

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

API 47 - 095 - 02614 County Tyler District Ellsworth  
Quad Shirley 7.5' Pad Name State Ridge Pad Field/Pool Name ----  
Farm name John D. Mendenhall & Jeffery A. Davis Well Number Penn 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 4373212.316m Easting 510809.560m  
Landing Point of Curve Northing 4372349.32m Easting 511059.41m  
Bottom Hole Northing 4371121.525m Easting 511509.343m

Elevation (ft) 1064' 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 5/16/2019 Date drilling commenced 8/17/2019 Date drilling ceased 1/30/2020  
Date completion activities began 4/21/2020 Date completion activities ceased 5/10/2020  
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 44' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1490' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft 100' Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by:  
LCB  
11/6/2020

API 47-095 - 02614 Farm name John D. Mendenhall & Jeffery A. Davis Well number Penn 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"	120'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	403'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2656'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	15153'	New	23#, HCP-110	N/A	Y
Tubing		2-3/8"	6832'		4.7#, P-110		
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	242 sx	15.6	1.18	241	0'	8 Hrs.
Surface	Class A	319 sx	15.6	1.20	635	0'	8 Hrs.
Coal							
Intermediate 1	Class A	933 sx	15.6	1.19	1082	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	792 sx (Lead) 2137 sx (Tail)	14.5 (Lead), 15.2 (Tail)	1.4 (Lead), 1.6 (Tail)	3003	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 15172' MD, 6555' TVD (BHL), 6557' (Deepest Point Drilled) Loggers TD (ft) 15172' MD

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

Plug back procedure N/A

Kick off depth (ft) 5759'

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 - 02614

Farm name John D. Mendenhall & Jeffery A. Davis

Well number Penn Unit 1H

**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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PRODUCING FORMATION(S)

DEPTHS

Marcellus 6438' (TOP) TVD 6871' (TOP) MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 3000 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 6671 mcfpd Oil 263 bpd NGL --- bpd Water 10 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 KLX Energy Services  
Address 6072 W Veterans Memorial Hwy City Bridgeport State WV Zip 26330

Cementing Company Schlumberger Oilfield Services  
Address 300 Schlumberger Dr City Sugarland State TX Zip 77478

Stimulating Company CalFrac Well Services  
Address 171 17th Street, Suite 1445 City Denver State CO Zip 80202

Please insert additional pages as applicable.

Completed by Megan Griffith Telephone 303-357-7223  
Signature [Signature] Title Permitting Agent Date 9/14/20

