

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

API 47 - 095 - 02618 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 Sisterville 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 4373210.431m Easting 510800.693m
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing 4376752.737m Easting 510124.390m

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

RECEIVED
Office of Oil and Gas

OCT 28 2020

WV Department of
Environmental Protection

Date permit issued 5/16/2019 Date drilling commenced 8/5/2019 Date drilling ceased 2/9/2020
Date completion activities began 4/29/2020 Date completion activities ceased 5/16/2020
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 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:
[Signature]
11/6/2020

API 47-095 - 02618 Farm name John D. Mendenhall & Jeffery A. Davis Well number Sisterville 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"	105'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	407'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2591'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17739'	New	23#, HCP-110	N/A	Y
Tubing		2-3/8"	7068'		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 ³ /sks)	Volume (ft ³)	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	882 sx	15.6	1.19	1082	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	792 sx (Lead) 2652 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) 17758' MD, 6444' TVD (BHL), 6446' (Deepest Point Drilled) Loggers TD (ft) 17758' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

RECEIVED
Office of Oil and Gas

OCT 28 2020

Kick off depth (ft) 6402'

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

WV Department of Environmental Protection

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 - 02618 Farm name John D. Mendenhall & Jeffery A. Davis Well number Sisterville Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
*PLEASE SEE ATTACHED EXHIBIT 1					

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)
*PLEASE SEE ATTACHED EXHIBIT 2								RECEIVED Office of Oil and Gas OCT 28 2020

Please insert additional pages as applicable.

API 47- 095 - 02618 Farm name John D. Mendenhall & Jeffery A. Davis Well number Sisterville Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6450' (TOP)</u>	<u>TVD</u>	<u>7099' (TOP)</u> 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 4635 mcfd Oil 249 bpd NGL --- bpd Water 972 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)
-------------------------	--------------------------------	------------------------------	--------------------------	-----------------------------	--

***PLEASE SEE ATTACHED EXHIBIT 3**

RECEIVED
Office of Oil and Gas

OCT 28 2020

Please insert additional pages as applicable.

Drilling Contractor Frontier Drilling LLC
Address 562 Spring Run Road City Pennsboro State WV Zip 26415 WV Department of Environmental Protection

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 Median Griffith Telephone 303-357-7223
Signature Title Permitting Agent Date 8/14/20

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

API 47-095-02618 Farm Name John D. Mendenhall & Jeffrey A. Davis Well Number Sisterville Unit 1H

