

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

API 47 - 095 - 02950 ⁰²⁵⁹⁰ County Tyler District Meade
Quad Middlebourne 7.5' Pad Name Gorrell Pad Field/Pool Name ----
Farm name Elizabeth Gorrell Well Number Grounds Unit 1H
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 4363234.265m Easting 500841.359m
Landing Point of Curve Northing 4362911.82m Easting 501286.28m
Bottom Hole Northing 4360132.009m Easting 502318.862m

Elevation (ft) 1045' 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 3/15/2019 Date drilling commenced 3/26/2019 Date drilling ceased 6/10/2019
Date completion activities began 10/5/2019 Date completion activities ceased 11/19/2019
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 108', 505' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1378', 1544' 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: JEB
4/15/2020

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API 47- 095 - 02590 02950 Farm name Elizabeth Gorrell Well number Grounds Unit 1H

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"	631'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2636'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17534'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6472'		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	214 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	631 sx	15.6	1.18	826	0'	8 Hrs.
Coal							
Intermediate 1	Class A	836 sx	15.6	1.18	1181	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	675sx (Lead) 2647sx (Tail)	14.5 (Lead), 15.2 (Tail)	1.40 (Lead), 1.26 (Tail)		-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17554' MD, 6321' TVD (BHL), 6320' (Deepest Point Drilled) Loggers TD (ft) 17554' MD

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

Plug back procedure N/A

Kick off depth (ft) 5772'

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

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API 47- 095 - 02590
02950

Farm name Elizabeth Gorrell

Well number Grounds Unit 1H

PRODUCING FORMATION(S)

DEPTHS

<u>Marcellus</u>	<u>6201' (TOP)</u>	<u>TVD</u>	<u>6539' (TOP)</u>	<u>MD</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

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 1051 mcfd Oil 1 bpd NGL --- bpd Water 15 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 ₂ S, ETC)
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***PLEASE SEE ATTACHED EXHIBIT 3**

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 KLX Energy Services
Address 3040 Post Oak Boulevard City Houston State TX Zip 77056

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 [Signature] Title Permitting Agent Date 4-3-20

