

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

API 47-095-02567 County Tyler District Ellsworth
Quad Middlebourne 7.5' Pad Name Ferrell Pad Field/Pool Name ----
Farm name Antero Resources Midstream LLC Well Number Daniels 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 4369185.548m Easting 507137.102m
Landing Point of Curve Northing 4369274.67m Easting 507545.63m
Bottom Hole Northing 4365633.454m Easting 508819.963m

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

Date permit issued 1/25/2019 Date drilling commenced 6/30/2019 Date drilling ceased 11/7/2019
Date completion activities began 2/15/2020 Date completion activities ceased 3/22/2020
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

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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:
JCS
10/15/2020

API 47- 095 - 02567 Farm name Antero Resources Midstream LLC Well number Daniels 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"	399'	New	54#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2662'	New	36#, H-40	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	19488'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6468'		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	350 sx	15.6	1.19	402	0'	8 Hrs.
Coal							
Intermediate 1	Class A	915 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) 19508' MD, 6185' TVD (BHL), 6187' (Deepest Point Drilled) Loggers TD (ft) 19508' MD

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

Plug back procedure N/A

Kick off depth (ft) 5475'

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

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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 - 02567 Farm name Antero Resources Midstream LLC Well number Daniels Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Marcellus	6028' (TOP) TVD	6526' (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 3428 mcfpd Oil 148 bpd NGL --- bpd Water 404 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 ₂ 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

