

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

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NOV 1 2021

WV Department of
Environmental Protection

API 47-095-02722 County Wetzel District Ellsworth/Magnolia
Tyler
Quad Porter Falls/ Paden City Pad Name Elk Fork Field/Pool Name ----
Farm name Patricia Ann Heintzman Well Number Tygart 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 4376855m Easting 511125m
Landing Point of Curve Northing 4376997.24m Easting 510758.07m
Bottom Hole Northing 4381331m Easting 509299m

Elevation (ft) 1126' 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 12/16/2020 Date drilling commenced 1/17/2021 Date drilling ceased 1/29/2021
Date completion activities began 4/2/2021 Date completion activities ceased 6/5/2021
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 408' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1703' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 58' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:

DCN
12/21/21
12/31/2021

API 47-095 - 02722 Farm name Patricia Ann Heintzman Well number Tygart 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"	80'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	377'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2571'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	22157'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6729'		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	266 sx	15.6	1.18	56	0'	8 Hrs.
Surface	Class A	429 sx	15.6	1.19	92	0'	8 Hrs.
Coal							
Intermediate 1	Class A	883 sx	15.6	1.19	187	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	792 sx (Lead) 3494 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.4 (Lead), 1.26 (Tail)	787	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 22201' MD, 6466' TVD (BHL), 6530' (Deepest Point Drilled) Loggers TD (ft) 22201' MD

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

Plug back procedure N/A

Kick off depth (ft) 5896'