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

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API 47-095-02950 Farm Name Elizabeth Gorrell Well Number Grounds Unit 1H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	10/5/2019	17386.5	17441.3	60	Marcellus
2	10/6/2019	17186.55	17355.175	60	Marcellus
3	10/6/2019	16986.6	17155.225	60	Marcellus
4	10/6/2019	16786.65	16955.275	60	Marcellus
5	10/6/2019	16586.7	16755.325	60	Marcellus
6	10/7/2019	16386.75	16555.375	60	Marcellus
7	10/7/2019	16186.8	16355.425	60	Marcellus
8	10/7/2019	15986.85	16155.475	60	Marcellus
9	10/8/2019	15786.9	15955.525	60	Marcellus
10	10/8/2019	15586.95	15755.575	60	Marcellus
11	10/8/2019	15387	15555.625	60	Marcellus
12	10/9/2019	15187.05	15355.675	60	Marcellus
13	10/9/2019	14987.1	15155.725	60	Marcellus
14	10/9/2019	14787.15	14955.775	60	Marcellus
15	10/9/2019	14587.2	14755.825	60	Marcellus
16	10/9/2019	14387.25	14555.875	60	Marcellus
17	10/10/2019	14187.3	14355.925	60	Marcellus
18	10/10/2019	13987.35	14155.975	60	Marcellus
19	10/10/2019	13787.4	13956.025	60	Marcellus
20	10/10/2019	13587.45	13756.075	60	Marcellus
21	10/11/2019	13387.5	13556.125	60	Marcellus
22	10/11/2019	13187.55	13356.175	60	Marcellus
23	10/11/2019	12987.6	13156.225	60	Marcellus
24	10/11/2019	12787.65	12956.275	60	Marcellus
25	10/11/2019	12587.7	12756.325	60	Marcellus
26	10/12/2019	12387.75	12556.375	60	Marcellus
27	10/12/2019	12187.8	12356.425	60	Marcellus
28	10/12/2019	11987.85	12156.475	60	Marcellus
29	10/12/2019	11787.9	11956.525	60	Marcellus
30	10/13/2019	11587.95	11756.575	60	Marcellus
31	10/13/2019	11388	11556.625	60	Marcellus
32	10/13/2019	11188.05	11356.675	60	Marcellus
33	10/13/2019	10988.1	11156.725	60	Marcellus
34	10/13/2019	10788.15	10956.775	60	Marcellus
35	10/14/2019	10588.2	10756.825	60	Marcellus
36	10/14/2019	10388.25	10556.875	60	Marcellus
37	10/14/2019	10188.3	10356.925	60	Marcellus
38	10/14/2019	9988.35	10156.975	60	Marcellus
39	10/14/2019	9788.4	9957.025	60	Marcellus
40	10/15/2019	9588.45	9757.075	60	Marcellus
41	10/15/2019	9388.5	9557.125	60	Marcellus
42	10/15/2019	9188.55	9357.175	60	Marcellus
43	10/15/2019	8988.6	9157.225	60	Marcellus
44	10/15/2019	8788.65	8957.275	60	Marcellus
45	10/16/2019	8588.7	8757.325	60	Marcellus
46	10/16/2019	8388.75	8557.375	60	Marcellus
47	10/16/2019	8188.8	8357.425	60	Marcellus
48	10/16/2019	7988.85	8157.475	60	Marcellus
49	10/17/2019	7788.9	7957.525	60	Marcellus
50	10/17/2019	7588.95	7757.575	60	Marcellus
51	10/18/2019	7389	7557.625	60	Marcellus
52	10/19/2019	7189.05	7357.675	60	Marcellus
53	10/20/2019	6989.1	7157.725	60	Marcellus
54	10/21/2019	6789.15	6957.775	60	Marcellus
55	10/22/2019	6589.2	6757.825	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	10/5/2019	70.98	7874	6811	3352	184040	5118.7	N/A
2	10/6/2019	78.72	8033	6128	3184	403900	7359.9	N/A
3	10/6/2019	76.59	8046	5894	3280	406140	7285.5	N/A
4	10/6/2019	76.92	7969	5343	3307	403480	7423.8	N/A
5	10/6/2019	77.36	8058	6203	3280	405900	7581.3	N/A
6	10/7/2019	75.9	7767	5240	3475	406400	7295.1	N/A
7	10/7/2019	68.63	7437	5122	3369	404080	7204.3	N/A
8	10/7/2019	77.9	7848	4973	3405	408080	7278.2	N/A
9	10/8/2019	82.63	8223	5242	3574	409340	7478.7	N/A
10	10/8/2019	78.5	8013	5048	3458	408420	7306.3	N/A
11	10/8/2019	82.97	8315	5244	3295	404020	7242.3	N/A
12	10/9/2019	81.4	8024	5352	3280	407220	7601.5	N/A
13	10/9/2019	85.13	8175	5172	3438	407600	7486.2	N/A
14	10/9/2019	84.33	8017	5047	3467	408560	7458.6	N/A
15	10/9/2019	83.88	8062	5135	3399	406880	7468.5	N/A
16	10/9/2019	86.3	8210	4870	3471	414580	7192.1	N/A
17	10/10/2019	83.8	7921	5203	3495	411080	7189.2	N/A
18	10/10/2019	87.24	8151	5008	3428	407680	7538.8	N/A
19	10/10/2019	84.42	7760	5194	3456	410100	7273.9	N/A
20	10/10/2019	83.4	7594	5283	3520	408100	7155.9	N/A
21	10/11/2019	85.2	7558	5189	3397	409680	7185	N/A
22	10/11/2019	83.1	7542	5622	3385	406340	7158.9	N/A
23	10/11/2019	84.73	7744	5118	3345	407500	7049.8	N/A
24	10/11/2019	84.95	7694	4943	3299	409900	7036.6	N/A
25	10/11/2019	83.7	7707	5095	3217	408180	7105.2	N/A
26	10/12/2019	84.6	7572	5459	3504	406560	7022	N/A
27	10/12/2019	84.74	7822	5166	3410	407400	6906	N/A
28	10/12/2019	84.48	7783	5829	3276	407580	6910	N/A
29	10/12/2019	85.35	8025	5100	3283	404620	6885.7	N/A
30	10/13/2019	84.2	7664	5182	3321	401360	6964.7	N/A
31	10/13/2019	84.79	7575	5208	3413	404680	6867.9	N/A
32	10/13/2019	84.59	7537	5229	3356	405340	6824.1	N/A
33	10/13/2019	85.4	7675	5147	3545	411880	6914	N/A
34	10/13/2019	83.1	7524	5038	3413	406800	6909.3	N/A
35	10/14/2019	84.4	7543	6881	3351	412540	6978.6	N/A
36	10/14/2019	84.65	7726	5036	3427	410940	6991.8	N/A
37	10/14/2019	85.38	7562	4952	3458	404860	6856.7	N/A
38	10/14/2019	86.4	7635	4986	3579	400640	6815.5	N/A
39	10/14/2019	83.1	7416	5231	3246	405020	6840.1	N/A
40	10/15/2019	86	7365	5295	3438	409620	6905.8	N/A
41	10/15/2019	85.73	7635	5137	3522	405440	6856.2	N/A
42	10/15/2019	84.71	7502	5446	3301	408060	6855.4	N/A
43	10/15/2019	85.59	7459	5158	3574	399380	6756.5	N/A
44	10/15/2019	83.6	7505	5007	3681	400020	6749.2	N/A
45	10/16/2019	84.1	7231	5320	3671	400080	6720.8	N/A
46	10/16/2019	85.73	7425	5419	3637	403160	6727.4	N/A
47	10/16/2019	85.45	7242	4957	3358	409500	6796.1	N/A
48	10/16/2019	84.8	6782	5976	3223	405400	6819.1	N/A
49	10/17/2019	85.2	7132	6047	3293	401060	6801.3	N/A
50	10/17/2019	84.68	7246	5710	3214	407260	8418.5	N/A
51	10/17/2019	84.76	6776	5052	3416	414420	7026.6	N/A
52	10/17/2019	85.17	6894	5349	3302	406760	6825.7	N/A
53	10/18/2019	84.8	6855	5245	3293	406340	6739.9	N/A
54	10/18/2019	84.21	6887	5628	3344	415320	6860.5	N/A
55	10/18/2019	85.22	6843	5725	3077	401020	6709	N/A
	AVG	82.7	7,767	5,317	3,408	18,080,020	318,005	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
Silty Sandstone	70	300	70	300
Sandy Siltstone	300	380	300	380
Sandstone	380	540	380	540
Sandy Siltstone	540	580	540	580
Silty Sandstone	580	630	580	630
Silty Shale	630	720	630	720
Shale	720	1,280	720	1,280
Sandstone	1,280	1,660	1,280	1,660
Sandy Siltstone	1,660	1,780	1,660	1,780
Silty Sandstone, tr Shale	1,780	1,820	1,780	1,820
Sandstone	1,820	1,870	1,820	1,870
Sandy siltstone	1,870	1,880	1,870	1,880
Sandstone	1,880	1,903	1,880	N/A
Big Lime	1,933	2,750	0	2,788
Fifty Foot Sandstone	2,750	2,852	0	2,894
Gordon	2,852	3,129	0	3,181
Fifth Sandstone	3,129	3,280	0	3,336
Bayard	3,280	3,801	0	3,870
Speechley	3,801	4,072	0	4,147
Balltown	4,072	4,527	0	4,614
Bradford	4,527	4,883	0	4,981
Benson	4,883	5,171	0	5,277
Alexander	5,171	6,122	0	6,331
Sycamore	5,997	6,092	6,159	6,301
Middlesex	6,092	6,178	6,301	6,475
Burkett	6,178	6,196	6,475	6,525
Tully	6,196	6,201	6,525	6,539
Marcellus	6,201	NA	6,539	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:	10/5/2019
Job End Date:	10/18/2019
State:	West Virginia
County:	Tyler
API Number:	47-095-02590-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Grounds 1H
Latitude:	39.41855600
Longitude:	-80.99039400
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,315
Total Base Water Volume (gal):	16,921,285
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
Fresh Water	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	55.75259	Density = 8.34
Produced Water	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	30.59656	Density = 8.50