Submittal 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	1/25/2020	19388	19343	60	Marcellus
2	1/25/2020	19304.2381	19137.4286	60	Marcellus
3	1/26/2020	19101.66667	18934.8571	60	Marcellus
4	1/26/2020	18899.09524	18732.2857	60	Marcellus
5	1/26/2020	18696.52381	18529.7143	60	Marcellus
6	1/26/2020	18493.95238	18327.1429	60	Marcellus
7	1/27/2020	18291.38095	18124.5714	60	Marcellus
8	1/27/2020	18088.80952	17922	60	Marcellus
9	1/27/2020	17886.2381	17719.4286	60	Marcellus
10	1/27/2020	17683.66667	17516.8571	60	Marcellus
11	1/28/2020	17481.09524	17314.2857	60	Marcellus
12	1/28/2020	17278.52381	17111.7143	60	Marcellus
13	1/28/2020	17075.95238	16909.1429	60	Marcellus
14	1/28/2020	16873.38095	16706.5714	60	Marcellus
15	1/29/2020	16670.80952	16504	60	Marcellus
16	1/29/2020	16468.2381	16301.4286	60	Marcellus
17	1/29/2020	16265.66667	16098.8571	60	Marcellus
18	1/30/2020	16063.09524	15896.2857	60	Marcellus
19	1/30/2020	15860.52381	15693.7143	60	Marcellus
20	1/30/2020	15657.95238	15491.1429	60	Marcellus
21	1/30/2020	15455.38095	15288.5714	60	Marcellus
22	1/31/2020	15252.80952	15086	60	Marcellus
23	1/31/2020	15050.2381	14883.4286	60	Marcellus
24	1/31/2020	14847.66667	14680.8571	60	Marcellus
25	2/1/2020	14645.09524	14478.2857	60	Marcellus
26	2/1/2020	14442.52381	14275.7143	60	Marcellus
27	2/1/2020	14239.95238	14073.1429	60	Marcellus
28	2/1/2020	14037.38095	13870.5714	60	Marcellus
29	2/2/2020	13834.80952	13668	60	Marcellus
30	2/2/2020	13632.2381	13465.4286	60	Marcellus
31	2/2/2020	13429.66667	13262.8571	60	Marcellus
32	2/2/2020	13227.09524	13060.2857	60	Marcellus
33	2/2/2020	13024.52381	12857.7143	60	Marcellus
34	2/3/2020	12821.95238	12655.1429	60	Marcellus
35	2/3/2020	12619.38095	12452.5714	60	Marcellus
36	2/4/2020	12416.80952	12250	60	Marcellus
37	2/4/2020	12214.2381	12047.4286	60	Marcellus
38	2/4/2020	12011.66667	11844.8571	60	Marcellus
39	2/4/2020	11809.09524	11642.2857	60	Marcellus
40	2/4/2020	11606.52381	11439.7143	60	Marcellus
41	2/5/2020	11403.95238	11237.1429	60	Marcellus
42	2/5/2020	11201.38095	11034.5714	60	Marcellus
43	2/5/2020	10998.80952	10832	60	Marcellus
44	2/5/2020	10796.2381	10629.4286	60	Marcellus
45	2/6/2020	10593.66667	10426.8571	60	Marcellus
46	2/6/2020	10391.09524	10224.2857	60	Marcellus
47	2/6/2020	10188.52381	10021.7143	60	Marcellus
48	2/6/2020	9985.952381	9819.14286	60	Marcellus
49	2/6/2020	9783.380952	9616.57143	60	Marcellus
50	2/7/2020	9580.809524	9414	60	Marcellus
51	2/7/2020	9378.238095	9211.42857	60	Marcellus
52	2/7/2020	9175.666667	9008.85714	60	Marcellus
53	2/7/2020	8973.095238	8806.28571	60	Marcellus
54	2/7/2020	8770.52381	8603.71429	60	Marcellus
55	2/8/2020	8567.952381	8401.14286	60	Marcellus
56	2/8/2020	8365.380952	8198.57143	60	Marcellus
57	2/8/2020	8162.809524	7996	60	Marcellus
58	2/8/2020	7960.238095	7793.42857	60	Marcellus
59	2/9/2020	7757.666667	7590.85714	60	Marcellus
60	2/9/2020	7555.095238	7388.28571	60	Marcellus
61	2/9/2020	7352.52381	7185.71429	60	Marcellus
62	2/9/2020	7149.952381	6983.14286	60	Marcellus
63	2/9/2020	6947.380952	6780.57143	60	Marcellus
64	2/10/2020	6744.809524	6578	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	1/25/2020	72.01125	7961.5	5589	4254	199480	5532.9	N/A
2	1/25/2020	75.57034	7911.881	6583	4357	401560	7227.476	N/A
