Antero Resources
1615 Wynkoop Street
Denver, CO 80202
Office 303.357.7310
Fax 303.357.7315

May 15, 2020

West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street
Charleston, WV 25304

To Whom It May Concern:

Please find enclosed the Well Operator's Report of Well Work, Form WR-35 (including As-Drilled Survey Plat, Directional Survey and FracFocus report), Discharge Monitoring Report Form WR-34 and corresponding logs for the following wells off of the **Dawson Pad**:

- Gabitalalek Unit 1H-2H
- Kilska Unit 1H-2H
- Rodzina Unit 1H-3H

If you have any questions, please feel free to contact me at (303)-357-7223.

Sincerely,

Megan Griffith
Permitting Agent
Antero Resources Corporation

Enclosures

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

API 47 - 095 - 02587 County Tyler District Centerville
Quad Shirley 7.5' Pad Name Dawson Pad Field/Pool Name -----
Farm name Gary D. Dawson et ux Well Number Rodzina Unit 3H
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 4358981m Easting 510945m
Landing Point of Curve Northing 4358553.78m Easting 510667.97m
Bottom Hole Northing 4354625m Easting 511991m

Elevation (ft) 1009' 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 3/12/2019 Date drilling commenced 4/29/2019 Date drilling ceased 8/2/2019
Date completion activities began 10/22/2019 Date completion activities ceased 1/14/2020
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 115', 455' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 551', 1830' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 275', 975' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:

API 47- 095 - 02587 Farm name Gary D. Dawson et ux Well number Rodzina Unit 3H

| 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 | 24" | 20" | 110' | New | 94#, H-40 | N/A | Y |
| Surface | 17-1/2" | 13-3/8" | 593' | New | 54#, J-55 | N/A | Y |
| Coal | | | | | | | |
| Intermediate 1 | 12-1/4" | 9-5/8" | 2573' | New | 36#, H-40 | N/A | Y |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 8-3/4"/8-1/2" | 5-1/2" | 20697' | New | 23#, P-110 | N/A | Y |
| Tubing | | 2-3/8" | 6823' | | 4.7#, N-80 | | |
| 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 | 204 sx | 15.6 | 1.18 | 244 | 0' | 8 Hrs. |
| Surface | Class A | 490 sx | 15.6 | 1.19 | 402 | 0' | 8 Hrs. |
| Coal | | | | | | | |
| Intermediate 1 | Class A | 885 sx | 15.6 | 1.18 | 1047 | 0' | 8 Hrs. |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | Class H | 798sx (Lead) 3104 sx (Tail) | 13.5 (Lead), 15.2 (Tail) | 1.53 (Lead), 1.83 (Tail) | 2819 | ~500' into Intermediate Casing | 8 Hrs. |
| Tubing | | | | | | | |

Drillers TD (ft) 20716' MD, 6461' TVD (BHL), 6463' (Deepest Point Drilled) Loggers TD (ft) 20716' MD

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

Plug back procedure N/A

Kick off depth (ft) 6100'

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 N/A

API 47- 095 - 02587 Farm name Gary D. Dawson et ux Well number Rodzina Unit 3H

PERFORATION RECORD

| Stage No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formation(s) |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |

# *PLEASE SEE ATTACHED EXHIBIT 1

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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) |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
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# *PLEASE SEE ATTACHED EXHIBIT 2

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Please insert additional pages as applicable.

API 47- 095 - 02587 Farm name Gary D. Dawson et ux Well number Rodzina Unit 3H

| PRODUCING FORMATION(S) | DEPTHS | |
|---|---|---|
| Marcellus | 6442' (TOP) TVD | 6864' (TOP) MD |
| | | |
| | | |
| | | |

Please insert additional pages as applicable.

GAS TEST □ Build up □ Drawdown ■ Open Flow OIL TEST ■ Flow □ Pump

SHUT-IN PRESSURE Surface 2800 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 15614 mcfpd Oil 239 bpd NGL --- bpd Water 969 bpd GAS MEASURED BY □ Estimated ■ Orifice □ Pilot

| LITHOLOGY/ FORMATION | TOP DEPTH IN FT NAME TVD | BOTTOM DEPTH IN FT TVD | TOP DEPTH IN FT MD | BOTTOM DEPTH IN FT MD | DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, $H_2S$, ETC) |
|---|---|---|---|---|---|
| ***PLEASE SEE ATTACHED EXHIBIT 3** | | | | | |
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Please insert additional pages as applicable.

Drilling Contractor Frontier Drilling LLC
Address 562 Spring Run Road City Pennsboro State WV Zip 26415

Logging Company Nine Energy Services
Address 125 Museum Road City Washington State PA Zip 15301

Cementing Company C&J Energy Services
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 Megan Griffith Telephone 303-357-7223
Signature _____ Title Permitting Agent Date _____

