

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

API 47-095-02540 County Tyler District Meade
Quad Middlebourne 7.5' Pad Name Rush Fork Pad Field/Pool Name -----
Farm name Joseph R. Rymer Jr. Well Number Gauge Unit 3H
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 4363059m Easting 502629m
Landing Point of Curve Northing 4360468.84m Easting 504056.30m
Bottom Hole Northing 4359715m Easting 504348m

Elevation (ft) 986' 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 AUG 31 2020

Mud - Polymer WWW.DEP.wv.gov Environmental Protection

Date permit issued 11/9/2018 Date drilling commenced 12/19/2018 Date drilling ceased 4/16/2019
Date completion activities began 9/27/2019 Date completion activities ceased 11/18/2019
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 30, 81 Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1461, 1485, 1510 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: *[Signature]*
9/17/2020

API 47-095 - 02540 Farm name Joseph R. Rymer Jr. Well number Gauge Unit 3H

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"	95'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	375'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2630'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	18742'	New	23#, HCP-110	N/A	Y
Tubing		2-3/8"	6616'		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	300 sx	15.6	1.18	241	0'	8 Hrs.
Surface	Class A	325 sx	15.6	1.20	635	0'	8 Hrs.
Coal							
Intermediate 1	Class A	905 sx	15.6	1.19	1082	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	792 sx (Lead) 3310 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) 18769' MD, 6320' TVD (BHL), 6321' (Deepest Point Drilled) Loggers TD (ft) 18769' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5600'

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 RECEIVED
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Conductor - 0 AUG 31 2020
 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 47-095-02540 Farm Name Joseph R. Rymer, Jr., Well Number Gauge Unit 3H