3	1/26/2020	74.33152	7823.978	5868	3992	400060	7161.79	N/A
4	1/26/2020	77.78717	7999.859	5849	3668	401700	7311.05	N/A
5	1/26/2020	84.5	8319	5859	3667	402120	7142.91	N/A
6	1/26/2020	83.1	8051	5913	3753	412100	7248.58	N/A
7	1/27/2020	80.7	8099	6118	3739	402020	7234.86	N/A
8	1/27/2020	78.7	8369	5613	3684	401440	7105.8	N/A
9	1/27/2020	81.3	8167	6409	3863	402500	7123.45	N/A
10	1/27/2020	78.7	8009	6256	3783	401360	7114.8	N/A
11	1/28/2020	80.2	8072	5998	3566	401300	7109.34	N/A
12	1/28/2020	85.9	8279	5525	3754	399360	7045.41	N/A
13	1/28/2020	83.3	8452	6277	3804	400320	7193.75	N/A
14	1/28/2020	82.7	8394	5623	4587	401040	7069.97	N/A
15	1/29/2020	75.98	7999.51	5546	3487	402460	7013.96	N/A
16	1/29/2020	85.1	8454	5294	3840	401980	7094.19	N/A
17	1/29/2020	85.3	8472	5936	3652	407440	7089.76	N/A
18	1/30/2020	85.1	8405	5922	3548	403320	6977.44	N/A
19	1/30/2020	76.4	8448.61	5693	4716	406060	7761.49	N/A
20	1/30/2020	80.6	8215	6034	3956	401820	7115.85	N/A
21	1/30/2020	76.7	8150	7001	3681	403620	7274.82	N/A
22	1/31/2020	83.8	8186	6248	3794	403720	7025.22	N/A
23	1/31/2020	83.97	8255	5507	3896	409320	7395	N/A
24	1/31/2020	84.5	8229	5790	3567	406780	6975.39	N/A
25	2/1/2020	84.5	8212.68	5928	3256	405460	6974.63	N/A
26	2/1/2020	86.3	8324	5615	3699	403140	6961.4	N/A
27	2/1/2020	84.6	8486	5559	3439	407240	6998.2	N/A
28	2/1/2020	77.8	8191	5692	3613	400880	8551.09	N/A
29	2/2/2020	83.9	8128	6304	3381	401980	6923.49	N/A
30	2/2/2020	86.3	8129	5655	3393	400740	6954.83	N/A
31	2/2/2020	85	8196	4962	3370	405620	7065	N/A
32	2/2/2020	86.2	8050	5416	3533	401400	6856.08	N/A
33	2/2/2020	85.3	7914	5284	3502	409620	6934.5	N/A
34	2/3/2020	85.2	8193	5196	3362	404980	6897.91	N/A
35	2/3/2020	84.6	7779	5640	3521	395180	6826.12	N/A
36	2/4/2020	84.9	7908	5890	3360	403400	6749.23	N/A
37	2/4/2020	85.4	7914	4906	3390	398980	6820.29	N/A
38	2/4/2020	85.7	7947	5137	3240	401760	6808.93	N/A
39	2/4/2020	88.8	8001	5867	3507	403880	6810.22	N/A
40	2/4/2020	88.3	7936	5435	4096	405460	6927.13	N/A
41	2/5/2020	83.6	8199	5811	3571	397520	6655.4	N/A
42	2/5/2020	87.7	8094	5467	3912	400860	6722.92	N/A
43	2/5/2020	88.1	8170	5737	3728	400720	6816.23	N/A
44	2/5/2020	87.7	7844	5779	3973	403360	6822.99	N/A
45	2/6/2020	87.4	7938	6603	3538	404520	6806.64	N/A
46	2/6/2020	85.5	7231	5405	3480	396680	6700.28	N/A
47	2/6/2020	85.8	7549	5727	3389	433436	6971.18	N/A
48	2/6/2020	86.2	7322	5447	3608	402540	6707.27	N/A
49	2/6/2020	87.8	7414	5819	3710	411300	6828.15	N/A
50	2/7/2020	87.6	7665	5953	3536	409200	6739.33	N/A
51	2/7/2020	87.6	8059	5543	3333	403460	6756.59	N/A
52	2/7/2020	88.7	8020	5583	3756	408900	6783.44	N/A
53	2/7/2020	87.5	7407	5938	3839	406320	6757.9	N/A
54	2/7/2020	87.3	7372	5912	3724	406520	6813.38	N/A
55	2/8/2020	87.6	7672	6174	3535	412120	6727.82	N/A
56	2/8/2020	84.2	7386	5998	3664	405000	6663.3	N/A
57	2/8/2020	85.4	7316	5483	3739	399560	6649.48	N/A
58	2/8/2020	87.5	7509	6191	3819	397960	6568.48	N/A
59	2/9/2020	87.4	7551	5571	3942	405920	6623.16	N/A
60	2/9/2020	88.6	7239	5834	3867	402720	6671.51	N/A
61	2/9/2020	89	7040	5193	4077	403580	6637.39	N/A
62	2/9/2020	87.2	7164	5521	3729	407640	6678.95	N/A
63	2/9/2020	87.2	7080	5248	4231	405220	6645.64	N/A
64	2/10/2020	87.4	6894	5488	4173	400520	6689.82	N/A
	AVG=	82.5	8,152	5,774	3,703	16,320,120	289,060	TOTAL