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

| API 47-095-02587 Farm Name Gary D. Dawson et ux Well Number Rodzina Unit 3H | | | | | |
|---|---|---|---|---|---|
| **EXHIBIT 1** | | | | | |
| Stage No. | Perforation Date | Perforated from MD ft. | Perforated to MD ft. | Number of Perforations | Formations |
| 1 | 10/16/2019 | 20596 | 20552 | 60 | Marcellus |
| 2 | 10/17/2019 | 20512.58824 | 20347.5294 | 60 | Marcellus |
| 3 | 10/17/2019 | 20312.11765 | 20147.0588 | 60 | Marcellus |
| 4 | 10/18/2019 | 20111.64706 | 19946.5882 | 60 | Marcellus |
| 5 | 10/19/2019 | 19911.17647 | 19746.1176 | 60 | Marcellus |
| 6 | 10/19/2019 | 19710.70588 | 19545.6471 | 60 | Marcellus |
| 7 | 10/20/2019 | 19510.23529 | 19345.1765 | 60 | Marcellus |
| 8 | 10/20/2019 | 19309.76471 | 19144.7059 | 60 | Marcellus |
| 9 | 10/21/2019 | 19109.29412 | 18944.2353 | 60 | Marcellus |
| 10 | 10/21/2019 | 18908.82353 | 18743.7647 | 60 | Marcellus |
| 11 | 10/22/2019 | 18708.35294 | 18543.2941 | 60 | Marcellus |
| 12 | 10/22/2019 | 18507.88235 | 18342.8235 | 60 | Marcellus |
| 13 | 10/23/2019 | 18307.41176 | 18142.3529 | 60 | Marcellus |
| 14 | 10/23/2019 | 18106.94118 | 17941.8824 | 60 | Marcellus |
| 15 | 10/24/2019 | 17906.47059 | 17741.4118 | 60 | Marcellus |
| 16 | 10/24/2019 | 17706 | 17540.9412 | 60 | Marcellus |
| 17 | 10/25/2019 | 17505.52941 | 17340.4706 | 60 | Marcellus |
| 18 | 10/26/2019 | 17305.05882 | 17140 | 60 | Marcellus |
| 19 | 10/26/2019 | 17104.58824 | 16939.5294 | 60 | Marcellus |
| 20 | 10/28/2019 | 16904.11765 | 16739.0588 | 60 | Marcellus |
| 21 | 10/28/2019 | 16703.64706 | 16538.5882 | 60 | Marcellus |
| 22 | 10/29/2019 | 16503.17647 | 16338.1176 | 60 | Marcellus |
| 23 | 10/30/2019 | 16302.70588 | 16137.6471 | 60 | Marcellus |
| 24 | 10/31/2019 | 16102.23529 | 15937.1765 | 60 | Marcellus |
| 25 | 10/31/2019 | 15901.76471 | 15736.7059 | 60 | Marcellus |
| 26 | 10/31/2019 | 15701.29412 | 15536.2353 | 60 | Marcellus |
| 27 | 10/31/2019 | 15500.82353 | 15335.7647 | 60 | Marcellus |
| 28 | 11/1/2019 | 15300.35294 | 15135.2941 | 60 | Marcellus |
| 29 | 11/1/2019 | 15099.88235 | 14934.8235 | 60 | Marcellus |
| 30 | 11/1/2019 | 14899.41176 | 14734.3529 | 60 | Marcellus |
| 31 | 11/1/2019 | 14698.94118 | 14533.8824 | 60 | Marcellus |
| 32 | 11/2/2019 | 14498.47059 | 14333.4118 | 60 | Marcellus |
| 33 | 11/2/2019 | 14298 | 14132.9412 | 60 | Marcellus |
| 34 | 11/2/2019 | 14097.52941 | 13932.4706 | 60 | Marcellus |
| 35 | 11/2/2019 | 13897.05882 | 13732 | 60 | Marcellus |
| 36 | 11/3/2019 | 13696.58824 | 13531.5294 | 60 | Marcellus |
| 37 | 11/3/2019 | 13496.11765 | 13331.0588 | 60 | Marcellus |
| 38 | 11/3/2019 | 13295.64706 | 13130.5882 | 60 | Marcellus |
| 39 | 11/3/2019 | 13095.17647 | 12930.1176 | 60 | Marcellus |
| 40 | 11/3/2019 | 12894.70588 | 12729.6471 | 60 | Marcellus |
| 41 | 11/4/2019 | 12694.23529 | 12529.1765 | 60 | Marcellus |
| 42 | 11/4/2019 | 12493.76471 | 12328.7059 | 60 | Marcellus |
| 43 | 11/4/2019 | 12293.29412 | 12128.2353 | 60 | Marcellus |
| 44 | 11/4/2019 | 12092.82353 | 11927.7647 | 60 | Marcellus |
| 45 | 11/5/2019 | 11892.35294 | 11727.2941 | 60 | Marcellus |
| 46 | 11/5/2019 | 11691.88235 | 11526.8235 | 60 | Marcellus |
| 47 | 11/5/2019 | 11491.41176 | 11326.3529 | 60 | Marcellus |
| 48 | 11/5/2019 | 11290.94118 | 11125.8824 | 60 | Marcellus |
| 49 | 11/5/2019 | 11090.47059 | 10925.4118 | 60 | Marcellus |
| 50 | 11/6/2019 | 10890 | 10724.9412 | 60 | Marcellus |
| 51 | 11/6/2019 | 10689.52941 | 10524.4706 | 60 | Marcellus |
| 52 | 11/6/2019 | 10489.05882 | 10324 | 60 | Marcellus |
| 53 | 11/6/2019 | 10288.58824 | 10123.5294 | 60 | Marcellus |
| 54 | 11/7/2019 | 10088.11765 | 9923.05882 | 60 | Marcellus |
| 55 | 11/7/2019 | 9887.647059 | 9722.58824 | 60 | Marcellus |
| 56 | 11/7/2019 | 9687.176471 | 9522.11765 | 60 | Marcellus |
| 57 | 11/9/2019 | 9486.705882 | 9321.64706 | 60 | Marcellus |
| 58 | 11/9/2019 | 9286.235294 | 9121.17647 | 60 | Marcellus |
| 59 | 11/9/2019 | 9085.764706 | 8920.70588 | 60 | Marcellus |
| 60 | 11/9/2019 | 8885.294118 | 8720.23529 | 60 | Marcellus |
| 61 | 11/9/2019 | 8684.823529 | 8519.76471 | 60 | Marcellus |
| 62 | 11/9/2019 | 8484.352941 | 8319.29412 | 60 | Marcellus |
| 63 | 11/10/2019 | 8283.882353 | 8118.82353 | 60 | Marcellus |
| 64 | 11/10/2019 | 8083.411765 | 7918.35294 | 60 | Marcellus |
| 65 | 11/10/2019 | 7882.941176 | 7717.88235 | 60 | Marcellus |
| 66 | 11/10/2019 | 7682.470588 | 7517.41176 | 60 | Marcellus |
| 67 | 11/11/2019 | 7482 | 7316.94118 | 60 | Marcellus |
| 68 | 11/12/2019 | 7281.529412 | 7116.47059 | 60 | Marcellus |
| 69 | 11/13/2019 | 7081.058824 | 6916 | 60 | Marcellus |