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

API 47-095-02722 Farm Name Patricia Ann Heintzman Well Number Tygart Unit 2H

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	4/2/2021	22085.6	22046.9	36	Marcellus
2	4/2/2021	22007.89622	21840.8773	36	Marcellus
3	4/2/2021	21805.07356	21638.0547	36	Marcellus
4	4/2/2021	21602.25089	21435.232	36	Marcellus
5	4/3/2021	21399.42822	21232.4093	36	Marcellus
6	4/3/2021	21196.60556	21029.5867	36	Marcellus
7	4/3/2021	20993.78289	20826.764	36	Marcellus
8	4/3/2021	20790.96022	20623.9413	36	Marcellus
9	4/3/2021	20588.13756	20421.1187	36	Marcellus
10	4/4/2021	20385.31489	20218.296	36	Marcellus
11	4/4/2021	20182.49222	20015.4733	36	Marcellus
12	4/4/2021	19979.66956	19812.6507	36	Marcellus
13	4/4/2021	19776.84689	19609.828	36	Marcellus
14	4/5/2021	19574.02422	19407.0053	36	Marcellus
15	4/5/2021	19371.20156	19204.1827	36	Marcellus
16	4/5/2021	19168.37889	19001.36	36	Marcellus
17	4/5/2021	18965.55622	18798.5373	36	Marcellus
18	4/5/2021	18762.73356	18595.7147	36	Marcellus
19	4/6/2021	18559.91089	18392.892	36	Marcellus
20	4/6/2021	18357.08822	18190.0693	36	Marcellus
21	4/6/2021	18154.26556	17987.2467	36	Marcellus
22	4/6/2021	17951.44289	17784.424	36	Marcellus
23	4/6/2021	17748.62022	17581.6013	36	Marcellus
24	4/7/2021	17545.79756	17378.7787	36	Marcellus
25	4/7/2021	17342.97489	17175.956	36	Marcellus
26	4/7/2021	17140.15222	16973.1333	36	Marcellus
27	4/7/2021	16937.32956	16770.3107	36	Marcellus
28	4/8/2021	16734.50689	16567.488	36	Marcellus
29	4/8/2021	16531.68422	16364.6653	36	Marcellus
30	4/8/2021	16328.86156	16161.8427	36	Marcellus
31	4/8/2021	16126.03889	15959.02	36	Marcellus
32	4/8/2021	15923.21622	15756.1973	36	Marcellus
33	4/8/2021	15720.39356	15553.3747	36	Marcellus
34	4/9/2021	15517.57089	15350.552	36	Marcellus
35	4/9/2021	15314.74822	15147.7293	36	Marcellus
36	4/12/2021	15111.92556	14944.9067	36	Marcellus
37	4/13/2021	14909.10289	14742.084	36	Marcellus
38	4/13/2021	14706.28022	14539.2613	36	Marcellus
39	4/13/2021	14503.45756	14336.4387	36	Marcellus
40	4/13/2021	14300.63489	14133.616	36	Marcellus
41	4/13/2021	14097.81222	13930.7933	36	Marcellus
42	4/14/2021	13894.98956	13727.9707	36	Marcellus
43	4/14/2021	13692.16689	13525.148	36	Marcellus
44	4/14/2021	13489.34422	13322.3253	36	Marcellus
45	4/14/2021	13286.52156	13119.5027	36	Marcellus
46	4/14/2021	13083.69889	12916.68	36	Marcellus
47	4/14/2021	12880.87622	12713.8573	36	Marcellus
48	4/15/2021	12678.05356	12511.0347	36	Marcellus
49	4/15/2021	12475.23089	12308.212	36	Marcellus
50	4/15/2021	12272.40822	12105.3893	36	Marcellus
51	4/15/2021	12069.58556	11902.5667	36	Marcellus
52	4/15/2021	11866.76289	11699.744	36	Marcellus
53	4/16/2021	11663.94022	11496.9213	36	Marcellus
54	4/16/2021	11461.11756	11294.0987	36	Marcellus
55	4/16/2021	11258.29489	11091.276	36	Marcellus
56	4/16/2021	11055.47222	10888.4533	36	Marcellus
57	4/16/2021	10852.64956	10685.6307	36	Marcellus
58	4/16/2021	10649.82689	10482.808	36	Marcellus
59	4/17/2021	10447.00422	10279.9853	36	Marcellus
60	4/17/2021	10244.18156	10077.1627	36	Marcellus
61	4/17/2021	10041.35889	9874.34	36	Marcellus
62	4/17/2021	9838.53622	9671.51733	36	Marcellus
63	4/18/2021	9635.713556	9468.69467	36	Marcellus
64	4/18/2021	9432.890889	9265.872	36	Marcellus
65	4/18/2021	9230.068222	9063.04933	36	Marcellus
66	4/18/2021	9027.245556	8860.22667	36	Marcellus
67	4/18/2021	8824.422889	8657.404	36	Marcellus
68	4/19/2021	8621.600222	8454.58133	36	Marcellus
69	4/19/2021	8418.777556	8251.75867	36	Marcellus
70	4/19/2021	8215.954889	8048.936	36	Marcellus
71	4/19/2021	8013.132222	7846.11333	36	Marcellus
72	4/19/2021	7810.309556	7643.29067	36	Marcellus
73	4/19/2021	7607.486889	7440.468	36	Marcellus
74	4/19/2021	7404.664222	7237.64533	36	Marcellus
75	4/20/2021	7201.841556	7034.82267	36	Marcellus
76	4/20/2021	6999.018889	6832	36	Marcellus