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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	1,517	1,515	N/A
Big Lime	1,532	2,097	1,540	2,158
Fifty Foot Sandstone	2,097	2,332	2,143	2,404
Gordon	2,332	2,635	2,389	2,719
Fifth Sandstone	2,635	2,734	2,704	2,824
Bayard	2,734	3,582	2,809	3,723
Speechley	3,582	3,743	3,708	3,894
Balltown	3,743	4,258	3,879	4,437
Bradford	4,258	4,525	4,422	4,719
Benson	4,525	4,879	4,704	5,094
Alexander	4,879	5,921	5,079	6,258
Sycamore	5,793	5,891	6,102	6,228
Middlesex	5,891	5,981	6,243	6,396
Burkett	5,981	6,001	6,411	6,446
Tully	6,001	6,028	6,461	6,526
Marcellus	6,028	NA	6,526	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:	1/25/2020
Job End Date:	2/10/2020
State:	West Virginia
County:	Tyler
API Number:	47-095-02567-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Daniels Unit 2H
Latitude:	39.47215000
Longitude:	-80.91719000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,185
Total Base Water Volume (gal):	19,736,226
Total Base Non Water Volume:	0

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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	86.24529	
SaniFrac 8123	CWS	Microbiocide					
				Listed Below			

Sand (Proppant)	CWS	Propping Agent						
					Listed Below			
CI-9100G	CWS	Corrosion Inhibitor						
					Listed Below			
Calbreak 5501	CWS	Breaker						
					Listed Below			
CalGel 4000	CWS	Gel Slurry						
					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	13.43156	
			Illite	12173-60-3		1.00000	0.13431	
			Hydrochloric acid	7647-01-0		37.00000	0.11294	
			Ilmenite	98072-94-7		0.10000	0.01343	
			Biotite	1302-27-8		0.10000	0.01343	
			Goethite	1310-14-1		0.10000	0.01343	
			Apatite	64476-38-6		0.10000	0.01343	
			Distillates (petroleum), hydrotreated middle	64742-46-7		60.00000	0.00925	

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				Guar gum	9000-30-0	60.00000	0.00925
				Glutaraldehyde	111-30-8	14.00000	0.00129
				Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00077
				Ammonium Persulfate	7727-54-0	100.00000	0.00033
				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
				Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00023
				Vinylidene chloride-methyl acrylate copolymer	25038-72-6	20.00000	0.00007
				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
				Ethoxylated Alcohols	68131-39-5	10.00000	0.00002
				Tar bases, quinolone derivs, benzyl chloride- quaternized	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(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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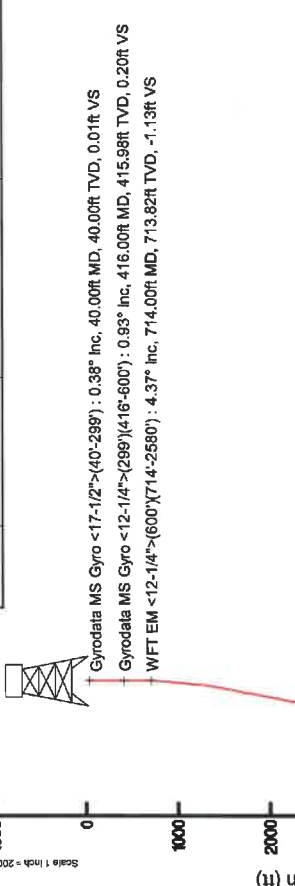
Location: Tyler County, WV
 Facility: Ferrill South Pad
 Slot: Slot #05
 Well: Daniels Unit 2H
 Wellbore: Daniels Unit 2H PWB

Plot reference wellbore is Daniels Unit 2H PWP Rev-A.0
 True vertical depths are referenced to H&P 519 (RKB)
 Measured depths are referenced to H&P 519 (RKB)
 H&P 519 (RKB) to Mean Sea Level: 781 feet
 Mean Sea Level to Ground level / At Slot: Slot #05: -731 feet
 Coordinates are in feet referenced to Slot