**API** 47-095-02587 **Farm Name** Gary D. Dawson et ux **Well Number** Rodzina Unit 3H

## 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 | 10/16/2019 | 74.69444 | 7342.491 | 4978 | 4084 | 160460 | 5719.466 | N/A |
| 2 | 10/17/2019 | 74.76622 | 7997.317 | 5811 | 4223 | 399900 | 7240.256 | N/A |
| 3 | 10/17/2019 | 79.09982 | 7912.993 | 5906 | 4402 | 399300 | 7214.57 | N/A |
| 4 | 10/18/2019 | 79.50633 | 8255.047 | 5711 | 4140 | 399360 | 7550.65 | N/A |
| 5 | 10/19/2019 | 71.12528 | 8286.178 | 5685 | 4473 | 398020 | 7067.903 | N/A |
| 6 | 10/19/2019 | 82.4 | 8241 | 5489 | 3963 | 400020 | 7313.5 | N/A |
| 7 | 10/20/2019 | 78.71977 | 8199.935 | 6125 | 4273 | 400040 | 7242.09 | N/A |
| 8 | 10/20/2019 | 78.63423 | 8445.064 | 5699 | 4597 | 400380 | 7185.235 | N/A |
| 9 | 10/21/2019 | 72.53141 | 8132.912 | 6164 | 4332 | 400200 | 7091.935 | N/A |
| 10 | 10/21/2019 | 79.5 | 8401 | 6057 | 4293 | 400220 | 7074.995 | N/A |
| 11 | 10/22/2019 | 78.41132 | 8105.469 | 6205 | 4354 | 400120 | 7206.465 | N/A |
| 12 | 10/22/2019 | 77.65873 | 8001.952 | 5998 | 4113 | 399980 | 7273.685 | N/A |
| 13 | 10/23/2019 | 76.7602 | 8134.727 | 6052 | 3429 | 400000 | 7314.425 | N/A |
| 14 | 10/23/2019 | 79.79538 | 8280.913 | 5986 | 3904 | 400000 | 7163.095 | N/A |
| 15 | 10/24/2019 | 77.50702 | 8173.131 | 5816 | 3825 | 400340 | 7204.345 | N/A |
| 16 | 10/24/2019 | 76.70335 | 8380.416 | 5826 | 4228 | 399000 | 7183.095 | N/A |
| 17 | 10/25/2019 | 75.47649 | 7954.952 | 5712 | 4039 | 400040 | 7206.125 | N/A |
| 18 | 10/26/2019 | 76.43306 | 8495.085 | 5814 | 3738 | 409060 | 7116.095 | N/A |
| 19 | 10/26/2019 | 66.20075 | 8169.738 | 5876 | 3298 | 399600 | 7096.915 | N/A |
| 20 | 10/28/2019 | 78.80865 | 7741.69 | 5321 | 3461 | 399600 | 7070.46 | N/A |
| 21 | 10/28/2019 | 76.91865 | 8079.055 | 6061 | 3599 | 405985 | 7160.13 | N/A |
| 22 | 10/29/2019 | 79.63628 | 8395.212 | 5992 | 3589 | 400760 | 7147.79 | N/A |
| 23 | 10/30/2019 | 77.47543 | 7434.209 | 5621 | 3610 | 402420 | 7246.66 | N/A |
| 24 | 10/31/2019 | 77.06191 | 7913.179 | 5830 | 3514 | 413900 | 7144.32 | N/A |
| 25 | 10/31/2019 | 75.33893 | 7900.173 | 5818 | 3651 | 408760 | 6948.2 | N/A |
| 26 | 10/31/2019 | 72.91282 | 7646.858 | 5784 | 3761 | 409320 | 8264.07 | N/A |
| 27 | 10/31/2019 | 80.59918 | 8004.616 | 5604 | 3679 | 403580 | 7041.29 | N/A |
| 28 | 11/1/2019 | 81.72412 | 8190.847 | 5815 | 3706 | 399200 | 6998.23 | N/A |
| 29 | 11/1/2019 | 75.75274 | 7882.012 | 5675 | 3712 | 400980 | 7040.55 | N/A |
| 30 | 11/1/2019 | 77.25193 | 7723.266 | 5730 | 4066 | 400200 | 7097.08 | N/A |
| 31 | 11/1/2019 | 78.84391 | 7767.941 | 5862 | 4034 | 403880 | 6904.02 | N/A |
| 32 | 11/2/2019 | 80.17441 | 7693.809 | 6092 | 3859 | 401040 | 7014.77 | N/A |
| 33 | 11/2/2019 | 79.93619 | 7568.813 | 5743 | 4351 | 399880 | 6835.62 | N/A |
| 34 | 11/2/2019 | 80.60427 | 7687.641 | 5769 | 3931 | 397100 | 6822.57 | N/A |
| 35 | 11/2/2019 | 81.2015 | 8100.659 | 6221 | 3602 | 399960 | 6947.01 | N/A |
| 36 | 11/3/2019 | 84.07474 | 8098.501 | 6202 | 3647 | 401920 | 6947.41 | N/A |
| 37 | 11/3/2019 | 77.1356 | 7710.177 | 5830 | 3849 | 402980 | 7009.16 | N/A |
| 38 | 11/3/2019 | 75.48328 | 7835.137 | 6295 | 4132 | 402360 | 6908.3 | N/A |
| 39 | 11/3/2019 | 79.86787 | 7954.817 | 6270 | 4384 | 402920 | 6920.34 | N/A |
| 40 | 11/3/2019 | 79.68672 | 8114.157 | 6049 | 4250 | 401800 | 7358.7 | N/A |
| 41 | 11/4/2019 | 79.17814 | 7665.781 | 5969 | 3892 | 405240 | 6858.63 | N/A |
| 42 | 11/4/2019 | 77.96181 | 7828.643 | 5742 | 4032 | 400500 | 6814.72 | N/A |
| 43 | 11/4/2019 | 84.52124 | 8222.464 | 5981 | 3758 | 404000 | 6912.64 | N/A |
| 44 | 11/4/2019 | 84.49503 | 8283.631 | 5668 | 3897 | 402580 | 6977.24 | N/A |
| 45 | 11/5/2019 | 84.70684 | 8101.343 | 5775 | 3867 | 401780 | 6891.68 | N/A |
| 46 | 11/5/2019 | 84.73973 | 7972.164 | 5794 | 3981 | 395680 | 6960.05 | N/A |
| 47 | 11/5/2019 | 85.02306 | 7658.969 | 5429 | 3841 | 398500 | 6981.42 | N/A |
| 48 | 11/5/2019 | 83.81456 | 8103.802 | 5473 | 3579 | 396980 | 6884.84 | N/A |
| 49 | 11/5/2019 | 85.30526 | 8109.716 | 5575 | 3650 | 398740 | 6915.66 | N/A |
| 50 | 11/6/2019 | 84.7907 | 8051.701 | 4934 | 3605 | 397380 | 6820.52 | N/A |
| 51 | 11/6/2019 | 83.22863 | 8005.291 | 6069 | 3650 | 397740 | 6845.8 | N/A |
| 52 | 11/6/2019 | 86.53061 | 7898.738 | 6553 | 3580 | 394620 | 6769.95 | N/A |
| 53 | 11/6/2019 | 84.72095 | 7727.981 | 4875 | 3914 | 405660 | 6836.53 | N/A |
| 54 | 11/7/2019 | 86.6049 | 8056.173 | 6176 | 4019 | 407540 | 6807.86 | N/A |
| 55 | 11/7/2019 | 85.30778 | 7433.598 | 4568 | 3605 | 407480 | 6806.08 | N/A |
| 56 | 11/7/2019 | 85.19273 | 7350.015 | 6083 | 3701 | 403000 | 6827.6 | N/A |
| 57 | 11/9/2019 | 85.14494 | 7797.961 | 6042 | 4129 | 401560 | 6932 | N/A |
| 58 | 11/9/2019 | 84.97818 | 7790.015 | 5642 | 3906 | 408080 | 6870.89 | N/A |
| 59 | 11/9/2019 | 83.93357 | 7809.399 | 5940 | 3868 | 403580 | 6831.27 | N/A |
| 60 | 11/9/2019 | 83.95654 | 7869.391 | 6397 | 3682 | 407900 | 6883.55 | N/A |
| 61 | 11/9/2019 | 83.77522 | 7445.19 | 5939 | 4089 | 402020 | 6942.46 | N/A |
| 62 | 11/9/2019 | 83.32165 | 7234.696 | 6352 | 3772 | 409920 | 6969.5 | N/A |
| 63 | 11/10/2019 | 83.90176 | 7110.05 | 6199 | 4286 | 379540 | 7657.24 | N/A |
| 64 | 11/10/2019 | 83.06933 | 7245.917 | 5961 | 3715 | 396420 | 7499.95 | N/A |
| 65 | 11/10/2019 | 84.60323 | 6990.727 | 5757 | 3668 | 406560 | 6902.44 | N/A |
| 66 | 11/10/2019 | 85.48297 | 7743.626 | 5873 | 3583 | 408750 | 6956.28 | N/A |
| 67 | 11/11/2019 | 75.8 | 7234 | 5850 | 4322 | 157140 | 3653.2 | N/A |
| 68 | 11/15/2019 | 84.8945 | 7060.427 | 5961 | 3432 | 411880 | 6948.89 | N/A |
| 69 | 11/15/2019 | 82.84491 | 6925.859 | 5420 | 4024 | 408700 | 6760.37 | N/A |
| | AVG= | **77.7** | **8,000** | **5,865** | **3,951** | **16,229,825** | **291,150** | TOTAL |

