

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

API 47-095-02562 County Tyler District Ellsworth  
Quad Middlebourne 7.5' Pad Name Ferrell Pad Field/Pool Name -----  
Farm name Antero Resources Midstream LLC Well Number Galt 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 4369171.808m Easting 507644.650m  
Landing Point of Curve Northing 4369065.28m Easting 506815.67m  
Bottom Hole Northing 4366721.332m Easting 507644.650m

Elevation (ft) 731.4' 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

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Date permit issued 1/25/2019 Date drilling commenced 7/16/2019 Date drilling ceased 11/19/2019  
Date completion activities began 2/6/2020 Date completion activities ceased 3/16/2020  
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 194', 243' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1224', 1347' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft 770' Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by:  
[Signature]  
10/19/2020

API 47- 095 - 02562 Farm name Antero Resources Midstream LLC Well number Galt 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	24"	20"	110'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	401'	New	54#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2597'	New	36#, H-40	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	14899'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6440'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	204 sx	15.6	1.18	244	0'	8 Hrs.
Surface	Class A	430 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	798 sx (Lead) 3040 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) 14919' MD, 6139' TVD (BHL), 6141' (Deepest Point Drilled) Loggers TD (ft) 14919' MD

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

Plug back procedure N/A

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Kick off depth (ft) 5316'

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

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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

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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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Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
Marcellus	5994' (TOP)	TVD	6471' (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 2340 mcfpd Oil 125 bpd NGL --- bpd Water 272 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	