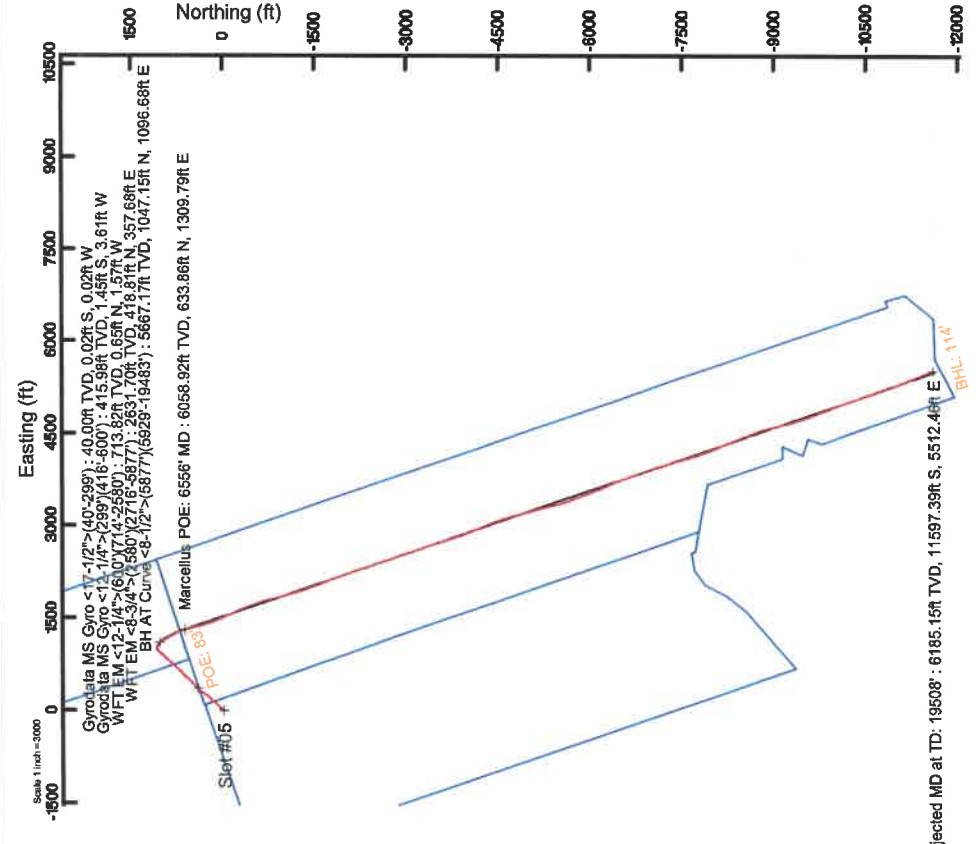
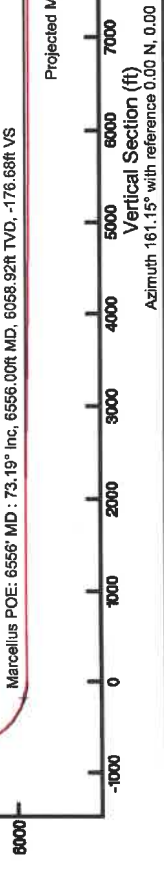
Location Information			
Facility Name	Grid East (US ft)	Grid North (US ft)	Longitude
Ferrill South Pad	1863764.631	39°28'19.560"N	80°55'01.900"W
Slot #05	1863764.617	39°28'19.740"N	80°55'01.900"W
H&P 519 (RKB) to Ground level / At Slot: Slot #05			30ft
Mean Sea Level to Ground level / At Slot: Slot #05			-731ft
H&P 519 (RKB) to Mean Sea Level			781ft

Well Profile Data								
Design Comment	MD (ft)	Inc (")	Az (°)	Local E (ft)	Local N (ft)	DLS (°/100ft)	VS (ft)	
To On	5877.00	25.540	136.220	5620.80	1084.76	1081.08	8.00	-958.37
Proj. To Bottom	5946.00	29.030	140.340	5684.78	1040.09	1102.68	5.61	-827.85
End of 3D Arc	5974.91	28.435	136.050	5707.51	1030.81	1111.27	8.32	-816.48
POE	6527.40	70.882	161.153	6080.00	688.58	1286.97	8.32	-214.61
Landing Pt.	6757.28	90.000	161.153	6098.00	456.01	1369.86	8.32	11.04
BHL	19514.00	90.000	161.153	6098.00	-11816.77	5480.74	0.00	12767.74

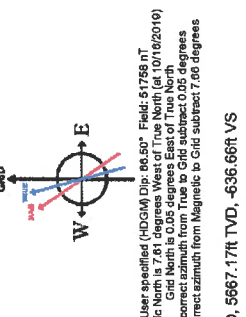
Slot	Well	Wellbore	Wellpath
Slot #05	Daniels Unit 2H	Daniels Unit 2H	Daniels Unit 2H AWB
			Daniels Unit 2H PWB
			Daniels Unit 2H PWP Rev-A.0



Gyrodala MS Gyro <17-1/2">(40°-299) : 0.38° Inc, 40.00ft MD, 40.00ft TVD, 0.01ft VS
 Gyrodala MS Gyro <12-1/4">(299)(416°-600) : 0.93° Inc, 416.00ft MD, 415.98ft TVD, 0.20ft VS
 WFT EM <8-3/4">(2580)(2716°-5877) : 16.84° Inc, 2716.00ft MD, 2631.70ft TVD, -280.79ft VS
 WFT EM <8-1/2">(6877)(5929°-19483) : 28.29° Inc, 5929.00ft MD, 5667.17ft TVD, -636.66ft VS
 Marcellus POE: 6556° MD : 73.19° Inc, 6556.00ft MD, 6058.92ft TVD, -176.68ft VS