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Discharge Monitoring Report
Oil and Gas General Permit

Company Name: Antero Resources Corporation
API No: 47-095-02587 County: Tyler
District: Centerville Well No: Rodzina Unit 3H
Farm Name: Gary D. Dawson et ux
Discharge Date/s From:(MMDDYY) 02/03/20 To: (MMDDYY) 03.04/20
Discharge Times. From: 0:00 To: 24:00
Total Volume to be Disposed from this facility (gallons): 1,325,486
Disposal Option(s) Utilized (write volumes in gallons):

(1) Land Application: 0 (Include a topographical map of the Area.)
(2) UIC: 0 Permit No.
(3) Offsite Disposal: 0 Site Location:
(4) Reuse: 1,325,486 Alternate Permit Number:
(5) Centralized Facility: 0 Permit No.
(6) Other method: 0 (Include an explanation)

Follow Instructions below to determine your treatment category:

Optional Pretreatment test: N/A Cl- mg/l N/A DO mg/l

1. Do you have permission to use expedited treatment from the Director or his representative? (Y/N) N/A If yes, who? _____ and place a four (4) on line 7. If not go to line 2
2. Was Frac Fluid or flowback put into the pit? (Y/N) N/A If yes, go to line 5. If not, go to line 3.
3. Do you have a chloride value pretreatment (see above)? (Y/N) N/A If yes, go to line 4 If not, go to line 5.
4. Is the Chloride level less than 5000 mg/l? (Y/N) N/A If yes, then enter a one (1) on line 7.
5. Do you have a pretreatment value for DO? (See above) (Y/N) N/A If yes, go to line 6 If not, enter a three (3) in line 7.
6. Is the DO level greater than 2.5 mg/l?(Y/N) N/A If yes, enter a two (2) on line 7. If not, enter a three (3) on line 7.
7. N/A is the category of your pit. Use the Appropriate section.
8. Comments on Pit condition: N/A No pit on-site.

Name of Principal Exec. Officer: Gretchen Kohler
Title of Officer: Sr. Environmental & Regulatory Manager
Date Completed: 05/08/2020

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

_____
Signature of a Principal Exec. Officer or Authorized agent.

Category 1
Sampling Results
API No : _____

| Parameter | Predischarge Limits | Predischarge Reported | Discharge Limits | Discharge Reported | Units |
|---|---|---|---|---|---|
| pH | 6-10 | | 6-10 | | S.U |
| Settling Time | 5 | | N/A | N/A | Days |
| Fe | 6 | | 6 | | mg/l |
| D.O. | 2.5 | | 2.5 | | mg/l |
| Settleable Sol. | 0.5 | | 0.5 | | mg/l |
| Cl | 5,000 | | 5,000 | | mg/l |
| Oil | Trace | | Trace | | Obs. |
| TOC** | | | Monitor | | mg/l |
| Oil and Grease | | | Monitor | | mg/l |
| Total Al*** | | | Monitor | | mg/l |
| TSS | | | Monitor | | mg/l |
| Total Mn | Monitor | | Monitor | | mg/l |
| Volume | | | Monitor | | Gal |
| Flow | | | Monitor | | Gal/min |
| Disposal Area | | | Monitor | | Acres |

*** Al is only reported if the pH is above 9.0

Category 2
Sampling Results
API No : _____

| Parameter | Predischarge Limits | Predischarge Reported | Discharge Limits | Discharge Reported | Units |
|---|---|---|---|---|---|
| pH | 6-10 | | 6-10 | | S.U |
| Settling Time | 10 | | N/A | N/A | Days |
| Fe | 6 | | 6 | | mg/l |
| D.O. | 2.5 | | 2.5 | | mg/l |
| Settleable Sol. | 0.5 | | 0.5 | | mg/l |
| Cl* | 12,500 | | 12,500 | | mg/l |
| Oil | Trace | | Trace | | Obs. |
| TOC** | | | Monitor | | mg/l |
| Oil and Grease | | | Monitor | | mg/l |
| Total Al*** | | | Monitor | | mg/l |
| TSS | | | Monitor | | mg/l |
| Total Mn | Monitor | | Monitor | | mg/l |
| Volume | | | Monitor | | Gal |
| Flow | | | Monitor | | Gal/min |
| Disposal Area | | | Monitor | | Acres |

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____ Date: _____
** Include a description of your aeration technique. Aeration Code: _____
*** Al is only reported if the pH is above 9.0

Category 3
Sampling Results
API No : _____

| | Predischarge | | Discharge | | |
|---|---|---|---|---|---|
| **Parameter** | **Limits** | **Reported** | **Limits** | **Reported** | **Units** |
| pH | 6-10 | | 6-10 | | S.U |
| Settling Time | 20 | | N/A | N/A | Days |
| Fe | 6 | | 6 | | mg/l |
| D.O. | 2.5 | | 2.5 | | mg/l |
| Settleable Sol. | 0.5 | | 0.5 | | mg/l |
| Cl* | 12,500 | | 12,500 | | mg/l |
| Oil | Trace | | Trace | | Obs. |
| TOC** | | | Monitor | | mg/l |
| Oil and Grease | | | Monitor | | mg/l |
| Total Al*** | | | Monitor | | mg/l |
| TSS | | | Monitor | | mg/l |
| Total Mn | Monitor | | Monitor | | mg/l |
| Volume | | | Monitor | | Gal |
| Flow | | | Monitor | | Gal/min |
| Disposal Area | | | Monitor | | Acres |

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____ Date: _____
** Include a description of your aeration technique. Aeration Code: _____
*** Al is only reported if the pH is above 9.0.