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	9/11/2019	18385	18341	60	Marcellus
2	9/12/2019	18303.565	18138.39	60	Marcellus
3	9/12/2019	18102.955	17937.78	60	Marcellus
4	9/12/2019	17902.345	17737.17	60	Marcellus
5	9/13/2019	17701.735	17536.56	60	Marcellus
6	9/13/2019	17501.125	17335.95	60	Marcellus
7	9/13/2019	17300.515	17135.34	60	Marcellus
8	9/14/2019	17099.905	16934.73	60	Marcellus
9	9/14/2019	16899.295	16734.12	60	Marcellus
10	9/14/2019	16698.685	16533.51	60	Marcellus
11	9/15/2019	16498.075	16332.9	60	Marcellus
12	9/15/2019	16297.465	16132.29	60	Marcellus
13	9/16/2019	16096.855	15931.68	60	Marcellus
14	9/16/2019	15896.245	15731.07	60	Marcellus
15	9/16/2019	15695.635	15530.46	60	Marcellus
16	9/16/2019	15495.025	15329.85	60	Marcellus
17	9/16/2019	15294.415	15129.24	60	Marcellus
18	9/17/2019	15093.805	14928.63	60	Marcellus
19	9/17/2019	14893.195	14728.02	60	Marcellus
20	9/17/2019	14692.585	14527.41	60	Marcellus
21	9/17/2019	14491.975	14326.8	60	Marcellus
22	9/18/2019	14291.365	14126.19	60	Marcellus
23	9/18/2019	14090.755	13925.58	60	Marcellus
24	9/18/2019	13890.145	13724.97	60	Marcellus
25	9/18/2019	13689.535	13524.36	60	Marcellus
26	9/19/2019	13488.925	13323.75	60	Marcellus
27	9/19/2019	13288.315	13123.14	60	Marcellus
28	9/19/2019	13087.705	12922.53	60	Marcellus
29	9/19/2019	12887.095	12721.92	60	Marcellus
30	9/20/2019	12686.485	12521.31	60	Marcellus
31	9/20/2019	12485.875	12320.7	60	Marcellus
32	9/20/2019	12285.265	12120.09	60	Marcellus
33	9/20/2019	12084.655	11919.48	60	Marcellus
34	9/21/2019	11884.045	11718.87	60	Marcellus
35	9/21/2019	11683.435	11518.26	60	Marcellus
36	9/21/2019	11482.825	11317.65	60	Marcellus
37	9/21/2019	11282.215	11117.04	60	Marcellus
38	9/22/2019	11081.605	10916.43	60	Marcellus
39	9/22/2019	10880.995	10715.82	60	Marcellus
40	9/22/2019	10680.385	10515.21	60	Marcellus
41	9/22/2019	10479.775	10314.6	60	Marcellus
42	9/23/2019	10279.165	10113.99	60	Marcellus
43	9/23/2019	10078.555	9913.38	60	Marcellus
44	9/23/2019	9877.945	9712.77	60	Marcellus
45	9/23/2019	9677.335	9512.16	60	Marcellus
46	9/24/2019	9476.725	9311.55	60	Marcellus
47	9/24/2019	9276.115	9110.94	60	Marcellus
48	9/24/2019	9075.505	8910.33	60	Marcellus
49	9/24/2019	8874.895	8709.72	60	Marcellus
50	9/25/2019	8674.285	8509.11	60	Marcellus
51	9/25/2019	8473.675	8308.5	60	Marcellus
52	9/25/2019	8273.065	8107.89	60	Marcellus
53	9/25/2019	8072.455	7907.28	60	Marcellus
54	9/25/2019	7871.845	7706.67	60	Marcellus
55	9/26/2019	7671.235	7506.06	60	Marcellus
56	9/26/2019	7470.625	7305.45	60	Marcellus
57	9/26/2019	7270.015	7104.84	60	Marcellus
58	9/26/2019	7069.405	6904.23	60	Marcellus
59	9/27/2019	6868.795	6703.62	60	Marcellus
60	9/27/2019	6668.185	6503.01	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 (bbbls)	Amount of Nitrogen/other (units)
1	8/12/2019	76.65162	8151.449	8113	3519	80260	4951	N/A
2	8/13/2019	79.13135	8239.759	5829	4110	117480	8916	N/A
3	8/13/2019	76.04814	8170.635	5884	4024	118360	8709	N/A
4	8/13/2019	77.12946	8175.649	5984	4392	120760	8900	N/A
5	8/14/2019	76.95372	8076.981	6041	4872	121590	8693	N/A
6	8/14/2019	79.4083	8105.2	5379	5099	121020	8865	N/A
7	8/15/2019	78.20056	7919.818	5637	4645	120060	8767	N/A
8	8/15/2019	76.61776	8192.359	5623	4576	114820	8847	N/A
9	8/16/2019	69.68531	8214.903	8299	4873	120200	8880	N/A
10	8/17/2019	66.18187	8106.002	5858	4222	122460	9261	N/A
11	8/17/2019	65.29604	8236.084	7054	3931	121340	8738	N/A
12	8/18/2019	64.14628	8209.474	5414	3945	119880	8758	N/A
13	8/19/2019	69.84263	8081.201	7063	4370	125960	8910	N/A
14	8/19/2019	65.83339	8200.7	5431	4544	119420	8847	N/A
15	8/19/2019	80.70597	8043.439	6351	4274	125940	8749	N/A
16	8/20/2019	75.64957	8196.429	8176	4792	125800	8087	N/A
17	8/22/2019	75.08685	8253.525	5631	4445	123820	8805	N/A
18	8/23/2019	77.845	8191.712	4340	4136	121860	8794	N/A
19	8/24/2019	65.87209	8243.911	5690	4236	122760	8840	N/A
20	8/24/2019	77.73592	8033.768	6351	4150	124500	8590	N/A
21	8/25/2019	76.88667	8189.333	5498	4594	124400	10042	N/A
22	8/26/2019	81.19883	7846.465	6913	4410	123080	8682	N/A
23	8/26/2019	72.77597	7878.76	5577	3549	122940	8685	N/A
24	8/27/2019	75.35871	8057.992	6320	3840	121820	8550	N/A
25	8/27/2019	71.30667	8103.945	5111	4069	123000	8757	N/A
26	8/27/2019	84.34104	8172.506	6879	3732	122160	8562	N/A
27	8/28/2019	81.11077	8185.973	5160	4676	120340	8651	N/A
28	8/28/2019	84.86991	7961.044	5836	3984	120360	8573	N/A
29	8/29/2019	85.83412	7925.574	6741	4588	121380	8632	N/A
30	8/29/2019	77.74173	7904.2	5318	3976	121460	8666	N/A
31	8/30/2019	82.47831	8065.56	5536	4521	121340	8528	N/A
32	8/30/2019	86.14631	7861.668	5377	4188	122560	8173	N/A
33	8/30/2019	83.71718	8031.188	5700	3737	121100	8618	N/A
34	8/31/2019	77.61926	7756.89	5600	4235	121300	8494	N/A
35	8/31/2019	81.13096	7921.848	5823	4579	121900	9497	N/A
36	9/1/2019	80.19835	7924.658	5031	3977	123620	8555	N/A
37	9/1/2019	84.61795	7926.309	3865	4191	121740	8587	N/A
38	9/2/2019	82.05126	7851.556	5060	4188	122280	8635	N/A
39	9/2/2019	79.42496	7778.799	5583	3863	123160	8481	N/A
40	9/3/2019	82.19366	7829.997	5333	4111	123520	8530	N/A
41	9/3/2019	83.15745	7866.378	5460	4176	122320	8548	N/A
42	9/3/2019	85.32366	7923.673	5589	3650	122760	8560	N/A
43	9/4/2019	85.73757	7548.459	5613	4255	122480	8542	N/A
44	9/4/2019	86.24848	7642.405	6020	4101	126190	8417	N/A
45	9/5/2019	85.67213	7777.621	5929	3686	121520	8416	N/A
46	9/5/2019	86.78925	7312.652	7686	3779	122200	8315	N/A
47	9/5/2019	85.40299	7615.292	5483	3715	120920	8443	N/A
48	9/6/2019	84.56991	7782.422	5461	4118	121080	8458	N/A
49	9/6/2019	83.03676	7622.955	6224	3593	121540	8414	N/A
50	9/6/2019	85.08982	7677.113	5707	3969	121460	8328	N/A
51	9/7/2019	85.08713	7588.334	5788	4202	122240	8349	N/A
52	9/7/2019	80.22311	7248.212	5942	3913	122240	8405	N/A
53	9/8/2019	85.40479	7490.813	5469	3585	122400	8412	N/A
54	9/8/2019	84.7278	7430.142	5906	3646	123180	8289	N/A
55	9/8/2019	85.53058	7384.794	5769	3269	122640	8360	N/A
56	9/9/2019	85.52697	6810.225	5769	3297	122000	8321	N/A
57	9/9/2019	85.69611	6912.304	6314	3239	121660	8306	N/A
58	9/9/2019	86.21533	6987.079	5969	4396	120960	8480	N/A
59	9/10/2019	83.98311	6713.556	5169	3190	122460	8341	N/A
60	9/10/2019	85.10493	6646.024	5560	3244	121060	8282	N/A
	AVG=	76	8,098	6,064	4,273	3,974,230	285,028	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	0		215		0		215	
Sandy Siltstone	215		385		215		385	
Shaly Siltstone	385		585		385		585	
Silty sandstone	585		625		585		625	
Shaly Siltstone	625		745		625		745	
Silty sandstone	745		805		745		805	
Sandy Siltstone	805		865		805		865	
Shaly Siltstone	865		985		865		985	
Silty Shale	985		1,185		985		1,185	
Silty Sandstone	1,185		1,475		1,185		1,475	
Sandstone	1,475		1,645		1,475		1,645	
Sandy Siltstone	1,645		1,745		1,645		1,745	
Silty sandstone	1,745		1,811		1,745		1,842	
Big Lime	1,826		2,730		1,817		2,757	
Fifty Foot Sandstone	2,730		2,841		2,732		2,869	
Gordon	2,841		3,186		2,844		3,220	
Fifth Sandstone	3,186		3,375		3,195		3,411	
Bayard	3,375		4,002		3,386		4,048	
Speechley	4,002		4,270		4,023		4,321	
Balltown	4,270		4,502		4,296		4,557	
Bradford	4,502		4,732		4,532		4,790	
Benson	4,732		4,880		4,765		4,941	
Alexander	4,880		6,065		4,916		6,229	
Sycamore	5,941		6,040		6,056		6,204	
Middlesex	6,040		6,129		6,204		6,385	
Burkett	6,129		6,147		6,385		6,435	
Tully	6,147		6,155		6,435		6,456	
Marcellus	6,155		NA		6,456		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