12/31/2021

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	4/2/2021	60.25	9833.27	7917.69	5537.83	164320	196232	N/A
2	4/2/2021	83.2	9858.77	6265.48	3114.46	404360	313182	N/A
3	4/2/2021	83.98	9592.97	5584.63	3128.47	406040	310512	N/A
4	4/2/2021	83.99	9619	5234	3595.63	404180	310106	N/A
5	4/3/2021	85.22	9779	5879	3644.46	404120	311328	N/A
6	4/3/2021	87.51	9652.37	5178.46	3718.38	406840	314182	N/A
7	4/3/2021	86.78	9708.25	5835.21	3849.06	404720	291916	N/A
8	4/3/2021	88.09	9833	5529	4181	408520	295937	N/A
9	4/3/2021	88.55	9813	5185	4376	408100	303074	N/A
10	4/4/2021	89.19	9836	5373	4120	401060	302391	N/A
11	4/4/2021	90.08	9978.31	5751.03	3955.34	411720	296222	N/A
12	4/4/2021	91.36	9780	5325	3943	407240	297927	N/A
13	4/4/2021	90.18	9974	5613	3979	409620	302710	N/A
14	4/5/2021	92.27	9772	5468	4554	412600	305078	N/A
15	4/5/2021	91.97	9779	5214	4124	408680	302993	N/A
16	4/5/2021	86.64	9597	5271	3704	408860	293073	N/A
17	4/5/2021	89.34	9782	5226	3722	413280	299605	N/A
18	4/5/2021	89.79	9849	5619	4443	411360	300445	N/A
19	4/6/2021	91.66	9866	5238	3974.98	407900	299290	N/A
20	4/6/2021	92.42	9884.03	5175.06	4142.62	405380	300311	N/A
21	4/6/2021	91.73	9750	5520	4245	413000	303651	N/A
22	4/6/2021	91.73	9685	5543	4003	408240	299553	N/A
23	4/6/2021	92.99	9686	5380	4392	421320	302742	N/A
24	4/7/2021	93.42	9689	4671	3471	407880	299228	N/A
25	4/7/2021	91.72	9788	5142	3583	413780	303602	N/A
26	4/7/2021	89.16	9569	5147	4113	415540	302000	N/A
27	4/7/2021	91.74	9861	5375	4594	410360	296581	N/A
28	4/8/2021	93.26	9837	5325	4096	412300	298724	N/A
29	4/8/2021	93.87	9552	5187	4514	404589	299440	N/A
30	4/8/2021	94.03	9650	5541	4088	408640	290497	N/A
31	4/8/2021	90.92	8992	5303	4175	401760	287963	N/A
32	4/8/2021	93.47	9690	5705	4036	407500	295120	N/A
33	4/8/2021	94.27	9265	5450	3804	403840	294351	N/A
34	4/9/2021	93.63	9403	5981	4115	399380	297830	N/A
35	4/9/2021	94.2	9356	5395	3969	404460	288148	N/A
36	4/12/2021	93.58	9343	5413	4380	403580	297712	N/A
37	4/13/2021	93.93	9363	6079	4271	400960	294685	N/A
38	4/13/2021	93.55	8984	5749	4049	415020	294089	N/A
39	4/13/2021	93.89	8959	5679	4168	413940	293010	N/A
40	4/13/2021	94.9	8977	5623	4225	408320	286227	N/A
41	4/13/2021	94.57	8961	5395	3774	411760	288878	N/A
42	4/14/2021	94.98	8935.96	5261.32	3564.6	416620	286600	N/A
43	4/14/2021	94.52	8888	5618	4059	415760	288227	N/A
44	4/14/2021	94.37	8294	5227	3940	406460	285151	N/A
45	4/14/2021	94.39	8590	5440	3672	410060	289637	N/A
46	4/14/2021	94.33	8379.8	5078.47	3834.63	409500	286952	N/A
47	4/14/2021	95.63	8505	5263	3580.46	415720	297747	N/A
48	4/15/2021	95.11	8778.89	5552.86	3941.16	392110	291962	N/A
49	4/15/2021	94.95	8927	5384	3792	405260	298445	N/A
50	4/15/2021	95.35	8606	5369	3733	412920	298957	N/A
51	4/15/2021	95.18	8598	5529	3870	416160	300059	N/A
52	4/15/2021	95.82	8780	5542	3544	416140	295377	N/A
53	4/16/2021	95.35	8665	5587	4293	407480	291142	N/A
54	4/16/2021	95.04	8751	5518	4369	399180	287762	N/A
55	4/16/2021	94.88	8598	5968	4011	407800	293414	N/A
56	4/16/2021	95.95	8431	5424	3959	412260	294270	N/A
57	4/16/2021	93.8	8108	5492	3800	411460	294156	N/A
58	4/16/2021	93.9	8472	5587	4278	416100	292617	N/A
59	4/17/2021	96.39	8743	5309	4088	405380	289854	N/A
60	4/17/2021	95.55	8570	5319	3753	406860	294798	N/A
61	4/17/2021	95.52	8488	5342	3551	414960	295451	N/A
62	4/17/2021	95.21	8506	5450	3552.81	403940	357093	N/A
63	4/18/2021	90.43	7528	5657	3971	409020	291856	N/A
64	4/18/2021	95.52	7732	5360	4449	406640	290751	N/A
65	4/18/2021	95.42	7796	6110	4080	407700	294246	N/A
66	4/18/2021	94.29	7999	5586	4039	416620	290879	N/A
67	4/18/2021	95.22	7224.89	5356.8	3913.74	409640	294292	N/A
68	4/19/2021	95.3	7596	5337	3806	415500	293320	N/A
69	4/19/2021	90.47	7159	5210	3819	410660	286934	N/A
70	4/19/2021	94.63	7351	5596	3910	414160	295828	N/A
71	4/19/2021	94.81	7134.21	5618.07	4160.91	414920	295724	N/A
72	4/19/2021	96.3	7214	5258	4293	416900	293136	N/A
73	4/19/2021	96.21	7191	5532	4083.75	407440	293177	N/A
74	4/19/2021	96.91	7333	5457	3903.37	404360	286365	N/A
75	4/20/2021	95.93	7134	5203	3841	413120	293244	N/A
76	4/20/2021	95.58	7073	5317	3844	405940	289562	N/A
	AVG=	92	8,916	5,491	3,989	30,850,019	22,459,530	TOTAL