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

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Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	4/21/2020	15054.7	15011.6	60	Marcellus
2	4/22/2020	14973.68583	14807.115	60	Marcellus
3	4/22/2020	14771.40083	14604.83	60	Marcellus
4	4/22/2020	14569.11583	14402.545	60	Marcellus
5	4/22/2020	14366.83083	14200.26	60	Marcellus
6	4/23/2020	14164.54583	13997.975	60	Marcellus
7	4/23/2020	13962.26083	13795.69	60	Marcellus
8	4/23/2020	13759.97583	13593.405	60	Marcellus
9	4/23/2020	13557.69083	13391.12	60	Marcellus
10	4/23/2020	13355.40583	13188.835	60	Marcellus
11	4/24/2020	13153.12083	12986.55	60	Marcellus
12	4/24/2020	12950.83583	12784.265	60	Marcellus
13	4/24/2020	12748.55083	12581.98	60	Marcellus
14	4/24/2020	12546.26583	12379.695	60	Marcellus
15	4/24/2020	12343.98083	12177.41	60	Marcellus
16	4/24/2020	12141.69583	11975.125	60	Marcellus
17	4/25/2020	11939.41083	11772.84	60	Marcellus
18	4/25/2020	11737.12583	11570.555	60	Marcellus
19	4/25/2020	11534.84083	11368.27	60	Marcellus
20	4/25/2020	11332.55583	11165.985	60	Marcellus
21	4/25/2020	11130.27083	10963.7	60	Marcellus
22	4/25/2020	10927.98583	10761.415	60	Marcellus
23	4/25/2020	10725.70083	10559.13	60	Marcellus
24	4/26/2020	10523.41583	10356.845	60	Marcellus
25	4/26/2020	10321.13083	10154.56	60	Marcellus
26	4/26/2020	10118.84583	9952.275	60	Marcellus
27	4/26/2020	9916.560833	9749.99	60	Marcellus
28	4/26/2020	9714.275833	9547.705	60	Marcellus
29	4/26/2020	9511.990833	9345.42	60	Marcellus
30	4/27/2020	9309.705833	9143.135	60	Marcellus
31	4/27/2020	9107.420833	8940.85	60	Marcellus
32	4/27/2020	8905.135833	8738.565	60	Marcellus
33	4/27/2020	8702.850833	8536.28	60	Marcellus
34	4/27/2020	8500.565833	8333.995	60	Marcellus
35	4/27/2020	8298.280833	8131.71	60	Marcellus
36	4/28/2020	8095.995833	7929.425	60	Marcellus
37	4/28/2020	7893.710833	7727.14	60	Marcellus
38	4/28/2020	7691.425833	7524.855	60	Marcellus
39	4/28/2020	7489.140833	7322.57	60	Marcellus
40	4/29/2020	7286.855833	7120.285	60	Marcellus
41	4/29/2020	7084.570833	6918	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	4/21/2020	81.3	8607	8405	4234	167340	5077.926	N/A
2	4/22/2020	91.4	8148	5706	4626	271160	7354.466	N/A
3	4/22/2020	92.4	7888	5817	3961	266140	7273.5	N/A
4	4/22/2020	93.9	8164	5702	3919	267260	7231.69	N/A
5	4/22/2020	96	8193	5551	3751	265370	7206.88	N/A
6	4/23/2020	96.5	8031	5572	4385	271190	7182.89	N/A
7	4/23/2020	94.1	7928	5895	4409	268770	7139.24	N/A
8	4/23/2020	96.1	7891	5903	4381	268490	7184.85	N/A
9	4/23/2020	96.7	8133	6171	4005	272220	7061.29	N/A
10	4/23/2020	95	8103	5805	4011	270830	7054.98	N/A
11	4/24/2020	95.8	8083	5998	4073	271970	7147.85	N/A