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	3/31/2020	17640.5	17596.7	60	Marcellus
2	3/31/2020	17559.21058	17393.7635	60	Marcellus
3	3/31/2020	17358.27404	17192.8269	60	Marcellus
4	3/31/2020	17157.3375	16991.8904	60	Marcellus
5	4/1/2020	16956.40096	16790.9538	60	Marcellus
6	4/1/2020	16755.46442	16590.0173	60	Marcellus
7	4/1/2020	16554.52788	16389.0808	60	Marcellus
8	4/1/2020	16353.59135	16188.1442	60	Marcellus
9	4/2/2020	16152.65481	15987.2077	60	Marcellus
10	4/2/2020	15951.71827	15786.2712	60	Marcellus
11	4/2/2020	15750.78173	15585.3346	60	Marcellus
12	4/2/2020	15549.84519	15384.3981	60	Marcellus
13	4/2/2020	15348.90865	15183.4615	60	Marcellus
14	4/3/2020	15147.97212	14982.525	60	Marcellus
15	4/3/2020	14947.03558	14781.5885	60	Marcellus
16	4/3/2020	14746.09904	14580.6519	60	Marcellus
17	4/3/2020	14545.1625	14379.7154	60	Marcellus
18	4/3/2020	14344.22596	14178.7788	60	Marcellus
19	4/4/2020	14143.28942	13977.8423	60	Marcellus
20	4/4/2020	13942.35288	13776.9058	60	Marcellus
21	4/4/2020	13741.41635	13575.9692	60	Marcellus
22	4/4/2020	13540.47981	13375.0327	60	Marcellus
23	4/4/2020	13339.54327	13174.0962	60	Marcellus
24	4/5/2020	13138.60673	12973.1596	60	Marcellus
25	4/5/2020	12937.67019	12772.2231	60	Marcellus
26	4/5/2020	12736.73365	12571.2865	60	Marcellus
27	4/5/2020	12535.79712	12370.35	60	Marcellus
28	4/5/2020	12334.86058	12169.4135	60	Marcellus
29	4/6/2020	12133.92404	11968.4769	60	Marcellus
30	4/6/2020	11932.9875	11767.5404	60	Marcellus
31	4/6/2020	11732.05096	11566.6038	60	Marcellus
32	4/6/2020	11531.11442	11365.6673	60	Marcellus
33	4/6/2020	11330.17788	11164.7308	60	Marcellus
34	4/6/2020	11129.24135	10963.7942	60	Marcellus
35	4/7/2020	10928.30481	10762.8577	60	Marcellus
36	4/7/2020	10727.36827	10561.9212	60	Marcellus
37	4/7/2020	10526.43173	10360.9846	60	Marcellus
38	4/7/2020	10325.49519	10160.0481	60	Marcellus
39	4/7/2020	10124.55865	9959.11154	60	Marcellus
40	4/8/2020	9923.622115	9758.175	60	Marcellus
41	4/8/2020	9722.685577	9557.23846	60	Marcellus
42	4/8/2020	9521.749038	9356.30192	60	Marcellus
43	4/9/2020	9320.8125	9155.36538	60	Marcellus
44	4/9/2020	9119.875962	8954.42885	60	Marcellus
45	4/9/2020	8918.939423	8753.49231	60	Marcellus
46	4/9/2020	8718.002885	8552.55577	60	Marcellus
47	4/9/2020	8517.066346	8351.61923	60	Marcellus
48	4/10/2020	8316.129808	8150.68269	60	Marcellus
49	4/10/2020	8115.193269	7949.74615	60	Marcellus
50	4/10/2020	7914.256731	7748.80962	60	Marcellus
51	4/10/2020	7713.320192	7547.87308	60	Marcellus
52	4/10/2020	7512.383654	7346.93654	60	Marcellus
53	4/11/2020	7311.447115	7146	60	Marcellus

RECEIVED
Office of Oil and Gas
OCT 28 2020
WV Department of
Environmental Protection