Category 4
Sampling Results
API No: _____

| | Predischarge | | Discharge | | |
|---|---|---|---|---|---|
| **Parameter** | **Limits** | **Reported** | **Limits** | **Reported** | **Units** |
| pH | 6-10 | | 6-10 | | S.U |
| Settling Time | 1 | | N/A | N/A | Days |
| Fe | Monitor | | Monitor | | mg/l |
| D.O. | Monitor | | Monitor | | mg/l |
| Settleable Sol. | Monitor | | Monitor | | mg/l |
| Cl* | 12,500 | | 12,500 | | mg/l |
| Oil | Trace | | Trace | | Obs. |
| TOC** | | | Monitor | | mg/l |
| Oil and Grease | | | Monitor | | mg/l |
| TSS | | | Monitor | | mg/l |
| Total Mn | Monitor | | Monitor | | mg/l |
| Volume | | | Monitor | | Gal |
| Flow | | | Monitor | | Gal/min |
| Activated Carbon (0.175) | | | N/A | N/A | lb/Bl |
| Date Site Reclaimed | N/A | N/A | | | 10 days from dis. |
| Disposal Area | | | Monitor | | Acres |

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____ Date: _____

# ANTERO RESOURCES CORPORATION

| | | | |
|---|---|---|---|
| Location: | Tyler County, WV | Slot: | Slot #11 |
| Field: | Tyler | Well: | Rodzina Unit 3H |
| Facility: | Dawson Pad | Wellbore: | Rodzina Unit 3H PWB |

| | |
|---|---|
| Plot reference wellpath is Rodzina Unit 3H PWP Rev-A.0 | Grid System: NAD27 / UTM Zone 17 North, US feet |
| True vertical depths are referenced to H&P 519 (RKB) | North Reference: Grid north |
| Measured depths are referenced to H&P 519 (RKB) | Scale: True distance |
| H&P 519 (RKB) to Mean Sea Level: 1039 feet | Depths are in feet |
| Mean Sea Level to Ground level (At Slot: Slot #11): -1009 feet | Created by: delaset on 2019-08-09 |
| Coordinates are in feet referenced to Slot | Database: WA_MPL_EasternUS_Defn |

## Location Information

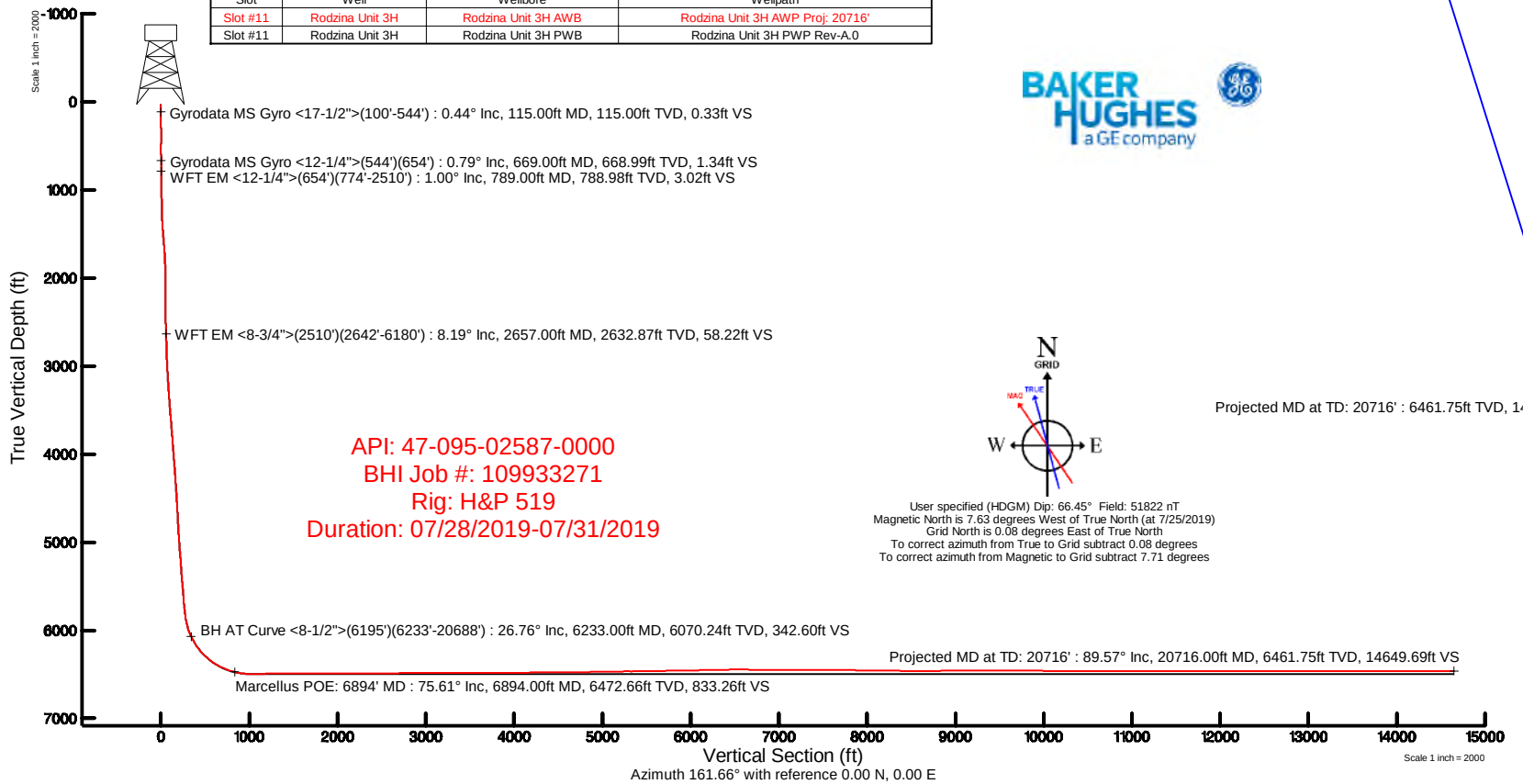
| Facility Name | | | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
|---|---|---|---|---|---|---|
| Dawson Pad | | | 1676049.728 | 14300592.517 | 39°22'50.710"N | 80°52'26.030"W |
| Slot | Local N (ft) | Local E (ft) | Grid East (US ft) | Grid North (US ft) | Latitude | Longitude |
| Slot #11 | -217.21 | 229.59 | 1676279.230 | 14300375.390 | 39°22'48.560"N | 80°52'23.110"W |
| H&P 519 (RKB) to Ground level (At Slot: Slot #11) | | | | | 30ft | |
| Mean Sea Level to Ground level (At Slot: Slot #11) | | | | | -1009ft | |
| H&P 519 (RKB) to Mean Sea Level | | | | | 1039ft | |