**\*PLEASE SEE ATTACHED EXHIBIT 3**


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 6/19/20

Submission 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	2/21/2020	14799	14754	60	Marcellus
2	2/22/2020	14715.55285	14550.406	60	Marcellus
3	2/22/2020	14514.86992	14349.7231	60	Marcellus
4	2/22/2020	14314.18699	14149.0402	60	Marcellus
5	2/23/2020	14113.50407	13948.3572	60	Marcellus
6	2/23/2020	13912.82114	13747.6743	60	Marcellus
7	2/23/2020	13712.13821	13546.9914	60	Marcellus
8	2/24/2020	13511.45528	13346.3085	60	Marcellus
9	2/25/2020	13310.77236	13145.6255	60	Marcellus
10	2/25/2020	13110.08943	12944.9426	60	Marcellus
11	2/25/2020	12909.4065	12744.2597	60	Marcellus
12	2/25/2020	12708.72358	12543.5768	60	Marcellus
13	2/26/2020	12508.04065	12342.8938	60	Marcellus
14	2/26/2020	12307.35772	12142.2109	60	Marcellus
15	2/26/2020	12106.6748	11941.528	60	Marcellus
16	2/26/2020	11905.99187	11740.845	60	Marcellus
17	2/27/2020	11705.30894	11540.1621	60	Marcellus
18	3/1/2020	11504.62602	11339.4792	60	Marcellus
19	3/1/2020	11303.94309	11138.7963	60	Marcellus
20	3/2/2020	11103.26016	10938.1133	60	Marcellus
21	3/2/2020	10902.57724	10737.4304	60	Marcellus
22	3/2/2020	10701.89431	10536.7475	60	Marcellus
23	3/3/2020	10501.21138	10336.0646	60	Marcellus
24	3/3/2020	10300.52846	10135.3816	60	Marcellus
25	3/3/2020	10099.84553	9934.6987	60	Marcellus
26	3/3/2020	9899.162602	9734.01577	60	Marcellus
27	3/4/2020	9698.479675	9533.33285	60	Marcellus
28	3/4/2020	9497.796748	9332.64992	60	Marcellus
29	3/4/2020	9297.113821	9131.96699	60	Marcellus
30	3/4/2020	9096.430894	8931.28407	60	Marcellus
31	3/4/2020	8895.747967	8730.60114	60	Marcellus
32	3/5/2020	8695.065041	8529.91821	60	Marcellus
33	3/5/2020	8494.382114	8329.23529	60	Marcellus
34	3/5/2020	8293.699187	8128.55236	60	Marcellus
35	3/5/2020	8093.01626	7927.86943	60	Marcellus
36	3/5/2020	7892.333333	7727.18651	60	Marcellus
37	3/6/2020	7691.650407	7526.50358	60	Marcellus
38	3/6/2020	7490.96748	7325.82065	60	Marcellus
39	3/6/2020	7290.284553	7125.13773	60	Marcellus
40	3/6/2020	7089.601626	6924.4548	60	Marcellus
41	3/6/2020	6888.918699	6723.77187	60	Marcellus
42	3/7/2020	6688.235772	6523.08895	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	2/21/2020	77.7	7792	6019	3660	180070	5160.496	N/A
2	2/22/2020	84.2	8004	6186	3922	179950	7335.676	N/A
3	2/22/2020	85.6	8120	5772	3736	182810	7221.17	N/A
4	2/22/2020	83.2	7975	5977	3738	180380	7117.7	N/A
5	2/23/2020	82.3	8220	5904	3246	181700	7977.67	N/A
6	2/23/2020	86.7	7976	6064	3567	180500	7072.69	N/A
7	2/23/2020	70.4	8071	6145	3420	179200	10962.73	N/A
8	2/24/2020	83.7	8192	5887	3408	184730	9256.411	N/A
9	2/25/2020	85.9	8087	5311	4188	176600	7001.64	N/A
10	2/25/2020	85.3	7854	5748	4531	179620	7520.75	N/A
11	2/25/2020	85.4	7857	5740	3605	182580	6939.84	N/A
12	2/25/2020	82.2	7905	5676	3791	181360	6970.01	N/A
13	2/26/2020	85.2	7560	5314	3408	180380	6965.62	N/A
14	2/26/2020	87.2	7518	5929	3463	178000	6861.71	N/A
15	2/26/2020	87.9	7730	5292	3390	182760	6992.6	N/A
16	2/26/2020	85.1	7418	5230	3381	178940	6924.57	N/A
17	2/27/2020	52.5	8553	4896	5072		1580.83	N/A
18	3/1/2020	85.2	7828	5598	3414	181740	6986.63	N/A
19	3/1/2020	85.5	7761	6174	3434	181310	6932.62	N/A
20	3/2/2020	87.4	7703	6034	3478	180750	6865.79	N/A
21	3/2/2020	85	7440	5780	3679	181200	6903.22	N/A
22	3/2/2020	86.4	7290	6084	3747	182140	6919.94	N/A
23	3/3/2020	84.8	7284	5745	3668	180740	6890.99	N/A
24	3/3/2020	84.9	7343	5217	3612	179290	6795.74	N/A
25	3/3/2020	87.6	7075	5386	3653	181200	7590.05	N/A
26	3/3/2020	83.4	7488	5381	3535	178670	6862.4	N/A
27	3/4/2020	85.4	7192	5390	3550	183660	6932.23	N/A
28	3/4/2020	85.1	7252	5711	3516	180420	6843.4	N/A
29	3/4/2020	0	0	6027	3514	179690	6798.19	N/A
30	3/4/2020	0	0	5285	3683	179850	6848.69	N/A
31	3/4/2020	85	6736	5488	3686	183970	6863.62	N/A
32	3/5/2020	84.7	6737	5727	3596	182810	6793.1	N/A
33	3/5/2020	84.7	6639	5360	3580	183720	6830.66	N/A
34	3/5/2020	84.6	6723	5131	3497	182700	6828.35	N/A
35	3/5/2020	84.6	7057	5328	3430	180180	6819.19	N/A
36	3/5/2020	85.1	6890	5665	3729	180480	6826.33	N/A
37	3/6/2020	84.4	7037	5346	3627	184180	6848.56	N/A
38	3/6/2020	84.7	7075	4514	3440	184560	6766.87	N/A
39	3/6/2020	81.6	7041	5545	4244	214680	7778.65	N/A
40	3/6/2020	84.4	6611	6394	3624	181810	6918.22	N/A
41	3/6/2020	86	6264	5826	3648	180880	8122.03	N/A
42	3/7/2020	86	6264	6139	3646	180160	8345.6	N/A
	<b>AVG=</b>	<b>79.5</b>	<b>7,105</b>	<b>5,640</b>	<b>3,661</b>	<b>7,280,210</b>	<b>287,428</b>	<b>NETOTAL</b>