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	3/31/2020	89.1	8086	6767	4301	160940	4542.876	N/A
2	3/31/2020	92.2	8350	5633	4445	409300	7212.516	N/A
3	3/31/2020	96	8626	6068	4174	408060	7238.18	N/A
4	3/31/2020	92.9	8477	5646	4335	416200	7303.65	N/A
5	4/1/2020	93	8358	5827	4264	404440	7259.66	N/A
6	4/1/2020	89.5	8262	5846	4589	406120	7091.69	N/A
7	4/1/2020	91.7	8480	5988	4385	416260	7176.7	N/A
8	4/1/2020	82	8643	6171	4285	416220	7307.47	N/A
9	4/2/2020	77.3	8754	5885	4169	404840	8042.98	N/A
10	4/2/2020	89.2	8459	5964	3872	405640	7280.83	N/A
11	4/2/2020	96.9	8514	5351	4057	412100	7293.18	N/A
12	4/2/2020	74.6	8387	6393	4329	406060	8314.85	N/A
13	4/2/2020	91.3	8396	6050	3998	409040	7378.69	N/A
14	4/3/2020	94.3	8399	5388	3612	402740	7189.61	N/A
15	4/3/2020	93.8	8438	5527	3934	408320	7263.74	N/A
16	4/3/2020	91.5	8236	5782	3832	404500	7435.35	N/A
17	4/3/2020	92.4	8387	6695	3680	406360	7121.98	N/A
18	4/3/2020	94.9	8399	5893	3923	406740	7021.52	N/A
19	4/4/2020	96.2	8295	6153	4135	414440	7180.98	N/A
20	4/4/2020	96	8037	4515	4000	414360	7186.38	N/A
21	4/4/2020	95.8	8367	6078	3851	406900	7113.34	N/A
22	4/4/2020	95.8	8135	6331	4442	398540	7050.7	N/A
23	4/4/2020	95.9	8193	5877	4061	400260	7012.99	N/A
24	4/5/2020	95	8257	6146	4117	404780	7180.94	N/A
25	4/5/2020	95.9	7974	6295	3946	406520	7145.17	N/A
26	4/5/2020	94.8	7929	5768	4294	402540	7080.3	N/A
27	4/5/2020	95.3	7906	4943	4362	409400	7124.6	N/A
28	4/5/2020	95.8	7783	5808	4184	411240	6945.94	N/A
29	4/6/2020	96.2	8067	5705	4223	406240	6886.65	N/A
30	4/6/2020	96.7	7819	5783	4196	407140	7048.23	N/A
31	4/6/2020	95.6	7686	6076	3715	408260	7017.48	N/A
32	4/6/2020	93.4	7925	6063	4145	407260	7018.98	N/A
33	4/6/2020	96.7	8119	5260	4116	406220	6928.78	N/A
34	4/6/2020	96.8	7899	5962	4029	407480	6855.31	N/A
35	4/7/2020	96.4	7996	6436	4218	411980	6971.24	N/A
36	4/7/2020	95.8	8058	5949	3865	405520	7058.69	N/A
37	4/7/2020	89.9	7854	6034	4513	403440	8243.62	N/A
38	4/7/2020	95.9	7972	5856	4098	408360	6975.59	N/A
39	4/7/2020	96.2	7899	6231	4152	405860	6929.34	N/A
40	4/8/2020	81.9	7973	6527	4087	404760	11707.23	N/A
41	4/8/2020	89.3	7647	6634	4705	408600	7120.38	N/A
42	4/8/2020	92.2	7476	5924	4752	409940	6945.46	N/A
43	4/9/2020	92.9	7542	5549	4913	407525	7192.95	N/A
44	4/9/2020	94.3	7472	5849	4409	415820	7075.13	N/A
45	4/9/2020	94.8	7262	6219	4667	398220	6894.01	N/A
46	4/9/2020	96.3	7741	5776	4286	406280	7016.3	N/A
47	4/9/2020	81.6	7722	5858	4667	402740	10139.64	N/A
48	4/10/2020	96	6950	5949	4417	407740	6813.59	N/A
49	4/10/2020	95.1	7218	5956	4318	407080	6934.68	N/A
50	4/10/2020	97.3	7235	5782	4309	404500	6823.42	N/A
51	4/10/2020	95.5	7245	6593	4716	407040	6908.49	N/A
52	4/10/2020	59.47	7183	6271	4527	402460	6808.28	N/A
53	4/11/2020	95.6	7107	6230	4072	403340	6829.08	N/A
	AVG=	93	8,247	5,869	4,120	13,207,980	235,397	TOTAL

RECEIVED
Office of Oil and Gas
OCT 28 2020
WV Department of
Environmental Protection

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	1,942	1,910	1,942
Big Lime	1,942	2,585	1,917	2,586
Fifty Foot Sandstone	2,585	2,658	2,561	2,658
Gordon	2,658	2,982	2,633	2,985
Fifth Sandstone	2,982	3,058	2,960	3,063
Bayard	3,058	3,938	3,038	4,036
Speechley	3,938	4,209	4,011	4,349
Balltown	4,209	4,584	4,324	4,785
Bradford	4,584	4,993	4,760	5,260
Benson	4,993	5,232	5,235	5,537
Alexander	5,232	6,318	5,512	6,823
Sycamore	6,187	6,293	6,658	6,798
Middlesex	6,293	6,380	6,798	6,935
Burkett	6,380	6,403	6,935	6,981
Tully	6,403	6,450	6,981	7,099
Marcellus	6,450	NA	7,099	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.