## Well Profile Data

| Design Comment | MD (ft) | Inc (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | DLS (°/100ft) | VS (ft) |
|---|---|---|---|---|---|---|---|---|
| Tie On | 6195.00 | 25.440 | 191.490 | 6036.11 | -681.79 | -1014.71 | 10.48 | 327.87 |
| PTB | 6270.00 | 30.890 | 181.980 | 6102.24 | -716.86 | -1018.59 | 9.39 | 359.94 |
| Build/Turn | 6288.37 | 29.828 | 184.067 | 6118.09 | -726.13 | -1019.07 | 8.15 | 368.59 |
| POE | 6873.85 | 74.675 | 161.663 | 6470.00 | -1165.03 | -935.70 | 8.15 | 811.43 |
| LP | 7061.90 | 90.000 | 161.663 | 6495.00 | -1341.41 | -877.24 | 8.15 | 997.25 |
| BHL | 20712.64 | 90.000 | 161.663 | 6495.00 | -14299.00 | 3417.36 | 0.00 | 14647.99 |

## Well Data

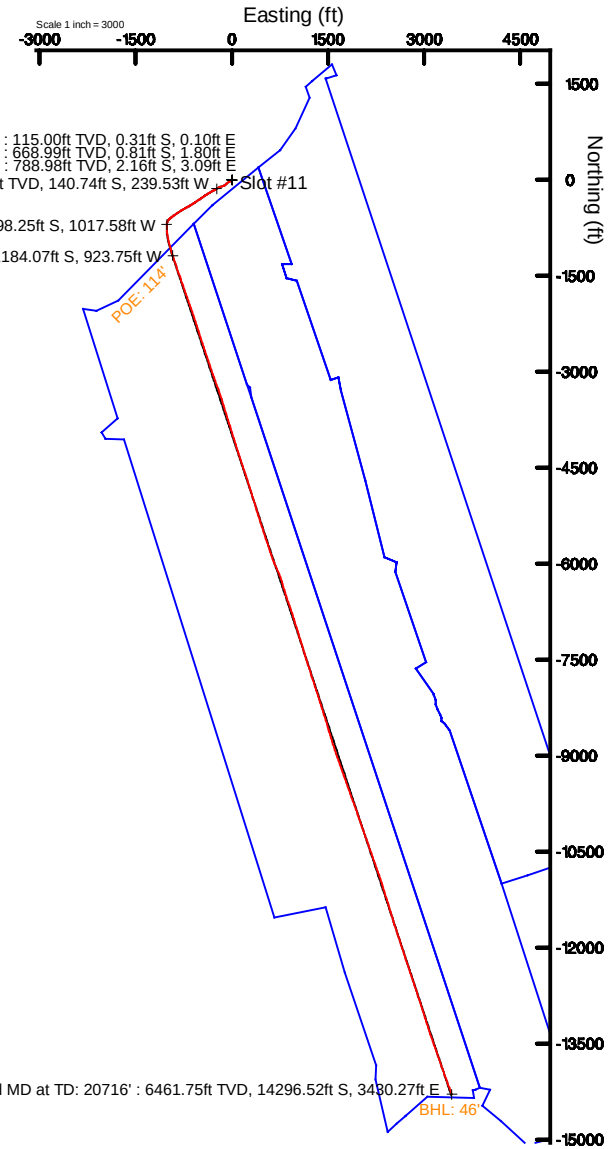
| Slot | Well | Wellbore | Wellpath |
|---|---|---|---|
| Slot #11 | Rodzina Unit 3H | Rodzina Unit 3H AWB | Rodzina Unit 3H AWP Proj: 20716' |
| Slot #11 | Rodzina Unit 3H | Rodzina Unit 3H PWB | Rodzina Unit 3H PWP Rev-A.0 |







User specified (HDGM) Dip: 66.45° Field: 51822 nT
Magnetic North is 7.63 degrees West of True North (at 7/25/2019)
Grid North is 0.08 degrees East of True North
To correct azimuth from True to Grid subtract 0.08 degrees
To correct azimuth from Magnetic to Grid subtract 7.71 degrees