API: 47-095-02567-0000
 BHI Job #: 110073152A
 Rig: H&P 519
 Duration: 11/02/2019-11/04/2019



RECEIVED
 Office of Oil and Gas
 SEP 24 2020
 WV Department of Environmental Protection

6,504' to Bottom Hole

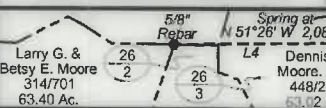
309' to Top Hole

TOP HOLE LATITUDE 39-30-00
BTM HOLE LATITUDE 39-27-30

TOP HOLE LONGITUDE 80-55-00
BTM HOLE LONGITUDE 80-52-30

10,140' to Top Hole

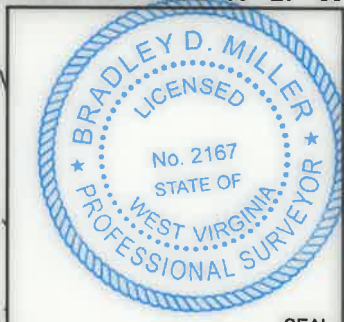
Antero Resources
Well No. Daniels Unit 2H
As-Drilled
Antero Resources Corporation



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E: 1,599,943.00' Longitude: 80°55'01.90"
Bottom Hole coordinates are
N: 345,549.40' Latitude: 39°26'25.10"
E: 1,605,271.83' Longitude: 80°53'51.62"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,369,185.548m N: 4,365,633.454m
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Plat orientation and corner and well references are based upon the grid north meridian.
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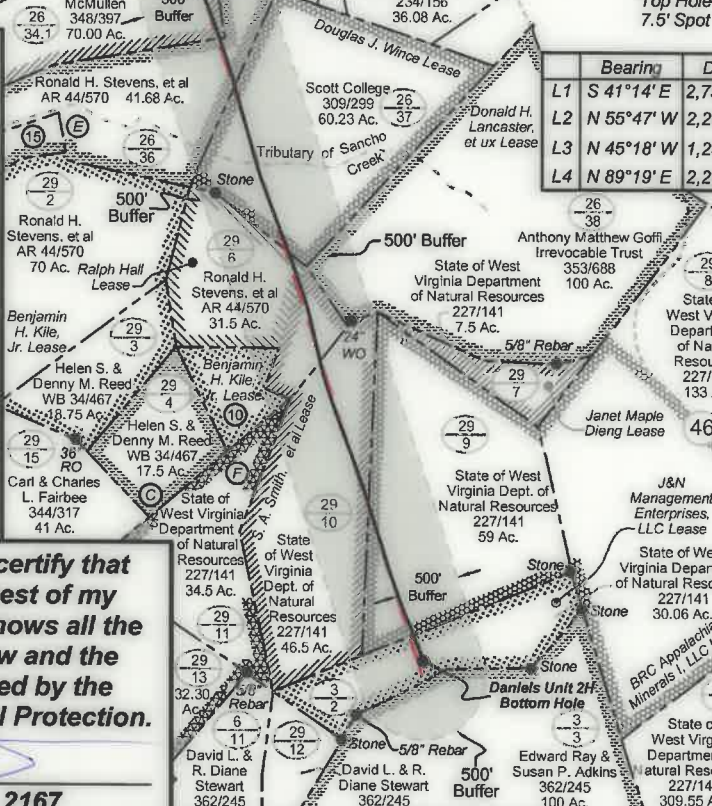
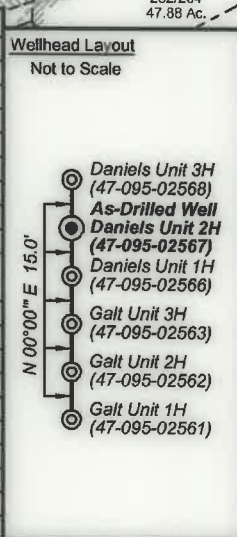
Leases