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**EXHIBIT 3**

LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Silty Sandstone	75	175	75	175
Siltstone	175	275	175	275
Shaly Siltstone	275	335	275	335
Silty Shale	335	555	335	555
Silty Sandstone	555	575	555	575
Shale	575	955	575	955
Shaly Sandstone	955	1,035	955	1,035
Sandstone	1,035	1,215	1,035	1,215
Sandy Shale	1,215	1,255	1,215	1,255
Shaly Siltstone	1,255	1,315	1,255	1,315
Sandstone	1,315	1,435	1,315	1,435
Shaly Sandstone	1,435	1,515	1,435	1,515
Sandy Shale	1,515	1,511	1,515	N/A
Big Lime	1,526	2,098	1,514	2,101
Fifty Foot Sandstone	2,098	2,330	2,086	2,334
Gordon	2,330	2,630	2,319	2,633
Fifth Sandstone	2,630	2,738	2,618	2,741
Bayard	2,738	3,568	2,726	3,587
Speechley	3,568	3,694	3,572	3,720
Balltown	3,694	4,198	3,705	4,281
Bradford	4,198	4,506	4,266	4,635
Benson	4,506	4,889	4,620	5,083
Alexander	4,889	5,896	5,068	6,230
Sycamore	5,763	5,866	6,074	6,200
Middlesex	5,866	5,955	6,215	6,370
Burkett	5,955	5,976	6,385	6,420
Tully	5,976	5,994	6,435	6,471
Marcellus	5,994	NA	6,471	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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CI-9100G	CWS	Corrosion Inhibitor											
									Listed Below				
CalGel 4000	CWS	Gel Slurry											
									Listed Below				
Calbreak 5501	CWS	Breaker											
									Listed Below				
Sand (Proppant)	CWS	Propping Agent											
									Listed Below				
Hydrochloric Acid	CWS	Clean Perforations											
									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	13.13409	
									Hydrochloric acid	7647-01-0	37.00000	0.12370	
									Calcite	471-34-1	1.00000	0.07222	
									Illite	12173-60-3	1.00000	0.05910	
									Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.01941	
									Guar gum	9000-30-0	60.00000	0.01941	
									Apatite	64476-38-6	0.10000	0.01313	
									Biotite	1302-27-8	0.10000	0.01313	

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					Goethite	1310-14-1	0.10000	0.01313	
					Ilmenite	98072-94-7	0.10000	0.00591	
					Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00162	
					Glutaraldehyde	111-30-8	14.00000	0.00128	
					Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00049	
					Ammonium Persulfate	7727-54-0	100.00000	0.00047	
					Ethanol	64-17-5	3.00000	0.00028	
					Alkyl dimethyl benzyl ammonium chloride	68424-85-1	3.00000	0.00028	
					Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00028	
					Vinylidene chloride-methyl acrylate copolymer	25038-72-6	20.00000	0.00009	
					Ethylene Glycol	107-21-1	40.00000	0.00007	
					Diethylene glycol, monomethyl ether	34590-94-8	20.00000	0.00003	
					Ethoxylated Alcohols	68131-39-5	10.00000	0.00002	
					Cinnamaldehyde	104-55-2	10.00000	0.00002	
					Formic acid	64-18-6	10.00000	0.00002	
					Tar bases, quinolone derivs, benzyl chloride- quatenized	72480-70-7	10.00000	0.00002	
					Isopropyl alcohol	67-63-0	5.00000	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(j) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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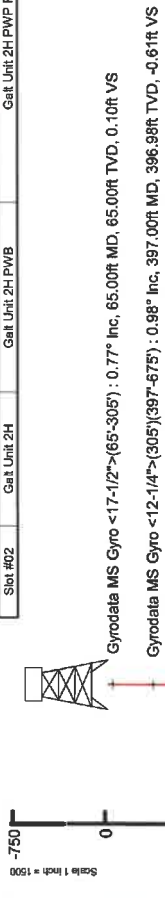
Location: Tyler County, WV  
 Facility: Ferrell South Pad  
 Slot: Slot #02  
 Well: Galt Unit 2H  
 Wellbore: Galt Unit 2H PWB



Plot reference north is Galt Unit 2H PWB Rev-A-0  
 True vertical depths are referenced to H&P 519 (RKB)  
 Reference wellbore measurements and depths are referenced to H&P 519 (RKB)  
 H&P 519 (RKB) to Mean Sea Level: 701 feet  
 Mean Slot Level to Ground level (At Slot: Slot #02): 201 feet  
 Other wellbore MDs are referenced to each well's default MD datum

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Ferrell South Pad	14333840.689	3922916.5900N	80°55'1.9000"W
Slot	Local E (ft)	Local N (ft)	Latitude
Slot #02	-30.35	0.61	3922916.2900N
H&P 519 (RKB) to Ground level (At Slot: Slot #02)	14333810.558	3922916.2900N	80°55'1.8800"W
H&P 519 (RKB) to Ground level (At Slot: Slot #02)		30ft	
H&P 519 (RKB) to Mean Sea Level		761ft	