# Hydraulic Fracturing Fluid Product Component Information Disclosure

| | |
|---|---|
| Job Start Date: | 10/16/2019 |
| Job End Date: | 11/15/2019 |
| State: | West Virginia |
| County: | Tyler |
| API Number: | 47-095-02587-00-00 |
| Operator Name: | Antero Resources Corporation |
| Well Name and Number: | Rodzina 3H |
| Latitude: | 39.38015600 |
| Longitude: | -80.87308600 |
| Datum: | NAD83 |
| Federal Well: | NO |
| Indian Well: | NO |
| True Vertical Depth: | 6,467 |
| Total Base Water Volume (gal): | 21,639,441 |
| 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 | Supplied by Operator | Base Fluid | | | | | |
| | | | Water | 7732-18-5 | 100.00000 | 86.57581 | |
| Hydrochloric Acid | CWS | Clean Perforations | | | | | |
| | | | | Listed Below | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SaniFrac 8844 | CWS | Biocide | | | | | |
| | | | | Listed Below | | | |
| Sand (Proppant) | CWS | Propping Agent | | | | | |
| | | | | Listed Below | | | |
| CI-9100G | CWS | Corrosion Inhibitor | | | | | |
| | | | | Listed Below | | | |
| Calbreak 5501 | CWS | Breaker | | | | | |
| | | | | Listed Below | | | |
| DynaRate 6522 | CWS | Friction Reducer | | | | | |
| | | | | Listed Below | | | |
| CalGel 4000 | CWS | Gel Slurry | | | | | |
| | | | | Listed Below | | | |
| DAP-103 | CWS | Iron Control | | | | | |
| | | | | Listed Below | | | |
| Other Chemical (s) | Listed Above | See Trade Name (s) List | | | | | |
| | | | | Listed Below | | | |
| Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients. | | | | | | | |
| | | | Crystalline silica (Quartz) | 14808-60-7 | 100.00000 | 13.06296 | |
| | | | Illite | 12173-60-3 | 1.00000 | 0.13062 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Hydrochloric acid | 7647-01-0 | 37.00000 | 0.10062 | |
| | | | Distillates (petroleum), hydrotreated middle | 64742-46-7 | 60.00000 | 0.01645 | |
| | | | Guar gum | 9000-30-0 | 60.00000 | 0.01645 | |
| | | | Copolymer of 2-propenamide | 69418-26-4 | 30.00000 | 0.01506 | |
| | | | Goethite | 1310-14-1 | 0.10000 | 0.01306 | |
| | | | Biotite | 1302-27-8 | 0.10000 | 0.01306 | |
| | | | Apatite | 64476-38-6 | 0.10000 | 0.01306 | |
| | | | Ilmenite | 98072-94-7 | 0.10000 | 0.01306 | |
| | | | Distillates (petroleum), hydrotreated light | 64742-47-8 | 20.00000 | 0.01004 | |
| | | | Polyethylene glycol mixture | 25322-68-3 | 54.50000 | 0.00806 | |
| | | | Ammonium chloride | 12125-02-9 | 8.00000 | 0.00402 | |
| | | | 2,2-Dibromo-3-Nitrilopropionamide | 10222-01-2 | 20.00000 | 0.00296 | |
| | | | Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite | 68953-58-2 | 5.00000 | 0.00137 | |
| | | | Oleic Acid Diethanolamide | 93-83-4 | 2.00000 | 0.00100 | |
| | | | Sodium bromide | 7647-15-6 | 4.00000 | 0.00059 | |
| | | | Ammonium Persulfate | 7727-54-0 | 100.00000 | 0.00052 | |
| | | | Dibromoacetonitrile | 3252-43-5 | 3.00000 | 0.00044 | |
| | | | Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether | 37251-67-5 | 1.50000 | 0.00041 | |
| | | | Citric acid | 77-92-9 | 60.00000 | 0.00012 | |
| | | | Vinylidene chloride-methyl acrylate copolymer | 25038-72-6 | 20.00000 | 0.00010 | |
| | | | Ethylene Glycol | 107-21-1 | 40.00000 | 0.00006 | |
| | | | Diethylene glycol, monomethyl ether | 34590-94-8 | 20.00000 | 0.00003 | |
| | | | Isopropyl alcohol | 67-63-0 | 5.00000 | 0.00001 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | Tar bases, quinolone derivs, benzyl chloride-quatenized | 72480-70-7 | 10.00000 | 0.00001 | |
| | | | Cinnamaldehyde | 104-55-2 | 10.00000 | 0.00001 | |
| | | | Formic acid | 64-18-6 | 10.00000 | 0.00001 | |
| | | | Ethoxylated Alcohols | 68131-39-5 | 10.00000 | 0.00001 | |

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%
*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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)

LATITUDE 39°25'00" — 11,237' — 7,833' TO BOTTOM HOLE — LATITUDE 39°22'30"

LONGITUDE 80°50'00" — 12,424' TO BOTTOM HOLE — 13,298' — LONGITUDE 80°50'00"

WV NORTH ZONE GRID NORTH

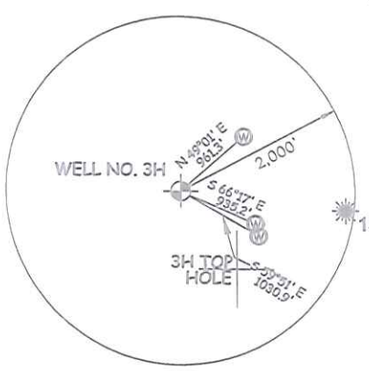
# Antero Resources Corporation Well No. Rodzina Unit 3H

**NOTES:**
WELL 3H TOP HOLE INFORMATION:
N: 323,537ft E: 1,611,861ft
LAT: 39°22'48.56" LON: 80°52'23.11"
BOTTOM HOLE INFORMATION:
N: 309,185ft E: 1,615,072ft
LAT: 39°20'27.21" LON: 80°51'39.71"
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 3H TOP HOLE INFORMATION:
N: 4,358,981m E: 510,945m
BOTTOM HOLE INFORMATION:
N: 4,354,625m E: 511,991m

**PAD LAYOUT**
NOT TO SCALE
N 45°30' W — N 40°30' W — N 46°16' W — 255.5' — 15' — 30' ACCESS ROAD
PIERSON UNIT 1H, PIERSON UNIT 2H, PIERSON UNIT 3H, PIERSON UNIT 4H, BOUNTY UNIT 1H, BOUNTY UNIT 2H, BOUNTY UNIT 3H, RODZINA UNIT 1H, RODZINA UNIT 2H, RODZINA UNIT 3H, KELSA UNIT 1H, KELSA UNIT 2H, KELSA UNIT 3H, CASTLE UNIT 1H, CASTLE UNIT 2H

3 WATER WELLS WERE LOCATED WITHIN 2000' OF CENTER OF PAD




| Clay District - Ritchie County | |
|---|---|
| 12-14 | Warren Suker Jr. |
| 12-14.1 | Gary Dawson |
| 12-14.4 | Gary Dawson |
| 12-28 | Gary Dawson Sr. |
| 15-01 | Gary Dawson |
| 15-1.1 | Larry Caine |
| 15-1.2 | Larry Robinson |
| 15-1.7 | Antero Resources Corp. |
| 15-1.9 | Antero Resources Corp. |
| 15-1.10 | Gary Dawson |
| 15-07 | Ralph Underwood III |
| 15-12 | Larry Hadley |
| 15-13 | Sara Reed |
| 15-14 | George Moore |
| 15-14.1 | Linda Moore |
| 15-21 | Clint Kissner |
| 15-25 | Emery Underwood Hrs. |
| 15-26 | Gary Dawson Sr. |
| 15-27 | Gary Dawson Sr. |
| 15-28 | Coastal Forest Resources Co. |
| 15-29 | Iras Wilson |
| 15-30 | Coastal Forest Resources Co. |
| 15-31 | Coastal Forest Resources Co. |
| 15-32 | Marvin Sole |
| 15-32.1 | Marvin Sole |
| 17-02 | Alfred Meredith |
| 17-2.1 | Alfred Meredith |
| 17-2.2 | Alfred Meredith |
| 17-2.4 | Andrew Smith |
| 17-09 | Antero Midstream LLC |
| 17-10.1 | Sandra Clark |
| 17-10.2 | Sandra Clark |
| 17-10.3 | Sandra Clark |
| 17-10.4 | Sandra Clark |
| 17-12 | CNG Transmission Corporation |
| 17-13 | George Ash |
| 17-22 | David Glasure |
| 17-23 | Colleen Ash |
| 17-24 | Jeffrey Milligan |




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 ANTERO RESOURCES CORPORATION.
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.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPTARTMENT OF ENVIRONMENTAL PROTECTION.