Field: Tyler

Facility: Rush Fork Pad

Wellbore: Gauge Unit 3H PWB

Slot: Slot #05

Well: Gauge Unit 3H

Reference wellpath is Gauge Unit 3H PWP Rev-A.0

Grid System: NAD27 UTM Zone 17 North, US feet
North Reference: Grid north
Scale: True distance
Depths are in feet
H&P 317 (RKB) to Mean Sea Level: 1011.5 feet
Mean Sea Level to Ground level (at Slot: Slot #05): -98ft
Coordinates are in feet referenced to Slot

Location Information

Facility Name	Grid East (US ft)	Latitude
Rush Fork Pad	1449000.970	39°25'01.492"N
Slot #05	14313756.427	39°25'01.100"N
H&P 317 (RKB) to Ground level (at Slot: Slot #05)	1648893.340	-5.63
Mean Sea Level to Ground level (at Slot: Slot #05)		-98ft
H&P 317 (RKB) to Mean Sea Level		1011.5ft

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (1/100ft)	VS (ft)
The On	6017.50	26.780	140.180	787.52	1298.43	1321.50	8.05	-300.51
Proj. To Bottom	6089.50	31.610	137.810	5843.46	781.08	1321.50	6.90	-297.90
End of 3D Arc	6333.02	48.780	143.838	6028.87	1418.04	1321.50	7.23	-118.78
POE	6698.84	71.455	160.175	6180.00	408.74	1321.50	8.75	138.80
Landing Pt.	6848.78	80.000	160.175	6214.00	210.82	1321.50	8.75	138.80
BHL	18758.78	90.000	160.175	6214.00	-10953.29	5847.20	0.00	12256.85

Well Data

Well	Wellbore	Wellpath
Slot #05	Gauge Unit 3H	Gauge Unit 3H AWP
Slot #05	Gauge Unit 3H AWP	Gauge Unit 3H PWP Rev-A.0