RECEIVED
Office of Oil and Gas
OCT 28 2020
WV Department of
Environmental Protection

ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
 Facility: Tyler
 Wellbore: State Ridge Pad

Slot: Slot #03
 Well: Sisterville Unit 1H
 Wellbore: Sisterville Unit 1H PWB

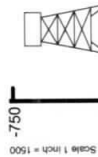


API: 47-095-02618-0000

BHI Job #: 110259312A

Rig: H&P 317

Duration: 02/04/2020-02/06/2020



1 Pk reference wellbore is Sisterville Unit 1H PWB Rev-A0
 2 True vertical depths are referenced to H&P 317 (RKB)
 3 Reference wellbore (vertical depth) are referenced to H&P 317 (RKB)
 4 H&P 317 (RKB) to Mean Sea Level: 1089.5 feet
 5 Mean Sea Level to Ground level (At Slot: Slot #03) : -1064 feet
 6 Official wellbore MDs are referenced to well's parent's official MD datum
 7 Created by: dslam on 2020-02-13; Database: WA_MPL_EmissionsUS_Datm

Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
State Ridge Pad	1075918.050	14347063.000	80°52'28.1461"W
Local N (ft)	Grid East (US ft)	Grid North (US ft)	Longitude
-3.12	1075904.314	14347050.900	80°52'28.3300"W
Slot #03			
Comment			
Sisterville Unit 1H			
H&P 317 (RKB) to Ground level (At Slot: Slot #03)			25.5ft
Mean Sea Level to Ground level (At Slot: Slot #03)			-1064ft
H&P 317 (RKB) to Mean Sea Level			1089.5ft

Well Data			
Well	Wellbore	Wellpath	
Slot #03	Sisterville Unit 1H	Sisterville Unit 1H AWP Proj: 17768	
Slot #03	Sisterville Unit 1H	Sisterville Unit 1H PWB	
Slot #03	Sisterville Unit 1H	Sisterville Unit 1H PWB Rev-A.0	

