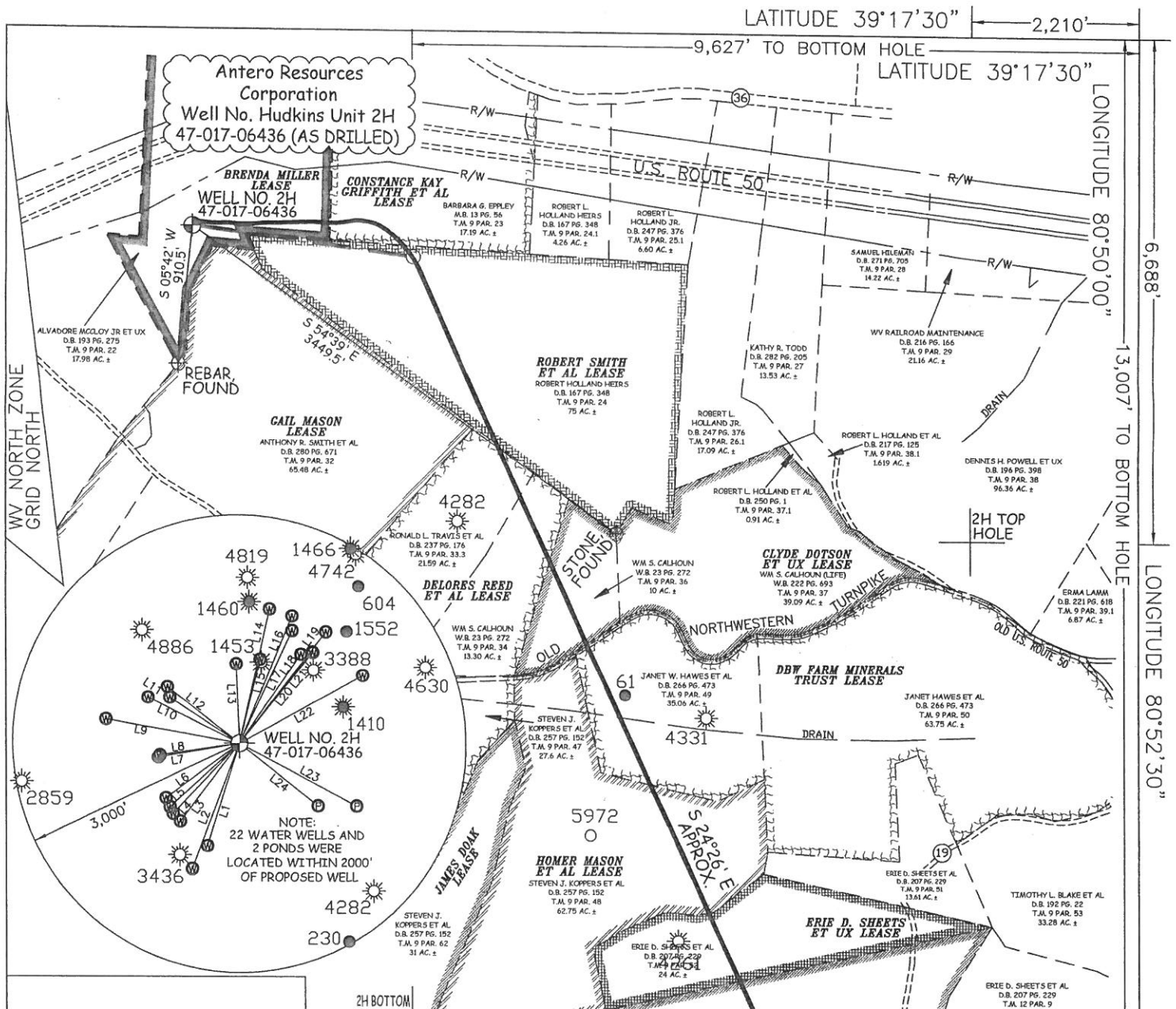
| Trade Name | Supplier | Purpose | Ingredients | Chemical Abstract Service Number (CAS #) | Maximum Ingredient Concentration in Additive (% by mass)** | Maximum Ingredient Concentration in HF Fluid (% by mass)** | Comments |
|-----------------------|--------------|------------------|--|--|--|--|-------------------|
| Water | Operator | Carrier | Water | 7732-18-5 | 100.00000 | 89.97995 | |
| Sand, White, 40/70 | Baker Hughes | Proppant | MSDS and Non-MSDS Ingredients Listed Below | N/A | | 5.23388 | |
| Sand, White, 20/40 | Baker Hughes | Proppant | MSDS and Non-MSDS Ingredients Listed Below | N/A | | 3.49278 | |
| Sand, White, 100 mesh | Baker Hughes | Proppant | MSDS and Non-MSDS Ingredients Listed Below | N/A | | 0.84294 | |
| HCl, 10.1 - 15% | Baker Hughes | Acidizing | MSDS and Non-MSDS Ingredients Listed Below | N/A | | 0.17347 | SmartCare Product |
| GW-3LDF | Baker Hughes | Gelling Agent | MSDS and Non-MSDS Ingredients Listed Below | N/A | | 0.07418 | SmartCare Product |
| FRW-18 | Baker Hughes | Friction Reducer | MSDS and Non-MSDS Ingredients Listed Below | N/A | | 0.05591 | SmartCare Product |
| Calcium Chloride | Baker Hughes | Salts | MSDS and Non-MSDS Ingredients Listed Below | N/A | | 0.02417 | |