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #02	Galt Unit 2H	Galt Unit 2H AMB	Galt Unit 2H AWP Prob: 14019'
Slot #02	Galt Unit 2H	Galt Unit 2H PWB	Galt Unit 2H PWP Rev-A-0



Well Profile Data						
Design Comment	MD (ft)	Inc (°)	Az (°)	Local N (ft)	Local E (ft)	VS (ft)
Top On	5856.00	26.000	187.850	5922.89	-1087.31	10.80
Proj. To Bottom	5946.00	26.920	187.850	5872.74	-1092.98	3.24
End of 3D Arc	6044.64	37.309	193.177	5755.30	-1103.07	9.00
POE	6500.82	70.108	161.241	6026.00	-1063.62	-252.87
Landing Pt.	6721.94	90.000	161.241	6064.00	-994.23	-36.17
BHL	14951.00	90.000	161.241	6064.00	-8091.41	0.00
					1652.17	0.00
					8192.89	



API: 47-095-02562-0000  
 BHI Job #: 110136819A  
 Rig: H&P 519  
 Duration: 11/16/2019-11/18/2019

User specified (FIDGM) Dip: 66.50° Field: 51749 nT  
 Magnetic North is 7.61 degrees West of True North (at 11/13/2019)  
 Grid North is 0.05 degrees East of True North  
 To correct azimuth from True to Grid subtract 0.05 degrees  
 To correct azimuth from Magnetic to Grid subtract 7.66 degrees

Vertical Section (ft)  
 Scale 1 inch = 1800  
 Azimuth 161.24° with reference 0.00 N, 0.00 E

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10,304' to Bottom Hole

309' to Top Hole  
TOP HOLE LATITUDE 39 - 30 - 00  
BTM HOLE LATITUDE 39 - 27 - 30

**Antero Resources**  
**Well No. Galt Unit 2H**  
**As-Drilled**  
Antero Resources Corporation

Wellhead Layout  
Not to Scale

- ⊙ Daniels Unit 3H (47-095-02568)
- ⊙ Daniels Unit 2H (47-095-02567)
- ⊙ Daniels Unit 1H (47-095-02566)
- ⊙ Galt Unit 3H (47-095-02563)
- ⊙ **As-Drilled Galt Unit 2H (47-095-02562)**
- ⊙ Galt Unit 1H (47-095-02561)

Dennis J. & Connie S. Moore  
314/699  
66.84 Ac.  
5/8" Rebar

Richard L. Clark Lease  
Richard L. Clark Lease  
Richard L. Clark Lease

Dennis J. Moore, et al  
448/216  
63.02 Ac.

Larry G. & Betsy E. Moore  
314/701  
63.40 Ac.

Kirk L. Hadley  
321/842  
40 Ac.

Robert L. Keller Lease

Robert L. Keller  
312/330  
14.32 Ac.

Robert L. Keller  
312/330  
25 Ac.

Ronald E. Stevens  
WB 34/467  
75.23 Ac.

Edwin K. Livingston Sr.  
WB 14/150  
25 Ac.

Denver A. & Carolyn F. McMullen  
252/264  
47.88 Ac.

Matthew & Mary Jo Childers  
358/77  
54.17 Ac.

Mathew S. Childers, et ux Lease

Virgil R. McMullen, et ux Lease

47-095-1922

Donald R. & ... Lease

Benjamin H. Kile, Jr. Lease

Ronald H. Stevens, et al  
AR 44/570  
70 Ac.

William Eugene III & Sharon Ann Hartwell  
269/1  
13.43 Ac.

Denver A. & Carolyn F. McMullen  
348/397  
70 Ac.

Helen Reed, et al Lease

500' Buffer

S 17°57' E Approx.

As-Drilled Well No. Galt Unit 2H

Bottom Hole 7.5' Spot

**Notes:**  
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.  
Well No. Galt Unit 2H Top Hole coordinates are  
N: 357,187.20' Latitude: 39°28'19.29"  
E: 1,599,943.00' Longitude: 80°55'01.89"  
Bottom Hole coordinates are  
N: 349,113.13' Latitude: 39°26'59.79"  
E: 1,601,473.52' Longitude: 80°54'40.76"  
UTM Zone 17, NAD 1983  
Top Hole Coordinates Bottom Hole Coordinates  
N: 4,369,171.808m N: 4,366,721.332m  
E: 507,137.332m E: 507,644.650m  
Plat orientation and corner and well references are based upon the grid north meridian.  
Well location references are based upon the magnetic meridian.