A.	Alice Moseley Lease
B.	Winifred Antalek Lease
C.	Connie S. Hardesty, et vir Lease
D.	Clarence W. Mutschelknaus Sr., et al Lease
E.	Helen Reed, et al Lease
F.	Janet L. Dieng Lease
G.	Donnie Smith, et ux Lease
H.	Jay D. Westbrook, et ux Lease
I.	Tammy L. Shanabarger Bassett Lease

Legend

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

ID	TM/Par	Owner	Bk/Pg	Acres
1	26/19.5	James Fallucco	361/260	8.60
2	26/19.6	Donnie & Katrenia A. Smith	320/498	3.92
3	26/19.7	Michael & Nancy H. Kester	368/813	5.76
4	26/19.8	Michael & Nancy H. Kester	368/813	8.99
5	26/19.10	Jay Westbrook & Teresa Hill	355/456	9.36
6	26/5	Robert L. Keller	312/330	20.01
7	26/7	Robert L. Keller	312/330	22.09
8	26/8	Robert L. Keller	312/330	17.78
9	26/17	Robert L. Keller	312/330	5.25
10	29/5	Ralph D Thacker & Carlisle J Maurice, Jr.	388/762	12.50
11	Not Used			
12	26/9.12	JB Exploration I, LLC	404/352	4.29
13	26/20	Leroy & Hilda M Lancaster	193/333	20.00
14	Various	JB Exploration I, LLC	404/352	Varies
15	26/35	Ronald L. Stevens, et al	AR44/570	13.61
16	26/19.1	Edward Beagle, et al	WB36/480	10.84
17	26/24	Joanna Payton	345/158	4.11
18	26/25	Joanna Payton	345/158	3.95
19	26/23	Gretta Westbrook	WB33/57	2.00
20	26/6	David L. Beagle	198/261	3.90
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Bearing	Dist.
L1 S 41°14' E	2,732.8'
L2 N 55°47' W	2,298.4'
L3 N 45°18' W	1,238.6'
L4 N 89°19' E	2,252.1'



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

FILE NO: 315-54-E-16
DRAWING NO: Daniels 2H As-Drilled
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

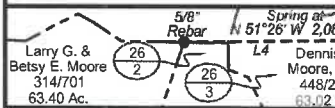
DATE: May 8 2020
OPERATOR'S WELL NO. Daniels Unit 2H
API WELL NO
47 - 095 - 02567
STATE COUNTY PERMIT

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
DISTRICT: Ellsworth Antero BRC Appalachian Minerals I, LLC; J&N Management Enterprises, LLC; Winifred Antalek; Joanna L. Binegar; David L. Beagle, et ux; COUNTY: Tyler
SURFACE OWNER: Midstream, LLC Helen Reed, et al; The Swan Living Trust; Douglas J. Wince; Gretta Westbrook; Clarence W. Mutschelknaus Sr., et al; S. A. Smith, et al; Tammy L. Shanabarger Bassett; ACREAGE: 203.59
ROYALTY OWNER: Larry R. Henthom, et ux; Denver A. McMullen, et ux; Ralph Hall; Michael S. Kester, et ux; LEASE NO: ACREAGE: 61.71875;
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 6,185' TVD
19,508' MD

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

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



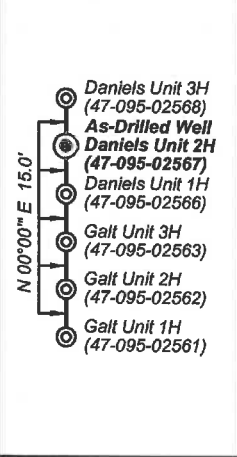
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Wellhead Layout
 Not to Scale



6,504' to Bottom Hole

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

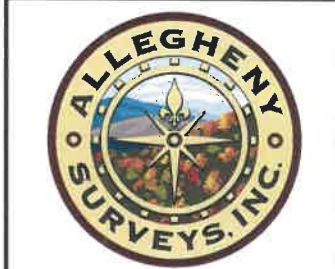


TOP HOLE LONGITUDE 80 - 55 - 00
 BTM HOLE LONGITUDE 80 - 52 - 30
 6,466' to Bottom Hole
 10,140' to Top Hole

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 - B. Winifred Antalek Lease
 - C. Connie S. Hardesty, et vir Lease
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OIL AND GAS DIVISION

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 47 - 095 - 02567
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