Gyrodatta SS Gyro <17-1/2>(100'-362') : 0.32° Inc, 110.50ft MD, 110.50ft TVD, -0.10ft VS

WFT EM <12-1/4>(362'x490'-2554') : 1.83° Inc, 500.50ft MD, 500.48ft TVD, -1.55ft VS

WFT EM <8-3/4>(2554'x2650'-6007') : 16.09° Inc, 2660.50ft MD, 2586.81ft TVD, -127.28ft VS

API: 47-095-02540-0000

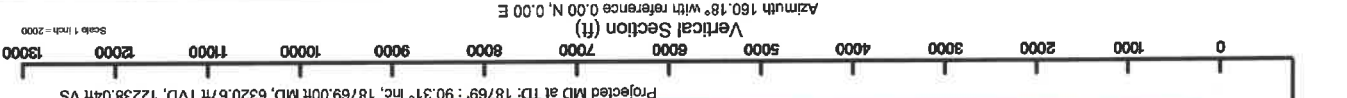
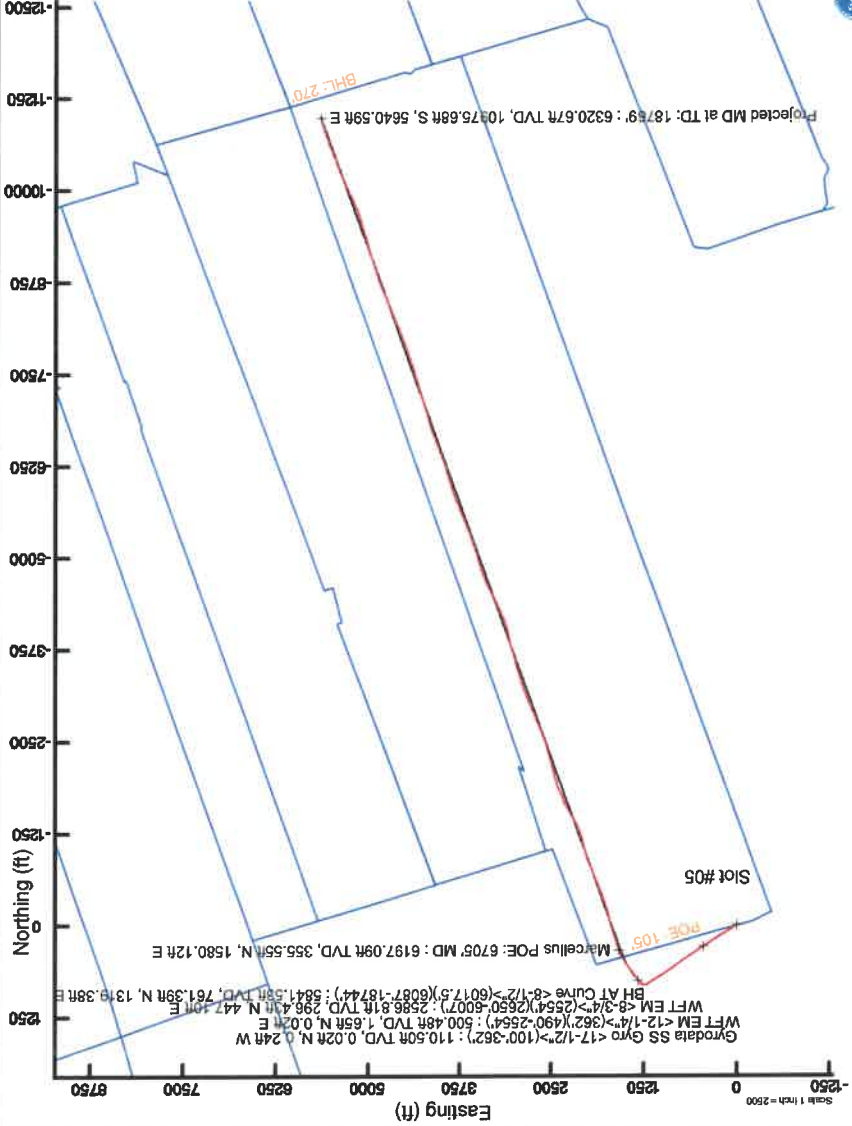
BHI Job #: 109757089

Rig: H&P 317

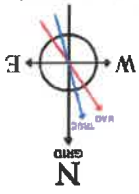
Duration: 04/11/2019-04/13/2019



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User specified (HDGM) Dip: 66.49° Fiat: 51751 nT
Magnetic North is 7.78 degrees West of True North (at 4/5/2019)
Grid North is 0.02 degrees East of True North
To correct azimuth from True to Grid subtract 0.02 degrees
To correct azimuth from Magnetic to Grid subtract 7.78 degrees