12	4/24/2020	94.4	8105	6123	3750	269290	7101.77	N/A
13	4/24/2020	95.3	7850	5887	4299	267510	7098.01	N/A
14	4/24/2020	96.2	7925	6070	4102	272910	7126.44	N/A
15	4/24/2020	96.4	7960	5791	3983	319490	6959.98	N/A
16	4/24/2020	97.2	8119	4338	4580	264260	6858.54	N/A
17	4/25/2020	97.9	8154	6146	4154	258680	6847.33	N/A
18	4/25/2020	97.2	8177	6363	3877	263430	6919.17	N/A
19	4/25/2020	97.1	8006	6067	4566	256990	6787.98	N/A
20	4/25/2020	96.7	7670	5806	4481	258880	6845.1	N/A
21	4/25/2020	96.9	7794	5991	4019	261350	6846.99	N/A
22	4/25/2020	96.4	7984	6418	3937	260400	6812.4	N/A
23	4/25/2020	96.5	7800	6009	4020	254390	6788.01	N/A
24	4/26/2020	96.4	7736	5899	4021	261030	6753.23	N/A
25	4/26/2020	96.5	7844	5728	4231	262220	6895.96	N/A
26	4/26/2020	96.7	7796	5548	4255	262350	6838.29	N/A
27	4/26/2020	97.8	7782	6317	4217	264980	6816.83	N/A
28	4/26/2020	98.1	7924	5906	4286	264740	6769.78	N/A
29	4/26/2020	96.4	7887	6879	4416	257710	6912.45	N/A
30	4/27/2020	97	7537	5830	4555	266410	6678.31	N/A
31	4/27/2020	97.7	7476	6025	4446	263740	6765.61	N/A
32	4/27/2020	97.5	7452	6053	4227	260410	6719.02	N/A
33	4/27/2020	97.6	7215	5983	4127	263330	6754.68	N/A
34	4/27/2020	97.3	7019	6176	4734	262770	6775.24	N/A
35	4/27/2020	97.2	6981	6191	3641	268430	6899.26	N/A
36	4/28/2020	96.5	7295	6214	3910	271060	6891.31	N/A
37	4/28/2020	97.9	6992	5528	3797	266270	7426.92	N/A
38	4/28/2020	97.2	7245	6214	4037	270200	6797.38	N/A
39	4/28/2020	97.9	6955	6098	4306	251655	6641.74	N/A
40	4/29/2020	98.1	6807	6217	4502	266240	6808.86	N/A
41	4/29/2020	94.6	6576	5998	3931	266280	6767.82	N/A
	AVG=	96	7,920	5,991	4,191	8,695,240	227,811	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
Sandstone	100	300	100	300
Siltstone	300	450	300	450
Siltstone w/ trace coal	450	510	450	510
Shaly Siltstone	510	630	510	630
Sandstone	630	700	630	700
Siltstone w/ trace coal	700	850	700	850
Silty Shale	850	970	850	970
Shale	970	1,010	970	1,010
Limestone w/ trace coal	1,010	1,130	1,010	1,130
Shaly Siltstone	1,130	1,510	1,130	1,510
Shaly Sandstone	1,510	1,830	1,510	1,830
Sandstone w/ interbedded coals	1,830	1,870	1,830	1,870
Shale	1,870	1,910	1,870	1,910
Sandy Siltstone	1,910	1,940	1,910	1,992
Big Lime	1,940	2,566	1,967	2,648
Fifty Foot Sandstone	2,566	2,638	2,623	2,722
Gordon	2,638	2,976	2,697	3,075
Fifth Sandstone	2,976	3,057	3,050	3,161
Bayard	3,057	3,940	3,136	4,087
Speechley	3,940	4,236	4,062	4,396
Balltown	4,236	4,604	4,371	4,782
Bradford	4,604	4,999	4,757	5,195
Benson	4,999	5,229	5,170	5,437
Alexander	5,229	6,302	5,412	6,587
Sycamore	6,178	6,277	6,434	6,562
Middlesex	6,277	6,373	6,562	6,713
Burkett	6,373	6,393	6,713	6,752
Tully	6,393	6,438	6,752	6,871
Marcellus	6,438	NA	6,871	NA