| | | | | | | | | |
|--|--------------|---------------------------|---|------------|--|-----------|---------|-------------------|
| Scaletrol 720 | Baker Hughes | Scale Inhibitor | MSDS and Non-MSDS Ingredients Listed Below | N/A | | | 0.01456 | SmartCare Product |
| Alpha 1427 | Baker Hughes | Biocide | MSDS and Non-MSDS Ingredients Listed Below | N/A | | | 0.01218 | SmartCare Product |
| Enzyme G-NE | Baker Hughes | Breaker | MSDS and Non-MSDS Ingredients Listed Below | N/A | | | 0.01123 | SmartCare Product |
| Ferrotrol 300L | Baker Hughes | Iron Control | MSDS and Non-MSDS Ingredients Listed Below | N/A | | | 0.00124 | SmartCare Product |
| CI-39 | Baker Hughes | Corrosion Inhibitor | MSDS and Non-MSDS Ingredients Listed Below | N/A | | | 0.00036 | |
| 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. | | | | | | | | |
| Ingredients in Additive (s) (MSDS and non- MSDS) | Baker Hughes | See Trade Name(s) List | | | | | | |
| | | | Crystalline Silica (Quartz) | 14808-60-7 | | 100.00000 | 9.56077 | |
| | | | Water | 7732-18-5 | | 95.00000 | 0.19554 | |
| | | | Mineral Oil | 8042-47-5 | | 70.00000 | 0.05188 | |
| | | | Guar Gum | 9000-30-0 | | 60.00000 | 0.04447 | |
| | | | Hydrochloric Acid | 7647-01-0 | | 15.00000 | 0.02600 | |
| | | | Calcium Chloride | 10043-52-4 | | 100.00000 | 0.02487 | |
| | | | Paraffinic Petroleum Distillate | 64742-55-8 | | 30.00000 | 0.02223 | |
| | | | Petroleum Distillates | 64742-47-8 | | 30.00000 | 0.02223 | |
| | | | Hydrotreated Light Distillate | 64742-47-8 | | 30.00000 | 0.01676 | |
| | | | Poly (acrylamide-co-acrylic acid) partial sodium salt | 62649-23-4 | | 30.00000 | 0.01676 | |
| | | | Ethylene Glycol | 107-21-1 | | 45.00000 | 0.00655 | |
| | | | Sodium Chloride | 7647-14-5 | | 5.00000 | 0.00415 | |
| | | | Isodecanol, ethoxylated | 9043-30-5 | | 5.00000 | 0.00371 | |
| | | | 1-butoxy-2-propanol | 5131-66-8 | | 5.00000 | 0.00371 | |
| | | | Crystalline Silica: Quartz | 14808-60-7 | | 5.00000 | 0.00371 | |
| | | | Glutaraldehyde | 111-30-8 | | 30.00000 | 0.00365 | |
| | | | 2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt | 71050-62-9 | | 20.00000 | 0.00291 | |
| | | | Ammonium Chloride | 12125-02-9 | | 3.00000 | 0.00168 | |
| | | | Potassium Chloride | 7447-40-7 | | 5.00000 | 0.00135 | |
| | | | Didecyl Dimethyl Ammonium Chloride | 7173-51-5 | | 10.00000 | 0.00122 | |
| | | | Oleamide DEA | 93-83-4 | | 2.00000 | 0.00112 | |
| | | | Alcohols, C12-16, ethoxylated | 68551-12-2 | | 2.00000 | 0.00112 | |
| | | | Citric Acid | 77-92-9 | | 60.00000 | 0.00074 | |
| | | | Quaternary Ammonium Compound | 68424-85-1 | | 5.00000 | 0.00063 | |
| | | | Ethanol | 64-17-5 | | 5.00000 | 0.00061 | |
| | | | Hemicellulase Enzyme Concentrate | 90255-56-3 | | 5.00000 | 0.00056 | |