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CalFrac CalBreak 5501	Calfrac Well Services Corp.	Oxidizer							
					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	13.46267		
			Hydrochloric acid	7647-01-0		30.00000	0.03954		
			Hydrotreated light petroleum distillate	64742-47-8		30.00000	0.01177		
			Guar gum	9000-30-0		100.00000	0.00369		
			Glutaraldehyde	111-30-8		30.00000	0.00276		
			Alkanolamine phosphate	Trade Secret		30.00000	0.00118		
			Methanol	67-56-1		100.00000	0.00111		
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1		5.00000	0.00046		
			Ethoxylated alcohols	Proprietary		1.00000	0.00039		
			Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched	69011-36-5		1.00000	0.00039		
			Ethylene glycol	107-21-1		5.00000	0.00020		
			Ethanol	64-17-5		1.00000	0.00009		
			Peroxydisulfuric acid ((HO)S(O)2)2O2), ammonium salt (1:2)	7727-54-0		100.00000	0.00009		
			Modified thiourea polymer	Proprietary		30.00000	0.00007		
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3		30.00000	0.00007		
			2-Propenoic acid, methyl ester, polymer with 1,1-dichloroethene	25038-72-6		20.00000	0.00002		
			Hexadecene	629-73-2		5.00000	0.00001		
			Propargyl alcohol	107-19-7		5.00000	0.00001		