			Listed Below				
DWP-NE1	CWS	Non-Emulsifier					
			Listed Below				
CI-9100G	CWS	Corrosion Inhibitor					
			Listed Below				
			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	11.32465
				Calcite	471-34-1	1.00000	0.07882
				Hydrochloric acid	7647-01-0	37.00000	0.05335
				Illite	12173-60-3	1.00000	0.03440
				Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.02623
				Guar gum	9000-30-0	60.00000	0.02623
				Biotite	1302-27-8	0.10000	0.01132
				Apatite	64476-38-6	0.10000	0.01132
				Goethite	1310-14-1	0.10000	0.01132
				Copolymer of 2-propenamide	69418-26-4	30.00000	0.00917
				Polymer	26100-47-0	45.00000	0.00602
				Polyethylene glycol mixture	25322-68-3	54.50000	0.00581
				Ammonium chloride	12125-02-9	11.00000	0.00392
				Illmenite	98072-94-7	0.10000	0.00344

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				Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite			
0.00219	5.00000	68953-58-2					
0.00213	20.00000	10222-01-2		2,2-Dibromo-3-Nitriopropionamide			
0.00107	100.00000	7727-54-0		Ammonium Persulfate			
0.00066	1.50000	37251-67-5		Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether			
0.00061	2.00000	93-83-4		Oleic Acid Diethanolamide			
0.00054	4.00000	1338-43-8		Sorbitan monooleate			
0.00048	60.00000	77-92-9		Citric acid			
0.00043	4.00000	7647-15-6		Sodium bromide			
0.00040	3.00000	9004-96-0		Polyethylene glycol monooleate			
0.00032	3.00000	3252-43-5		Dibromoacetone			
0.00027	2.00000	61723-83-9		Sorbitol tetraoleate			
0.00021	20.00000	25038-72-6		Vinylidene chloride-methyl acrylate copolymer			
0.00013	1.00000	61791-26-2		Amines, tallow alkyl, ethoxylated			
0.00007	0.50000	84133-50-6		Alkylpolyethyleneoxy ethanol			
0.00005	30.00000	67-63-0		Isopropanol			
0.00003	20.00000	68607-28-3		Dimethylcocoamine, bis (chloroethyl) ether, diguaternary ammonium salt			
0.00003	40.00000	107-21-1		Ethylene Glycol			
0.00002	10.00000	67-56-1		Methanol			
0.00001	5.00000	Proprietary		Substituted ammonium chloride			
0.00001	5.00000	67-63-0		Isopropyl alcohol			
0.00001	20.00000	34590-94-8		Diethylene glycol, monomethyl ether			

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			72480-70-7	10.00000	0.00001	Tar bases, quinolone derivs, benzyl chloride- quatenized
			61788-93-0	5.00000	0.00001	Amines, coco alkyl dimethyl
			68131-39-5	10.00000	0.00001	Ethoxylated Alcohols
			104-55-2	10.00000	0.00001	Cinnamaldehyde
			79-06-1	0.10000	0.00001	Acrylamide
			64-18-6	10.00000	0.00001	Formic acid
			78330-21-9			Alcohols, C11-14-iso-, C13-rich, ethoxylated
			9003-05-8			Cationic Polyacrylamide
			64742-47-8			Distillates (petroleum), hydrotreated light
						Proprietary Additive Concentration
						Proprietary Additive Concentration
						Proprietary Additive Concentration

* 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)

LATITUDE 39°27'30"