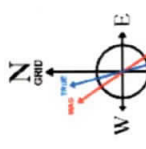
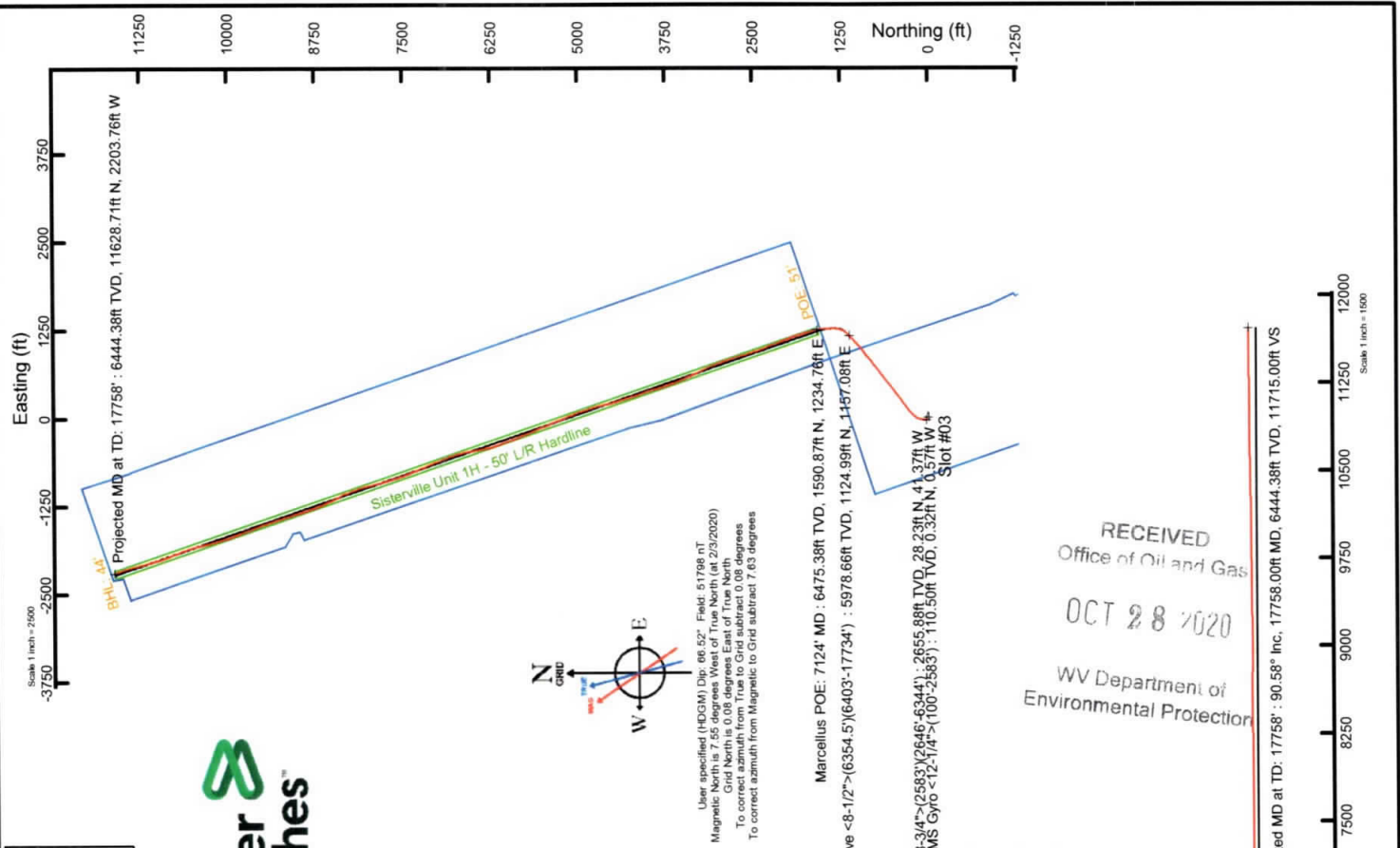
WFT EM <8-3/4">(2583)(2646-6344) : 1.69° Inc, 2656.50ft MD, 2655.88ft TVD, 40.12ft VS

Well Profile Data						
Design Comment	MD (ft)	Inc (°)	AS (°)	TVD (ft)	Local N (ft)	Local E (ft)
Tie On	6354.50	32.840	47.450	5937.97	1107.04	1137.74
Proj. To Bottom	6427.50	32.840	47.450	5999.30	1133.81	1166.90
Curve KOP	6489.15	32.840	47.450	6051.10	1156.42	1191.53
End of 3D Arc	6683.85	36.141	16.785	6212.77	1247.44	1247.44
POE	7122.13	70.459	341.077	6476.00	1583.42	1216.25
Landing Pt.	7317.54	90.000	341.077	6509.00	1764.70	1154.10
BH-L	17730.72	90.000	341.077	6509.00	11615.10	-2222.90
						0.00
						11708.33

BH AT Curve <8-1/2">(6354.5)(6403-17734) : 33.09° Inc, 6403.00ft MD, 5978.66ft TVD, 689.03ft VS

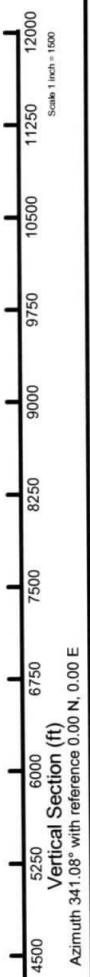
Marcellus POE: 7124' MD : 71.23° Inc, 7124.00ft MD, 6475.38ft TVD, 1104.55ft VS

Projected MD at TD: 17758' : 90.58° Inc, 17758.00ft MD, 6444.38ft TVD, 11715.00ft VS