12/31/2021

EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Shaley Siltstone	74	194	74	194
Shaley Sandstone	194	284	194	284
Shaley Siltstone	284	364	284	364
Limestone, Tr Shale	364	494	364	494
Sandstone	494	584	494	584
Limestone, Tr Shale	584	794	584	794
Shaley Sandstone	794	884	794	884
Shale, Tr Sandstone	884	1,134	884	1,134
Sandy Shale, Limestone	1,134	1,244	1,134	1,244
Sandy Shale	1,244	1,484	1,244	1,484
Sandstone, Tr Shale	1,484	1,664	1,484	1,664
Silty Shale, tr SS	1,664	1,754	1,664	1,754
Shale, Tr Sst	1,754	1,919	1,754	1,921
Big Lime	1,945	2,596	1,921	2,598
Fifty Foot Sandstone	2,596	2,683	2,572	2,685
Gordon	2,683	3,040	2,659	3,043
Fifth Sandstone	3,040	3,127	3,017	3,130
Bayard	3,127	3,946	3,104	3,971
Speechley	3,946	4,200	3,945	4,231
Balltown	4,200	4,644	4,205	4,691
Bradford	4,644	5,076	4,665	5,135
Benson	5,076	5,294	5,109	5,360
Alexander	5,294	6,348	5,334	6,506
Sycamore	6,215	6,322	6,338	6,480
Middlesex	6,322	6,408	6,480	6,626
Burkett	6,408	6,425	6,626	6,663
Tully	6,425	6,467	6,663	6,784
Marcellus	6,467	NA	6,784	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.

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/2/2021
Job End Date:	4/20/2021
State:	West Virginia
County:	Tyler
API Number:	47-095-02722-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	TYGART 2H
Latitude:	39.54121400
Longitude:	-80.87069700
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,529
Total Base Water Volume (gal):	23,527,467
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
Produced Water Mixture	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	86.25266	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.16527	

HAI-501	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
Excelerate LX-15	Halliburton	Friction Reducer					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
MC B-8614	Halliburton	Biocide					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			
MC B-8614A	MultiChem	Biocide					
				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	13.56085
		Hydrochloric acid	7647-01-0	30.00000	0.03911
		Complex Amine Compound	Proprietary	60.00000	0.02665
		Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01333
		Guar gum	9000-30-0	100.00000	0.00313
		Glutaraldehyde	111-30-8	30.00000	0.00247
		Surfactant	Proprietary	5.00000	0.00222
		Sobitan, mono-9-octadecenoate, (Z)	1338-43-8	5.00000	0.00222
		Ethoxylated alcohols	Proprietary	5.00000	0.00046
		Organic chloride compound	Proprietary	1.00000	0.00044
		Alkoxylated polyhydric alcohol	Proprietary	1.00000	0.00044
		Methanol	67-56-1	100.00000	0.00028
		Alkyl (C12-16) dimethylbenzyl ammonium chloride	68424-85-1	5.00000	0.00022
		Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5.00000	0.00019
		Ammonium persulfate	7727-54-0	100.00000	0.00009
		Ethanol	64-17-5	1.00000	0.00008
		Modified thiourea polymer	Proprietary	30.00000	0.00007
		Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00007
		Oxylated phenolic resin	Proprietary	30.00000	0.00003
		Propargyl alcohol	107-19-7	5.00000	0.00001
		Hexadecene	629-73-2	5.00000	0.00001
		Organic salt #2	Proprietary	0.01000	0.00000
		Organic salt #1	Proprietary	0.01000	0.00000