ID	TM/Par	Owner	BK/Pg	Acres
1	26/4		312/330	16.200
2	26/5	Robert L. Keller	312/330	20.010
3	26/7		312/330	22.090
4	26/9.1		393/474	1.805
5	26/9.2		393/474	1.908
6	26/9.3	Alicia Moseley	393/474	1.915
7	26/9.4		393/474	1.871
8	26/9.5		393/474	1.917
9	26/9.6		327/789	1.885
10	26/9.9	Kathryn Clow	326/307	1.599
11	26/9.10		323/504	1.200
12	26/9.7		404/352	2.048
13	26/9.8		404/352	1.751
14	26/9.11	JB Exploration I, LLC	404/352	1.569
15	26/9		404/352	28.021
16	26/9.12		404/352	4.285
17	26/10		312/330	12.25
18	26/15	Robert L. Keller	312/330	15.14
19	26/30	Ronald E. Stevens	WB34/467	4.470
20	26/26.3		351/650	10.106
21	26/26.2	Charles & Donna Mead	347/516	13.262
22	26/29	Virginia Frazier	175/414	2.340
23	26/31	Edwin K. Livingston Sr.	269/1	13.430
24	26/32		WB14/50	3.100
25	26/33	Denver A. & Carolyn F. McMullen	176/548	0.750
26	3/6.1	Virgil R. & Janice E. McMullen	308/290	12.000
27	29/1		230/799	1.000
28	26/35		AR44/570	13.610
29	6/7.1	Ronald L. Stevens, et al	AR44/570	9.810
30	6/7	Patsy Jean & Baker Donald Fletcher	110/551	69.000

Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

Note: 1 spring was found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad. There were no gas wells found or documented within 3000' of the proposed well.



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 prescribed by the Department of Environmental Protection.

Bradley D. Miller, P.S. 2167

	Bearing	Dist.
L1	S 40°37' W	2,766.9'
L2	N 56°44' W	2,273.4'
L3	N 46°50' W	1,207.3'
L4	S 89°32' E	2,252.1'



- Leases**
- A. Kathryn T. Clow Lease
  - B. Alice Moseley Lease
  - C. Winifred Antalek Lease
  - D. Edwin K. Livingston, Sr. Lease
  - E. Clarence W. Mutschelknaus, Sr., et al Lease
  - F. Susan E. Garnet Lease

- Legend**
- ⊙ Proposed gas well
  - ⊙ Monument, as noted
  - ⊙ Existing Well, as noted
  - Creek or Drain
  - Existing Road
  - Surface boundary (approx.)
  - Interior surface tracts (approx.)

FILE NO: 13-54-E-17  
DRAWING NO: Galt 2H As-Drilled  
SCALE: 1" = 1200'  
MINIMUM DEGREE OF ACCURACY: Submeter  
PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OIL AND GAS DIVISION

DATE: May 8 20 20  
OPERATOR'S WELL NO. Galt Unit 2H  
API WELL NO  
47 - 095 - 02562  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION: As-Drilled 731.4' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Middlebourne 1.885;  
DISTRICT: Ellsworth Helen Reed, et al; Denver A McMullen, et ux; COUNTY: Tyler 118.63; 51.29;  
SURFACE OWNER: Antero Midstream, LLC Clarence W. Mutschelknaus, Sr., et al; ACREAGE: 203.59 173.29; 164.91;  
ROYALTY OWNER: Alice Moseley; Larry R. Henthorn, et ux; Richard L. Clark Kathryn T. Clow; Robert L. Keller; Winifred Antalek; 9.416; 46.6425;  
LEASE NO: ACREAGE: 61.71875; 63.02;

PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,139' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 14,919' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System  
ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road  
Denver, CO 80202 Charleston, WV 25313

TOP HOLE LONGITUDE 80 - 55 - 00  
BTM HOLE LONGITUDE 80 - 52 - 30  
2,892' to Bottom Hole