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9,292' to Top Hole

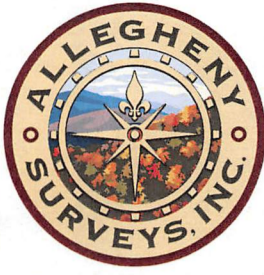
4,367' to Bottom Hole

TOP Hole LATITUDE 39 - 27 - 30
BTM Hole LATITUDE 39 - 25 - 00

LONGITUDE 80 - 57 - 30

14,338' to Top Hole

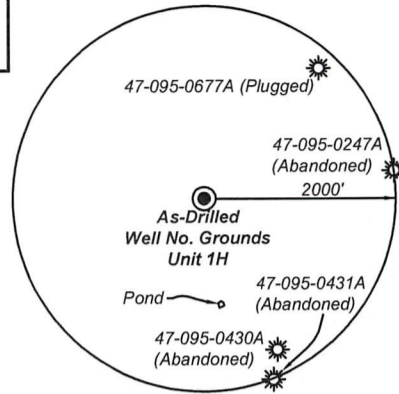
**Antero Resources
Well No. Grounds
Unit 1H
As Drilled**
Antero Resources Corporation



Legend

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

	Bearing	Dist.
L1	N 78°52' E	547.8'
L2	S 43°28' W	1,673.9'
L3	S 85°29' W	1,940.2'
L4	N 22°58' W	1,849.2'

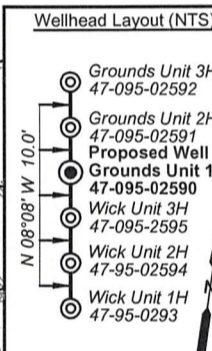


Note: It appears 0 water wells and a pond were found within 2000' of proposed well. No occupied dwellings and no buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.