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

WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO
WEST VIRGINIA 26415

THOMAS SUMMERS LICENSED No. 2109 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

JOB # 18-030WA
DRAWING # RODZINA3HAD
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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

**LEGEND**
Surface Owner Boundary Lines +/-
Interior Surface Tracts +/-
Proposed Well Path
As Drilled Well Path

THOMAS SUMMERS P.S. 2109

DATE 05/01/20
OPERATOR'S WELL# RODZINA UNIT #3H

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1,009' - AS BUILT WATERSHED HEADWATERS MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' (TH) WEST UNION 7.5' (BH) DISTRICT CENTERVILLE COUNTY TYLER
SURFACE OWNER GARY D. DAWSON ET UX ACREAGE 104.27 ACRES +/-
OIL & GAS ROYALTY OWNER GARY D. DAWSON ET UX; COASTAL FOREST RESOURCES CO.; BRC MINERALS 1, LLC; RALPH J. UNDERWOOD; RALPH J. UNDERWOOD; COASTAL FOREST RESOURCES CO.; ANN MARTINELLI ET VIR; CLARENCE HADLEY ET UX; EDWARD GREGG ET UX; CLARENCE HADLEY ET UX; EMERSON LAURENCE MOORE ET UX; JOSEPH E. MICHAEL ET UX; VIOLET GREGG ET AL; VIOLET GREGG ET AL; ROY A. MEREDITH ET UX; EUGENE R. HILL ET AL; JAMES W. DOAK; SARAH E. DOAK ET AL; O.W. GRIFFIN ET UX
LEASE ACREAGE 104.27 AC±; 108 AC±; 22 AC±; 57 AC±; 76 AC±; 32 AC±; 25 AC±; 176 AC±; 18 AC±; 31.2 AC±; 168 AC±; 125 AC±; 114 AC±; 40 AC±; 80 AC±; 22 AC±; 1 AC±; 136 AC±; 220AC±
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,461' TVD 20,716' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

47 — 095 — 02587
STATE COUNTY PERMIT

COUNTY NAME PERMIT

FORM WW-6

LATITUDE 39°25'00" — 11,237' — 7,833' TO BOTTOM HOLE — LATITUDE 39°22'30"

LONGITUDE 80°50'00" — 12,424' TO BOTTOM HOLE — 13,298' — LONGITUDE 80°50'00"

WV NORTH ZONE GRID NORTH

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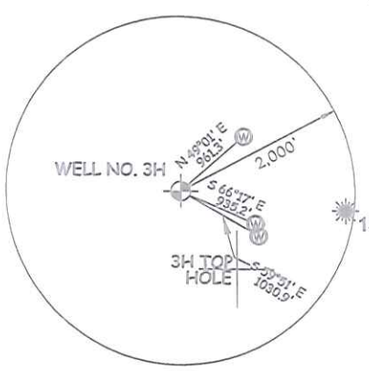
3 WATER WELLS WERE LOCATED WITHIN 2000' OF CENTER OF PAD




| Clay District - Ritchie County | |
|---|---|
| 12-14 | Warren Suker Jr. |
| 12-14.1 | Gary Dawson |
| 12-14.4 | Gary Dawson |
| 12-28 | Gary Dawson Sr. |
| 15-01 | Gary Dawson |
| 15-1.1 | Larry Caine |
| 15-1.2 | Larry Robinson |
| 15-1.7 | Antero Resources Corp. |
| 15-1.9 | Antero Resources Corp. |
| 15-1.10 | Gary Dawson |
| 15-07 | Ralph Underwood III |
| 15-12 | Larry Hadley |
| 15-13 | Sara Reed |
| 15-14 | George Moore |
| 15-14.1 | Linda Moore |
| 15-21 | Clint Kissner |
| 15-25 | Emery Underwood Hrs. |
| 15-26 | Gary Dawson Sr. |
| 15-27 | Gary Dawson Sr. |
| 15-28 | Coastal Forest Resources Co. |
| 15-29 | Iras Wilson |
| 15-30 | Coastal Forest Resources Co. |
| 15-31 | Coastal Forest Resources Co. |
| 15-32 | Marvin Sole |
| 15-32.1 | Marvin Sole |
| 17-02 | Alfred Meredith |
| 17-2.1 | Alfred Meredith |
| 17-2.2 | Alfred Meredith |
| 17-2.4 | Andrew Smith |
| 17-09 | Antero Midstream LLC |
| 17-10.1 | Sandra Clark |
| 17-10.2 | Sandra Clark |
| 17-10.3 | Sandra Clark |
| 17-10.4 | Sandra Clark |
| 17-12 | CNG Transmission Corporation |
| 17-13 | George Ash |
| 17-22 | David Glasure |
| 17-23 | Colleen Ash |
| 17-24 | Jeffrey Milligan |




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 ANTERO RESOURCES CORPORATION.
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.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPTARTMENT OF ENVIRONMENTAL PROTECTION.

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

WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO
WEST VIRGINIA 26415

THOMAS SUMMERS LICENSED No. 2109 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

JOB # 18-030WA
DRAWING # RODZINA3HAD
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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

**LEGEND**
Surface Owner Boundary Lines +/-
Interior Surface Tracts +/-
Proposed Well Path
As Drilled Well Path

THOMAS SUMMERS P.S. 2109

DATE 05/01/20
OPERATOR'S WELL# RODZINA UNIT #3H

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1,009' - AS BUILT WATERSHED HEADWATERS MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' (TH) WEST UNION 7.5' (BH) DISTRICT CENTERVILLE COUNTY TYLER
SURFACE OWNER GARY D. DAWSON ET UX ACREAGE 104.27 ACRES +/-
OIL & GAS ROYALTY OWNER GARY D. DAWSON ET UX; COASTAL FOREST RESOURCES CO.; BRC MINERALS 1, LLC; RALPH J. UNDERWOOD; RALPH J. UNDERWOOD; COASTAL FOREST RESOURCES CO.; ANN MARTINELLI ET VIR; CLARENCE HADLEY ET UX; EDWARD GREGG ET UX; CLARENCE HADLEY ET UX; EMERSON LAURENCE MOORE ET UX; JOSEPH E. MICHAEL ET UX; VIOLET GREGG ET AL; VIOLET GREGG ET AL; ROY A. MEREDITH ET UX; EUGENE R. HILL ET AL; JAMES W. DOAK; SARAH E. DOAK ET AL; O.W. GRIFFIN ET UX
LEASE ACREAGE 104.27 AC±; 108 AC±; 22 AC±; 57 AC±; 76 AC±; 32 AC±; 25 AC±; 176 AC±; 18 AC±; 31.2 AC±; 168 AC±; 125 AC±; 114 AC±; 40 AC±; 80 AC±; 22 AC±; 1 AC±; 136 AC±; 220AC±
PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED PLUG & ABANDON ___ CLEAN OUT & REPLUG ___
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,461' TVD 20,716' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

47 — 095 — 02587
STATE COUNTY PERMIT

COUNTY NAME PERMIT

FORM WW-6