User specified (MGM) Dip: 66.62° Field: 61769.0T
 Magnetic North is 7.63° West of True North (at 2/3/2020)
 Grid North is 0.08° 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

RECEIVED
 Office of Oil and Gas
 OCT 28 2020
 WV Department of
 Environmental Protection



Vertical Section (ft)
 Azimuth 341.08° with reference 0.00 N, 0.00 E

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/31/2020
Job End Date:	4/11/2020
State:	West Virginia
County:	Tyler
API Number:	47-095-02618-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Sisterville Unit 1H
Latitude:	39.50838000
Longitude:	-80.87454000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,477
Total Base Water Volume (gal):	17,095,332
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	86.69481	
SaniFrac 8123	WV Department of Environmental Protection	Microbiocide		Listed Below			

RECEIVED
Office of Oil and Gas
003 28 2020
CWS

Hydrochloric Acid	CWS	Clean Perforations							
					Listed Below				
Sand (Proppant)	CWS	Propping Agent							
					Listed Below				
CalGel 4000	CWS	Gel Slurry							
					Listed Below				
Calbreak 5501	CWS	Breaker							
					Listed Below				
CI-9100G	CWS	Corrosion Inhibitor							
					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		12.96784	
			Illite	12173-60-3		1.00000		0.12966	
			Hydrochloric acid	7647-01-0		37.00000		0.11292	
			Guar gum	9000-30-0		60.00000		0.01863	
			Distillates (petroleum), hydrotreated middle	64742-46-7		60.00000		0.01863	
			Apatite	64476-38-6		0.10000		0.01297	
			Goethite	1310-14-1		0.10000		0.01297	
			Ilmenite	98072-94-7		0.10000		0.01297	

RECEIVED
Office of Oil and Gas
OCT 28 2020
Wy Department of
Environmental Protection

11,804' to Top Hole

Antero Resources
Well No. Sisterville Unit 1H
 As-Drilled
Antero Resources Corporation



	Bearing	Dist.
L1	S 56°36' W	3,015.4'
L2	N 78°20' W	3,483.2'
L3	N 59°05' E	2,645.9'
L4	N 65°49' E	3,810.8'

2,080' to Bottom Hole



LATITUDE 39 - 32 - 30

ID	ITM/Par	Owner	Bk/Pg	Acres
1	15/17	David Mendenhall, et al	288/662	85.71
2	15/23	David Mendenhall, et al	326/13	97.25
3	15/15	David Mendenhall, et al	289/4	50.00
4	15/16	Robert M. Feldmeier	330/109	52.37
5	15/37	John D. Mendenhall & Jeffrey A. Davis	444/531	154.17
6	15/3	John W. Eddy Estate	77/319	40.33
7	15/14	John W. & Leah D. Starkey	345/93	50.75
8	15/5	Earl H. Jr. & Bernadette Warriner	306/141	48.50
9	15/4	Board of Education	86/145	0.334
10	15/2	John W. Eddy Estate	71/13	49.00
11	15/1	Martin L. Blair Jr. & Ronald K. Blair Sr.	WB18/361	47.00
12	10/62	Haessley Land & Timber, LLC.	334/833	268.91
13	10/65	Daniel R. Deetz & Kevin Richardson	321/713	131.94
14	10/35	Michael E. Neff	299/601	105.56
15	10/34	Oliver T. & Maxine M. Ankrom	265/399	11.00
16	10/33	Oliver T. & Maxine M. Ankrom	265/399	17.00
17	10/32	Ralph D. & Sylvia Harter	311/200	15.00
18	10/31	Ralph D. & Sylvia Harter	286/73	38.80
19	10/34.1	Robert P. & Sharon L. Thomas	542/657	2.21
20	10/26	John E. Roberts	WB30/108	4.00
21	10/27	John E. Roberts	WB30/108	4.00
22	10/24.1	Ralph D. & Sylvia Harter	334/277	18.44
23	10/24.2	Michael Van & Debra Kay Smith	400/612	0.15
24	10/25	Michael Van & Debra Kay Smith	400/612	0.29
25	10/24	Michael Van & Debra Kay Smith	400/612	1.25
26	10/23	Betty & Teresa J. Boggs	214/638	0.29
27	10/24.3	Tammy Sue & James R. Underwood Jr.	317/651	4.16
28	10/35.3	James H. & Mildred G. Bassett	273/538	0.39
29	10/35.4	Mary Jane Woofler	319/73	0.75
30	10/35.5	James H. & Mildred G. Bassett	281/543	0.76
31	10/20	James H. & Mildred G. Bassett	311/637	0.72
32	10/19	James H. & Mildred G. Bassett	264/548	29.52
33	10/21	Patricia Ann Heintzman	WB13/384	3.00
34	10/22	Michael V. & Debra K. Smith	335/619	59.42
35	10/28	John E. Roberts	WB30/142	38.99
36	10/1	Patricia Ann Heintzman	150/15	48.50
37	10/2	Patricia Ann Heintzman	WB13/384	73.26
38	10/64	John E. Roberts	WB30/108	100.00
39	6/40	Alan D. Wyke	WB40/195	42.25
40	9/13	Richard A. Mercer	321/197	16.00
41	6/41	Donald E. Forrester	125/421	20.05