ID	TM/Par	Owner	Bk/Pg	Acres
47	7/14	Smith	121/11	50.00
46	7/5	Coastal Forest Resources Co.	352/148	6.60
45	7/10	Fritzsimmmons	336/764	161.63
44	7/15	Gorrell	321/360	242.50
43	7/20	Ankrom	357/397	62.25
42	7/26	Freeland	348/231	5.64
41	7/26.1	Glover	347/492	4.36
40	7/16	Seven Spirits Farms, LLC	381/67	175.11
39	7/27	Darnell (Life)	260/657	23.49
38	8A/12	Ryan	325/224	1.21

Bottom Hole 7.5' Spot

ID	TM/Par	Owner	Bk/Pg	Acres
B7	8A/12.3	Leasure	WB 43/148	0.77
36	8/40	Darnell (Life)	260/657	3.05
35	8/42	Brisendine	353/369	49.03
34	8/41	Dunham	352/628	0.35
33	8/43	Dawson (Life)	365/198	0.67
32	8/43.1	Lamp	365/203	0.55
31	10/11	Tartal	342/109	80.32
30	8/46	Snider	376/614	49.03
29	8/48	Lamp	344/384	12.16
28	11/4.3	Forrester	386/291	1.35
27	11/5.1	Forrester	255/713	0.85
26	11/5	Forrester	285/111	67.57
25	11/4.2	Forrester, et al	445/300	1.67
24	11/4	Forrester	285/111	7.37
23	11/4.1	Forrester	275/76	1.82
22	10/12	Serafine	352/624	32.00
21	11/3	Shields	324/287	1.84
20	11/1.1	Shields	324/287	0.23
19	11/6	LeMasters	294/151	62.00
18	11/2	Grim, et al	333/675	35.00
17	11/1	Shields	493/423	1.76
16	10/13	Hendrickson	234/71	2.13
15	11/37	Hendrickson	255/100	0.343
14	11/38	Reed	343/196	1.063
13	11/36	Mossor	230/255	0.94
12	10/16	Jackson, et al	355/311	71.18
11	10/15	F&R Farm, LLC	343/331	47.17
10	10/14	Hendrickson	261/272	38.50
9	11/29	Hendrickson	261/272	10.00
8	11/28	Kasper	309/500	8.21
7	11/26	Waide (Life)	WB32/383	41.06
6	11/27	Yeater, et al	379/609	32.25
5	11/30	Shea, et al	356/33	60.00
4	11/31	Kronau, et al	481/185	11.07
3	11/32.1	Kronau, et al	481/185	2.22
2	11/32	Hall	338/287	153.11
1	11/25	Hamilton	352/524	171.79



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.

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



Notes:
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Well No. Grounds Unit 1H Top Hole coordinates are
N: 338,048.64' Latitude: 39°25'06.79"
E: 1,578,957.32' Longitude: 80°59'25.42"
Bottom Hole coordinates are
N: 327,787.47' Latitude: 39°23'26.15"
E: 1,583,635.80' Longitude: 80°58'23.67"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,363,234.265m N: 4,360,132.009m
E: 500,841.359m E: 502,318.862m
Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Leases			
A	Janice Rieck	E	Patricia G. Mason
B	DWG Oil & Gas Acquisitions, LLC	F	Ann W. Clutter
C	Ottis F. Wilcox	G	Kevin Andrew Yeater
D	J. Bradford Wells	H	J. Bradford Wells

FILE NO: 50-54-M-17
DRAWING NO: Grounds 1H As-Drilled
SCALE: 1" = 2000'
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: February 28 20 20
OPERATOR'S WELL NO. Grounds Unit 1H
API WELL NO
47 - 095 - 02590
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: As-Built 1045' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Middlebourne 39.04; 129.9825;
DISTRICT: Meade COUNTY: Tyler 127.846; 116.64; 83.12; 50.0;
SURFACE OWNER: Elizabeth Gorrell Kevin Andrew Yeater; Ann W. Clutter; Patricia G. Mason; Ottis F. Wilcox; J&N Management Enterprises, LLC; DWG Oil & Gas Acquisitions, LLC; ACREAGE: 242.5 28.97207; 185;
ROYALTY OWNER: Oil & Gas Onshore, LP; Wilma Jane Benefield; Vickie Gorrell, et al LEASE NO: ACREAGE: 234.74 201.8; 74.3;
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,321' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 17,554' 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