			Sodium hydroxide	1310-73-2	0.01000	0.00000	
			Sodium glycolate	2836-32-0	0.01000	0.00000	
			Nitrated acetate salt	Proprietary	0.01000	0.00000	
			Formaldehyde	50-00-0	0.01000	0.00000	
			Acrylamide	79-06-1	0.01000	0.00000	
			Phosphoric acid	7664-38-2	0.10000	0.00000	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00000	

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

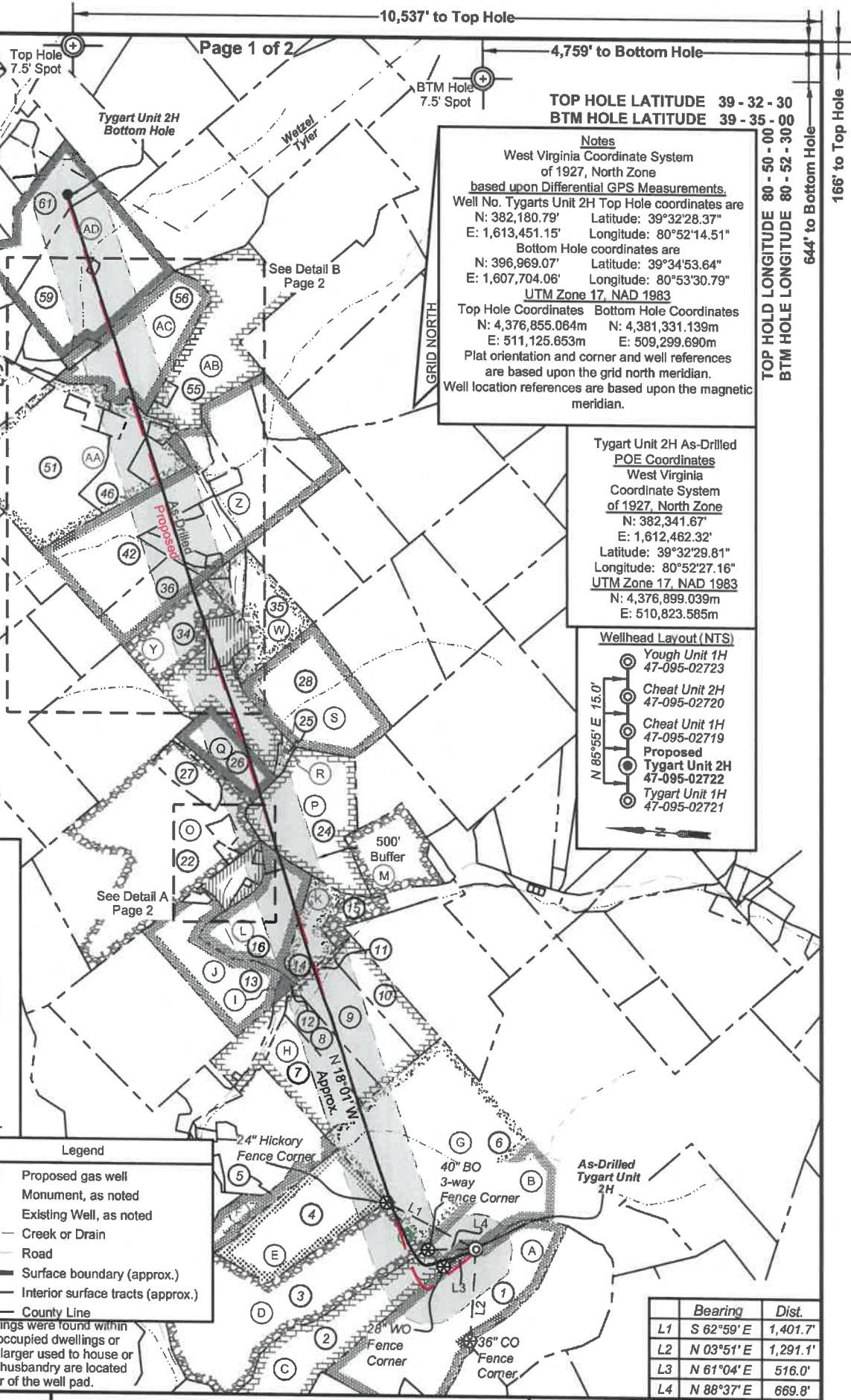
** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** 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)