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

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# ANTERO RESOURCES CORPORATION

Location: Tyler County, WV  
 Slot: Slot #05  
 Well: Penn Unit 1H  
 Facility: State Ridge Pad  
 Wellbore: Penn Unit 1H PWB



Grid System: MDZ77 UTM Zone 17 North, US feet  
 North Reference: Grid north  
 Scale: True distance  
 Coordinates are in feet referenced to SWS  
 Depths are in feet  
 Offsets are in feet  
 Created by: dshelton on 2020-01-27, Database: WA, API, Environmental, Data

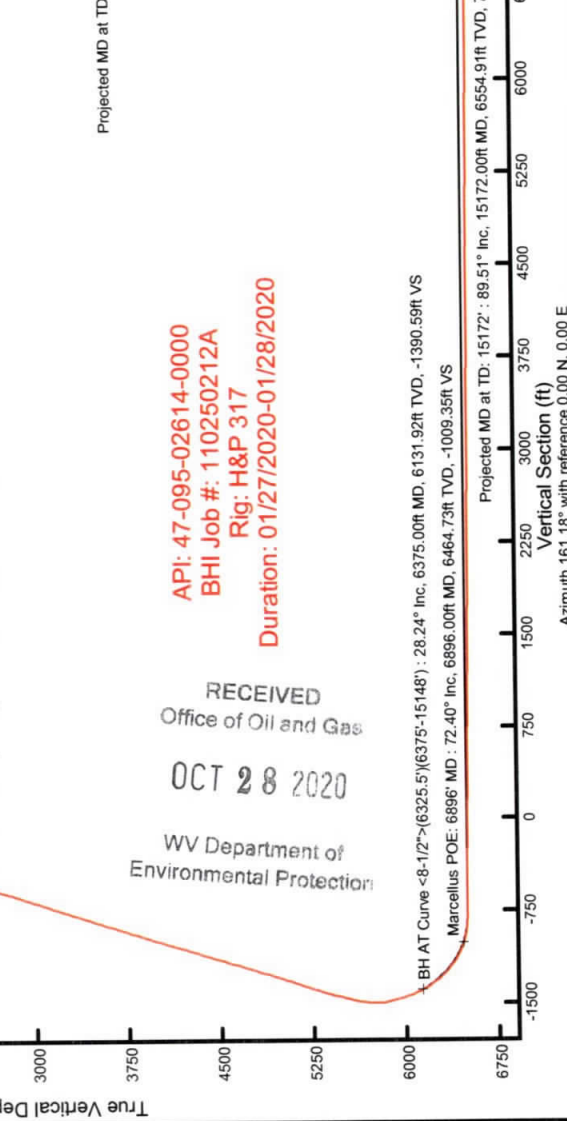
Location Information			
Facility Name	Grid East (US ft)	Latitude	Longitude
State Ridge Pad	1075818.950	39°30'30.1887"N	80°52'28.1461"W
Slot	Local N (ft)	Local E (ft)	Local S (ft)
Slot #05	3.19	14.86	1000.00
Mean Sea Level to Ground level (At Slot: Slot #05)	-1004.4ft		
Mean Sea Level to Ground level (At Slot: Slot #05)	1089.5ft		

Well Data			
Slot	Well	Wellbore	Wellpath
Slot #05	Penn Unit 1H	Penn Unit 1H PWB	Penn Unit 1H AWP Proj. 15172
Slot #05	Penn Unit 1H	Penn Unit 1H PWB	Penn Unit 1H PWP Rev-A-0

Marcellus POE: 6896' MD : 6464.73ft TVD, 920.90ft N, 426.80ft W  
 BH AT Curve <8-1/2>(6325.5)(6375-15148) : 6131.92ft TVD, 1268.41ft N, 588.95ft W  
 WFT EM <8-3/4>(2546)(2680-6315) : 2607.73ft TVD, 515.97ft N, 224.44ft W  
 WFT EM <12-1/4>(630)(750-2546) : 759.94ft TVD, 158.94ft N, 39ft W  
 Gyrodota MS Gyro <17-1/2>(50-350) : 60.50ft TVD, 0.12ft N, 0.17ft E  
 Gyrodota MS Gyro <17-1/2>(50-350) : 60.50ft TVD, 0.12ft N, 0.17ft E  
 Slot #05

Well Profile Data					
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)
Tile On	6325.50	25.190	162.200	6087.71	1289.62
Proj. To Bottom	6400.50	31.330	158.920	6153.74	1256.20
End of 3D Arc	6626.99	47.845	150.682	6327.80	1127.09
Landing Pt.	7107.07	90.000	161.176	6497.00	725.55
BHL	15137.07	90.000	161.176	6497.00	-8974.96
				Local E (ft)	VS (ft)
				-595.66	-1412.83
				8.44	-1377.36
				7.64	-1234.80
				9.00	-799.04
				0.00	7230.96

WFT EM <8-3/4>(2546)(2680-6315) : 15.23° Inc, 2690.50ft MD, 2607.73ft TVD, -560.79ft VS  
 Gyrodota MS Gyro <12-1/4>(350)(445-630) : 0.26° Inc, 455.50ft MD, 455.49ft TVD, 0.05ft VS  
 WFT EM <12-1/4>(630)(750-2546) : 6.62° Inc, 760.50ft MD, 759.94ft TVD, -14.58ft VS