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- A - MARVIN PHILLIPS ET AL. D.B. 269 PG. 227 T.M. 9 PAR. 34.2 1.03 AC.
- B - G.C.J.W. D.B. 283 PG. 265 T.M. 9 PAR. 47.1 0.41 AC.
- C - G.C.J.W. D.B. 283 PG. 265 T.M. 9 PAR. 47.5 0.51 AC.
- D - GEORGE L. NEELY ET AL. D.B. 282 PG. 158 T.M. 9 PAR. 47.3 1.17 AC.

| LINE | BEARING | DISTANCE |
|------|------------|----------|
| L1 | S 17°37' W | 1406.96' |
| L2 | S 20°55' W | 1754.60' |
| L3 | S 37°27' W | 1288.62' |
| L4 | S 43°37' W | 1274.56' |
| L5 | S 47°41' W | 1243.67' |
| L6 | S 53°30' W | 1210.25' |
| L7 | S 80°05' W | 1089.05' |
| L8 | S 81°27' W | 1062.21' |
| L9 | N 79°53' W | 1791.03' |
| L10 | N 63°35' W | 1347.08' |
| L11 | N 56°51' W | 1097.09' |
| L12 | N 52°04' W | 1203.83' |
| L13 | N 02°18' W | 1049.33' |
| L14 | N 12°44' E | 1814.44' |
| L15 | N 13°50' E | 1143.47' |
| L16 | N 22°31' E | 1819.62' |
| L17 | N 25°07' E | 1643.20' |
| L18 | N 34°35' E | 1433.31' |
| L19 | N 37°51' E | 1866.04' |
| L20 | N 38°36' E | 1549.05' |
| L21 | N 38°51' E | 1545.01' |
| L22 | N 61°00' E | 1864.85' |
| L23 | S 62°08' E | 1749.53' |
| L24 | S 51°44' E | 1320.37' |

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
 N: 284,666ft E: 1,608,535ft
 LAT: 39°16'23.90" LON: 80°52'58.10"
BOTTOM HOLE INFORMATION:
 N: 278,281ft E: 1,612,820ft
 LAT: 39°15'21.44" LON: 80°52'02.38"
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.

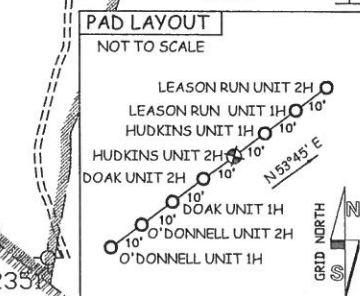
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
 N: 4,347,122m E: 510,124m
BOTTOM HOLE INFORMATION:
 N: 4,345,198m E: 511,461m

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 DIVISION OF OIL AND GAS
 WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1,083' ORIGINAL - 1,057' AS-DRILLED WATERSHED NORTH FORK HUGHES RIVER
 QUADRANGLE PENNSBORO 7.5' (TOP HOLE) WEST UNION 7.5' (BOTTOM HOLE) DISTRICT CENTRAL COUNTY DODDRIDGE
 SURFACE OWNER ALVADORE MCCLOY JR ET UX ACREAGE 17.98 ACRES +/-
 OIL & GAS ROYALTY OWNER BRENDA MILLER; CONSTANCE KAY GRIFFITH ET AL.; ROBERT SMITH ET AL.; DELORES REED ET AL.; LEASE ACREAGE 39.152 ACRES+; 50 ACRES+; 75 ACRES+; 75.6 ACRES+;
 CLYDE DOTSON ET UX; DBW FARM MINERALS TRUST; HOMER MASON ET AL.; ERIE D. SHEETS ET UX; WILLIAM HUFFORD 50 ACRES+; 98 ACRES+; 62 ACRES+; 24 ACRES+; 141 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
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,593' TVD 13,747' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
 ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
 FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WILLOW LAND SURVEYING PLLC
 P.O. BOX 17
 PENNSBORO, WV 26415

- NOTE**
- 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.
 - TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
 - AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
 - 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.
 - WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.
 - THIS WELL BORE IS SUBJECT TO THAT 60 FOOT STRIP OF LAND KNOWN AS THE OLD SISTERVILLE AND SALEM TURNPIKE WHICH MAY OR MAY NOT COINCIDE WITH THE CURRENT LOCATION OF WV STATE ROUTE 23 IN THIS AREA.



JOB # 13-089WA
 DRAWING # HUDKINS2HAD
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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

DATE 07/09/15
 OPERATOR'S WELL # HUDKINS UNIT #2H
 API WELL # 47 - 017 - 06436
 STATE COUNTY PERMIT

DIANNA STAMPER
 CT CORPORATION SYSTEM
 5400 D BIG TYLER ROAD
 CHARLESTON, WV 25313

COUNTY NAME PERMIT