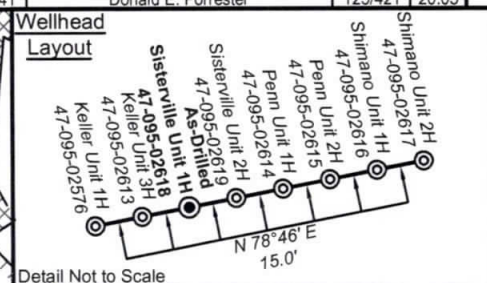
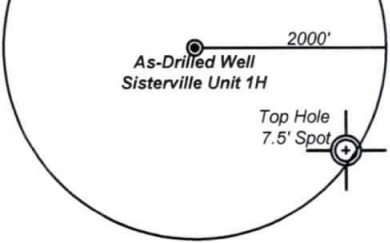
TOP HOLE LONGITUDE 80 - 50 - 00
 BOTTOM HOLE LONGITUDE 80 - 52 - 30

464' to Bottom Hole

11,948' to Top Hole

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: 0 water wells or springs were 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.



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
Bradley D. Miller, P.S. 2167



Leases	
A	Chris Folger
B	John W. Starkey, et ux
C	Richard A. Mercer

Legend

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

Notes:
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
 Well No. Sisterville Unit 1H Top Hole coordinates are
 N: 370,238.88' Latitude: 39°30'30.16"
 E: 1,612,185.51' Longitude: 80°52'28.33"
 Bottom Hole coordinates are
 N: 381,899.95' Latitude: 39°32'25.09"
 E: 1,610,159.92' Longitude: 80°52'56.46"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,373,210.431m N: 4,376,752.737m
 E: 510,800.693m E: 510,124.390m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

FILE NO: 07-54-E-19
 DRAWING NO: Sisterville 1H As-Drilled Plat
 SCALE: 1" = 1500'
 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: July 28 2020
 OPERATOR'S WELL NO. Sisterville Unit 1H
 API WELL NO
 47 - 095 - 02618
 STATE COUNTY PERMIT

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, Paul A. Marks, et ux; Patricia Ann Heintzman; Michael S. Mercer, et ux; ACREAGE: 154.17
 & Jeffrey A. Davis; Ronald K. & Martin L. Blair; Patsy J. Oliverio; Michael E. Neff; John E. Roberts; 47; 131.94; 106.32;

ROYALTY OWNER: Dianne T. Carpenter; Herbert Stephenson Boreman Jr.; Michael A. Eddy LEASE NO: ACREAGE: 85.8; 84.0; 48.5

PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,444' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 17,758' 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