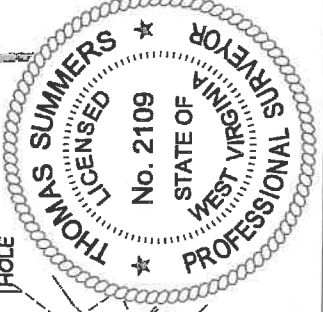
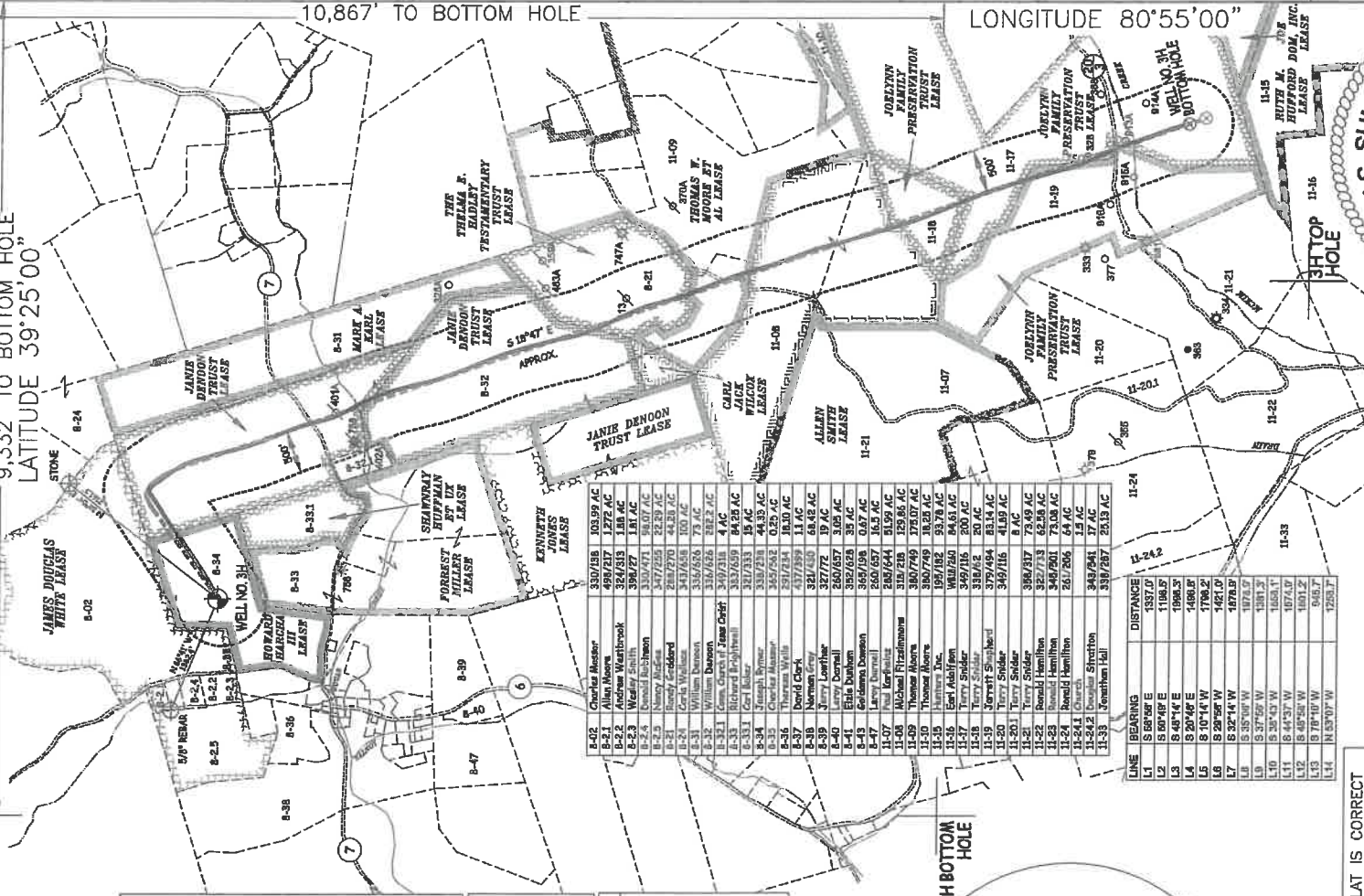
9,332' TO BOTTOM HOLE

LATITUDE 39°25'00"

15,065'

LONGITUDE 80°55'00"

LONGITUDE 80°57'30"

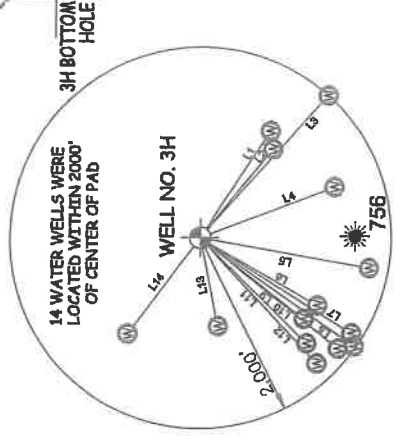
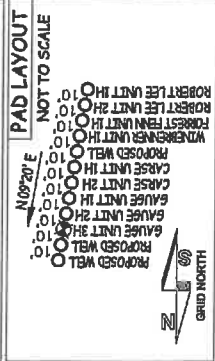


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Antero Resources Corporation
Well No. Gauge Unit 3H

AS DRILLED DATA:
WELL 3H TOP HOLE INFORMATION:
N: 337,376ft E: 1,584,815ft
LAT: 39°25'01.10" LON: 80°58'10.65"
BOTTOM HOLE INFORMATION:
N: 326,308ft E: 1,590,271ft
LAT: 39°23'12.60" LON: 80°56'58.86"
WEST VIRGINIA COORDINATE
SYSTEM OF 1927 NORTH ZONE.
MEASUREMENTS TAKEN WITH
TRIMBLE GEOXT SUBMETER
MAPPING GRADE GPS UNIT.
PLAT ORIENTATION, CORNER,
AND WELL REFERENCE TIE LINES
ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 3H TOP HOLE INFORMATION:
N: 4,363,059m E: 502,629m
BOTTOM HOLE INFORMATION:
N: 4,359,715m E: 504,348m