Antero Resources
Well No. Tygart 2H
As-Drilled
 Antero Resources Corporation



10,537' to Top Hole
 4,759' to Bottom Hole

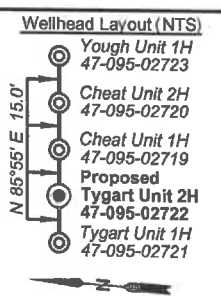
TOP HOLE LATITUDE 39 - 32 - 30
 BTM HOLE LATITUDE 39 - 35 - 00

Notes
 West Virginia Coordinate System of 1927, North Zone
 based upon Differential GPS Measurements.
 Well No. Tygarts Unit 2H Top Hole coordinates are
 N: 382,180.79' Latitude: 39°32'28.37"
 E: 1,613,451.15' Longitude: 80°52'14.51"
 Bottom Hole coordinates are
 N: 396,969.07' Latitude: 39°34'53.64"
 E: 1,607,704.06' Longitude: 80°53'30.79"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,376,855.064m N: 4,381,331.139m
 E: 511,125.653m E: 509,299.690m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

TOP HOLE LONGITUDE 80 - 50 - 00
 BTM HOLE LONGITUDE 80 - 52 - 30
 166' to Top Hole
 644' to Bottom Hole

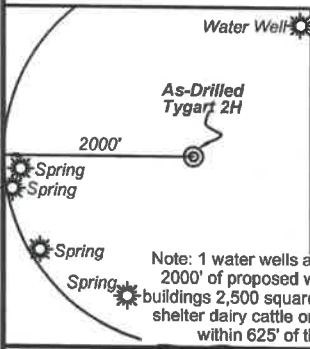
Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

Tygart Unit 2H As-Drilled POE Coordinates
 West Virginia Coordinate System of 1927, North Zone
 N: 382,341.67'
 E: 1,612,462.32'
 Latitude: 39°32'29.81"
 Longitude: 80°52'27.16"
 UTM Zone 17, NAD 1983
 N: 4,376,899.039m
 E: 510,823.585m



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



Legend

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

Note: 1 water wells and 4 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.

	Bearing	Dist.
L1	S 62°59' E	1,401.7'
L2	N 03°51' E	1,291.1'
L3	N 61°04' E	516.0'
L4	N 88°37' E	669.8'

FILE NO: 82-54-E-19
 DRAWING NO: Tygart Unit 2H As-Drilled
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: Submeter
 PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

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

DATE: August 30 2021
 OPERATOR'S WELL NO. Tygart 2H
 API WELL NO
 47 - 095 - 02722
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION: As-Built 1,126' WATERSHED: Outlet Middle Island Creek QUADRANGLE: Top Hole:Porter Falls
 DISTRICT: Ellsworth COUNTY: Tyler

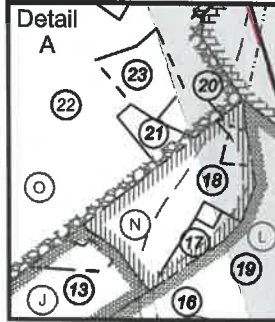
SURFACE OWNER: Patricia Ann Heintzman James D. VanCamp, et al (5); Norma Smith; Kerry Lemasters, et ux; James D. VanCamp, et ux (2); Sherry Lynn Cheffren; BRC Appalachian Minerals I, LLC (2); John E. Roberts; Dennis R. Heintzman, et ux; Sybil Mae Gorby; LEASE NO: ACREAGE: 76.25; 48.5; 100; 99.90; 88.1; 107.188; 68.76; 106.11; 26; 23.87; 6.4; 151.08; 13.3; 47.6; 109.875; 24; 33.8125