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API: 47-095-02614-0000  
 BHI Job #: 110250212A  
 Rig: H&P 317  
 Duration: 01/27/2020-01/28/2020

User specified (HPCGM) Dip: 66.52° Field: 51801.0T  
 Magnetic North is 7.55 degrees West of True North (at 1/25/2020)  
 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 7.63 degrees

Projected MD at TD: 15172' : 89.51° Inc, 15172.00ft MD, 6554.91ft TVD, 7235.90ft VS  
 Vertical Section (ft)  
 Azimuth 161.18° with reference 0.00 N, 0.00 E  
 Scale: 1 inch = 1500



# Hydraulic Fracturing Fluid Product Component Information Disclosure



Job Start Date:	4/21/2020
Job End Date:	4/29/2020
State:	West Virginia
County:	Tyler
API Number:	47-095-02614-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Penn Unit 1H
Latitude:	39.50839000
Longitude:	-80.87443000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,966
Total Base Water Volume (gal):	12,323,136
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	85.86104	
CalGel™ 4000		Gel Slurry		Listed Below			

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Hydrochloric Acid	CWS	Clean Perforations								
					Listed Below					
CI-9100G	CWS	Corrosion Inhibitor								
					Listed Below					
3rd Party, Friction Reducer	Operator	Friction Reducer								
					Listed Below					
SaniFrac™ 8123	CWS	Microbiocide								
					Listed Below					
Sand (Proppant)	CWS	Propping Agent								
					Listed Below					
CalBreak™ 5501	CWS	Breaker								
					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			13.80389	
			Hydrochloric acid	7647-01-0		37.00000			0.11636	
			Illite	12173-60-3		1.00000			0.09032	
			Calcite	471-34-1		1.00000			0.04770	
			Apatite	64476-38-6		0.10000			0.01380	

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				Biotite	1302-27-8	0.10000	0.01380
				Goethite	1310-14-1	0.10000	0.01380
				Guar gum	9000-30-0	60.00000	0.01281
				Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.01281
				Ilmenite	98072-94-7	0.10000	0.00903
				Glutaraldehyde	111-30-8	14.00000	0.00154
				Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00107
				Ammonium Persulfate	7727-54-0	100.00000	0.00046
				Alkyl dimethyl benzyl ammonium chloride	68424-85-1	3.00000	0.00033
				Ethanol	64-17-5	3.00000	0.00033
				Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00033
				Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00032
				Vinylidene chloride-methyl acrylate copolymer	25038-72-6	20.00000	0.00009
				Ethylene Glycol	107-21-1	40.00000	0.00006
				Diethylene glycol, monomethyl ether	34590-94-8	20.00000	0.00003
				Cinnamaldehyde	104-55-2	10.00000	0.00002
				Formic acid	64-18-6	10.00000	0.00002
				Tar bases, quinolone derivs, benzyl chloride-quaternized	72480-70-7	10.00000	0.00002
				Ethoxylated Alcohols	68131-39-5	10.00000	0.00002
				Isopropyl alcohol	67-63-0	5.00000	0.00001