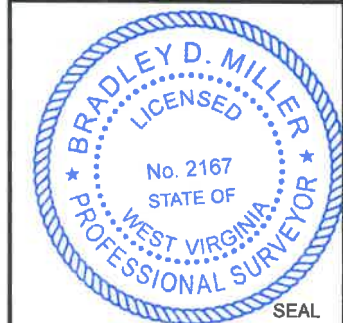
10,185' to Top Hole

**Antero Resources**  
**Well No. Galt Unit 2H**  
**As-Drilled**  
**Antero Resources Corporation**

- Wellhead Layout**  
 Not to Scale
- Daniels Unit 3H (47-095-02568)
  - Daniels Unit 2H (47-095-02567)
  - Daniels Unit 1H (47-095-02566)
  - Galt Unit 3H (47-095-02563)
  - As-Drilled Galt Unit 2H (47-095-02562)
  - Galt Unit 1H (47-095-02561)

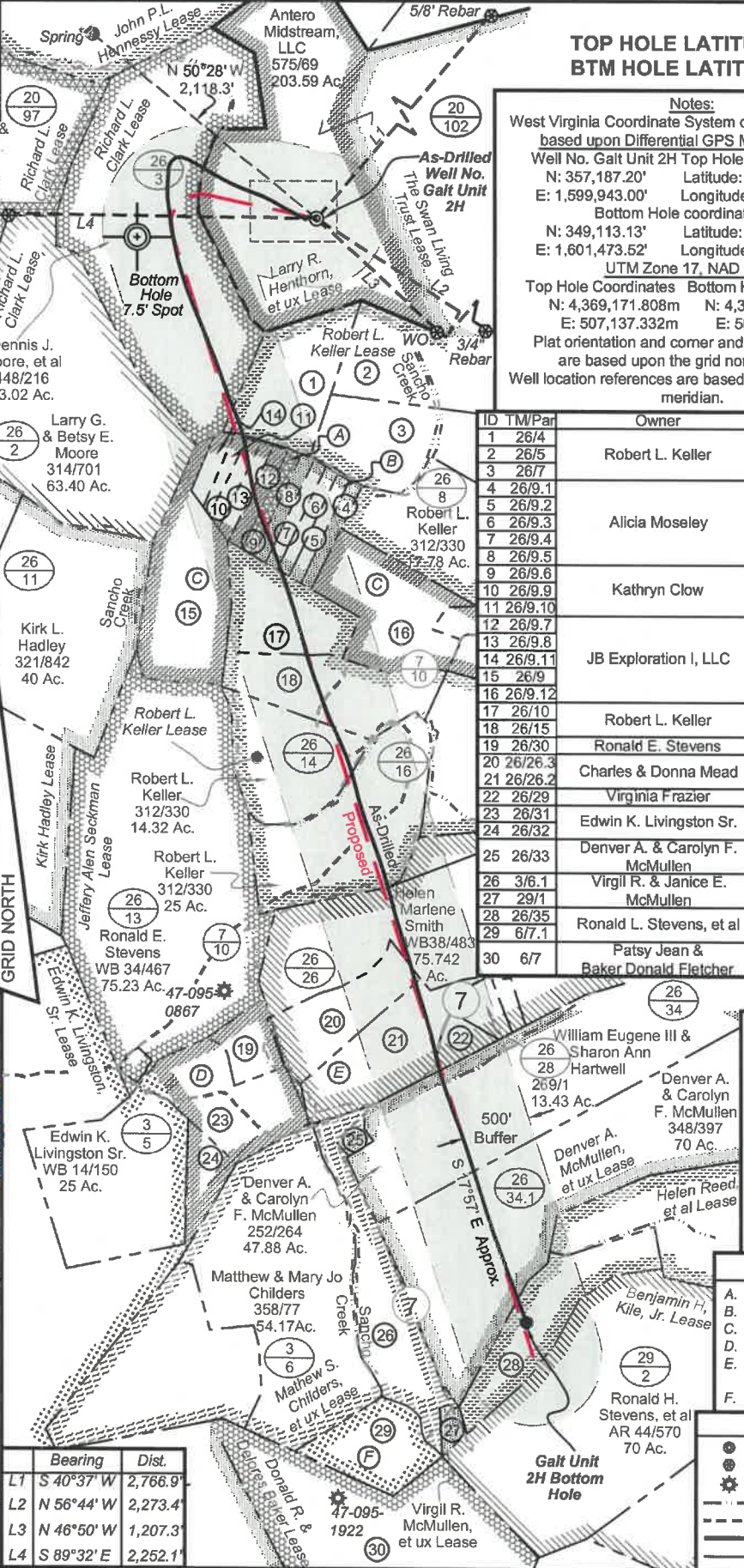
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