WELL #	OWNER	ACRES	WELL #	OWNER	ACRES
B-02	JAMES DOUGLAS WHITE LEASE	8-02	B-24	STONE	8-24
B-24	JAMES DOUGLAS WHITE LEASE	8-24	B-31	MARK A. KARL LEASE	8-31
B-25	50" DEEP	8-25	B-32	JANIE DENON TRUST LEASE	8-32
B-26	50" DEEP	8-26	B-33	JANIE DENON TRUST LEASE	8-33
B-27	50" DEEP	8-27	B-34	JANIE DENON TRUST LEASE	8-34
B-28	50" DEEP	8-28	B-35	JANIE DENON TRUST LEASE	8-35
B-29	50" DEEP	8-29	B-36	JANIE DENON TRUST LEASE	8-36
B-30	50" DEEP	8-30	B-37	JANIE DENON TRUST LEASE	8-37
B-31	MARK A. KARL LEASE	8-31	B-38	JANIE DENON TRUST LEASE	8-38
B-32	JANIE DENON TRUST LEASE	8-32	B-39	FORREST HILLER LEASE	8-39
B-33	JANIE DENON TRUST LEASE	8-33	B-40	SEANNVAY HUFFMAN BY UX LEASE	8-40
B-34	JANIE DENON TRUST LEASE	8-34	B-41	FORREST HILLER LEASE	8-41
B-35	JANIE DENON TRUST LEASE	8-35	B-42	FORREST HILLER LEASE	8-42
B-36	JANIE DENON TRUST LEASE	8-36	B-43	FORREST HILLER LEASE	8-43
B-37	JANIE DENON TRUST LEASE	8-37	B-44	FORREST HILLER LEASE	8-44
B-38	JANIE DENON TRUST LEASE	8-38	B-45	FORREST HILLER LEASE	8-45
B-39	FORREST HILLER LEASE	8-39	B-46	FORREST HILLER LEASE	8-46
B-40	SEANNVAY HUFFMAN BY UX LEASE	8-40	B-47	FORREST HILLER LEASE	8-47
B-41	FORREST HILLER LEASE	8-41	B-48	FORREST HILLER LEASE	8-48
B-42	FORREST HILLER LEASE	8-42	B-49	FORREST HILLER LEASE	8-49
B-43	FORREST HILLER LEASE	8-43	B-50	FORREST HILLER LEASE	8-50
B-44	FORREST HILLER LEASE	8-44	B-51	FORREST HILLER LEASE	8-51
B-45	FORREST HILLER LEASE	8-45	B-52	FORREST HILLER LEASE	8-52
B-46	FORREST HILLER LEASE	8-46	B-53	FORREST HILLER LEASE	8-53
B-47	FORREST HILLER LEASE	8-47	B-54	FORREST HILLER LEASE	8-54
B-48	FORREST HILLER LEASE	8-48	B-55	FORREST HILLER LEASE	8-55
B-49	FORREST HILLER LEASE	8-49	B-56	FORREST HILLER LEASE	8-56
B-50	FORREST HILLER LEASE	8-50	B-57	FORREST HILLER LEASE	8-57
B-51	FORREST HILLER LEASE	8-51	B-58	FORREST HILLER LEASE	8-58
B-52	FORREST HILLER LEASE	8-52	B-59	FORREST HILLER LEASE	8-59
B-53	FORREST HILLER LEASE	8-53	B-60	FORREST HILLER LEASE	8-60
B-54	FORREST HILLER LEASE	8-54	B-61	FORREST HILLER LEASE	8-61
B-55	FORREST HILLER LEASE	8-55	B-62	FORREST HILLER LEASE	8-62
B-56	FORREST HILLER LEASE	8-56	B-63	FORREST HILLER LEASE	8-63
B-57	FORREST HILLER LEASE	8-57	B-64	FORREST HILLER LEASE	8-64
B-58	FORREST HILLER LEASE	8-58	B-65	FORREST HILLER LEASE	8-65
B-59	FORREST HILLER LEASE	8-59	B-66	FORREST HILLER LEASE	8-66
B-60	FORREST HILLER LEASE	8-60	B-67	FORREST HILLER LEASE	8-67
B-61	FORREST HILLER LEASE	8-61	B-68	FORREST HILLER LEASE	8-68
B-62	FORREST HILLER LEASE	8-62	B-69	FORREST HILLER LEASE	8-69
B-63	FORREST HILLER LEASE	8-63	B-70	FORREST HILLER LEASE	8-70
B-64	FORREST HILLER LEASE	8-64	B-71	FORREST HILLER LEASE	8-71
B-65	FORREST HILLER LEASE	8-65	B-72	FORREST HILLER LEASE	8-72
B-66	FORREST HILLER LEASE	8-66	B-73	FORREST HILLER LEASE	8-73
B-67	FORREST HILLER LEASE	8-67	B-74	FORREST HILLER LEASE	8-74
B-68	FORREST HILLER LEASE	8-68	B-75	FORREST HILLER LEASE	8-75
B-69	FORREST HILLER LEASE	8-69	B-76	FORREST HILLER LEASE	8-76
B-70	FORREST HILLER LEASE	8-70	B-77	FORREST HILLER LEASE	8-77
B-71	FORREST HILLER LEASE	8-71	B-78	FORREST HILLER LEASE	8-78
B-72	FORREST HILLER LEASE	8-72	B-79	FORREST HILLER LEASE	8-79
B-73	FORREST HILLER LEASE	8-73	B-80	FORREST HILLER LEASE	8-80
B-74	FORREST HILLER LEASE	8-74	B-81	FORREST HILLER LEASE	8-81
B-75	FORREST HILLER LEASE	8-75	B-82	FORREST HILLER LEASE	8-82
B-76	FORREST HILLER LEASE	8-76	B-83	FORREST HILLER LEASE	8-83
B-77	FORREST HILLER LEASE	8-77	B-84	FORREST HILLER LEASE	8-84
B-78	FORREST HILLER LEASE	8-78	B-85	FORREST HILLER LEASE	8-85
B-79	FORREST HILLER LEASE	8-79	B-86	FORREST HILLER LEASE	8-86
B-80	FORREST HILLER LEASE	8-80	B-87	FORREST HILLER LEASE	8-87
B-81	FORREST HILLER LEASE	8-81	B-88	FORREST HILLER LEASE	8-88
B-82	FORREST HILLER LEASE	8-82	B-89	FORREST HILLER LEASE	8-89
B-83	FORREST HILLER LEASE	8-83	B-90	FORREST HILLER LEASE	8-90
B-84	FORREST HILLER LEASE	8-84	B-91	FORREST HILLER LEASE	8-91
B-85	FORREST HILLER LEASE	8-85	B-92	FORREST HILLER LEASE	8-92
B-86	FORREST HILLER LEASE	8-86	B-93	FORREST HILLER LEASE	8-93
B-87	FORREST HILLER LEASE	8-87	B-94	FORREST HILLER LEASE	8-94
B-88	FORREST HILLER LEASE	8-88	B-95	FORREST HILLER LEASE	8-95
B-89	FORREST HILLER LEASE	8-89	B-96	FORREST HILLER LEASE	8-96
B-90	FORREST HILLER LEASE	8-90	B-97	FORREST HILLER LEASE	8-97
B-91	FORREST HILLER LEASE	8-91	B-98	FORREST HILLER LEASE	8-98
B-92	FORREST HILLER LEASE	8-92	B-99	FORREST HILLER LEASE	8-99
B-93	FORREST HILLER LEASE	8-93	B-100	FORREST HILLER LEASE	8-100