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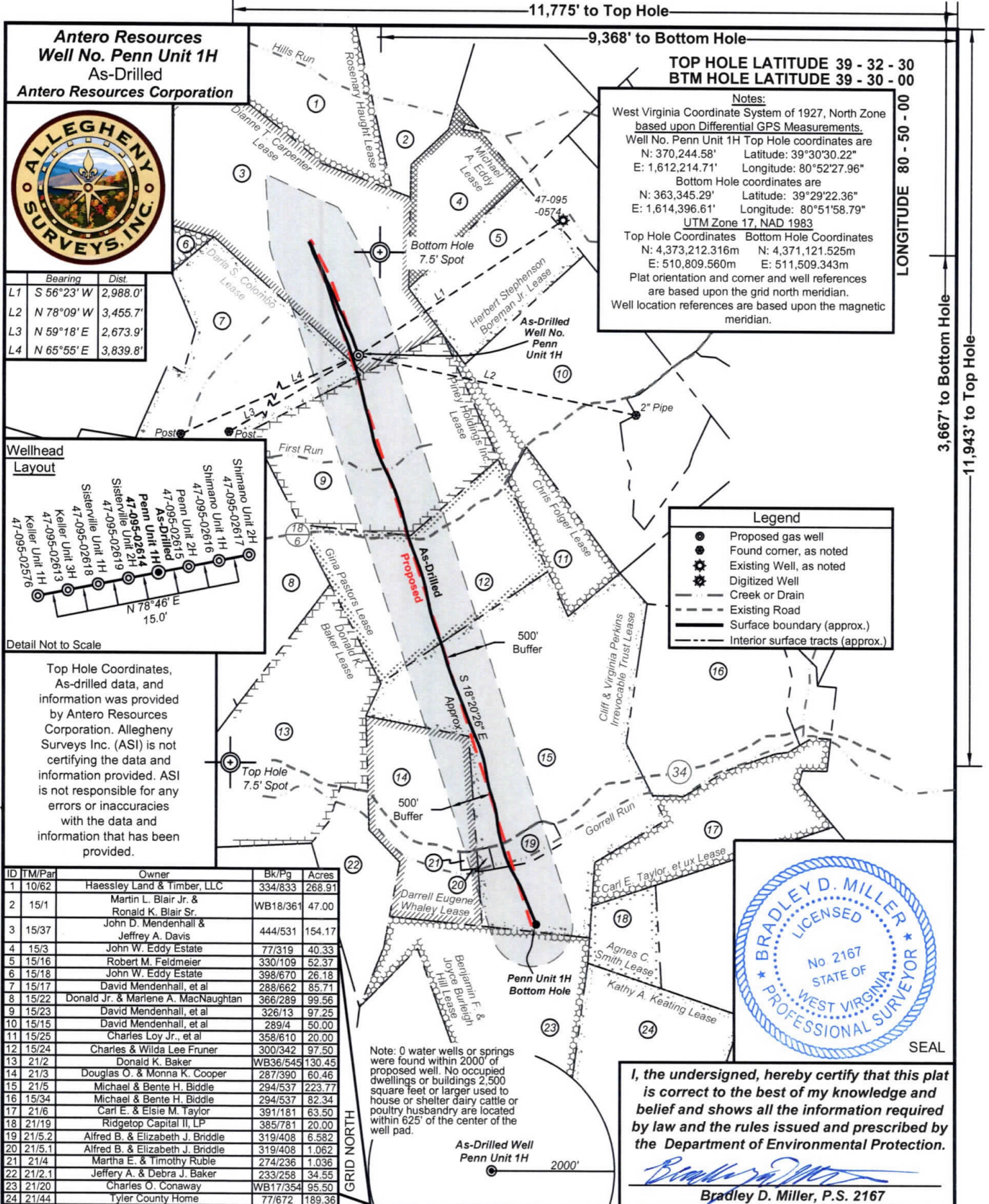
\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

\*\* 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)

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FILE NO: 05-54-E-16  
DRAWING NO: Penn 1H As-Drilled Plat  
SCALE: 1" = 1500'  
MINIMUM DEGREE OF ACCURACY: Submeter  
PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

DATE: July 28 2020  
OPERATOR'S WELL NO. Penn Unit 1H  
API WELL NO  
47 - 095 - 02614  
STATE COUNTY PERMIT

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

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

LOCATION: ELEVATION: As-Built 1,064' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Paden City/Porter Falls  
DISTRICT: Ellsworth COUNTY: Tyler

SURFACE OWNER: John D. Mendenhall & Jeffrey A. Davis ACREAGE: 154.17 154.17; 85.71; 97.25; 97.5;  
ROYALTY OWNER: Dianne T. Carpenter; Darla S. Colombo; Gina Pastors; Piney Holdings, Inc.; LEASE NO: ACREAGE: 231.42344;

PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,555' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 15,172' 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