WELL #	BEARING	DISTANCE	WELL #	BEARING	DISTANCE
11	S 69°42' E	187.0'	11-24		
12	S 69°42' E	187.0'	11-24.2		
13	S 40°42' E	108.3'			
14	S 20°42' E	148.8'			
15	S 10°42' W	178.2'			
16	S 20°42' W	148.1'			
17	S 32°14' W	107.0'			
18	S 37°52' W	131.3'			
19	S 38°43' W	107.0'			
20	S 44°31' W	164.0'			
21	S 49°54' W	180.2'			
22	S 79°10' W	94.8'			
23	S 83°07' W	125.7'			

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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.

STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415



JOB # 17-023WA
DRAWING # GAUGERHAD
SCALE 1" = 2000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS
WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION 985' AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK DISTRICT MEADE COUNTY TYLER ACREAGE 44.33 ACRES +/- LEASE ACREAGE 44.33 AC ± 88.2 AC ± 85.3 AC ± 44.28 AC ± 109.11 AC ± 129.86 AC ± 20AC ± 200 AC ± 88.14 AC ±
SURFACE OWNER JOSEPH R. RYMER JR.
OIL & GAS ROYALTY OWNER HOWARD HARCHA III; JANIE DENON TRUST; JANIE DENON TRUST;
THE HELMA E. HADLEY TESTAMENTARY TRUST; THOMAS W. MOORE ET AL; CARL JACK WILCOX;
JOELYNN FAMILY PRESERVATION TRUST; JOELYNN FAMILY PRESERVATION TRUST; JOELYNN FAMILY PRESERVATION TRUST
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL CLEAN OUT & REPLUG
(SPECIFY AS DRILLED) AS DRILLED PERFORATE NEW FORMATION PLUG & ABANDON
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,320' TVD 18,769' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP ST. DENVER, CO 80202
FORM WW-6

- NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY; HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
- TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
- AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
- WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE LEASE BOUNDARIES. INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
- WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.