ROYALTY OWNER: Patricia Ann Heintzman (2); John E. Roberts; Dennis R. Heintzman, et ux; Sybil Mae Gorby; LEASE NO: ACREAGE: 76.25; 48.5; 100; 99.90; 88.1; 107.188; 68.76; 106.11; 26; 23.87; 6.4; 151.08; 13.3; 47.6; 109.875; 24; 33.8125

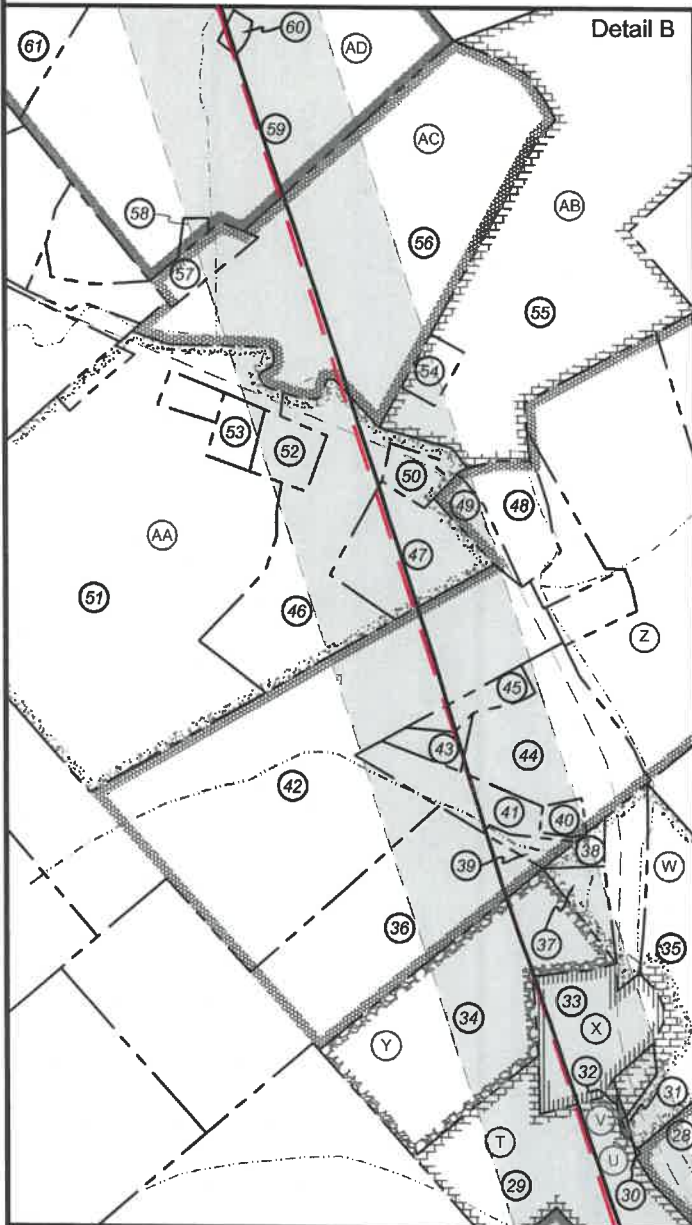
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,466' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 22,201' MD

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

Antero Resources
Well No. Tygart 2H
As-Drilled
 Antero Resources Corporation



Leases			
A	Patricia Ann Heintzman	P	James D. VanCamp, et al
B	Norma Smith	Q	James D. VanCamp, et ux
C	Patricia Ann Heintzman	R	James D. VanCamp, et al
D	John E. Roberts	S	James D. VanCamp, et al
E	Michael Scott Mercer, et ux	T	James D. VanCamp, et al
F	Richard A. Mercer	U	Stanley Watkins
G	Dennis R. Heintzman, et ux	V	Stanley Watkins
H	BRC Appalachian Minerals I, LLC	W	BRC Appalachian Minerals I, LLC
I	Waco Oil & Gas Company, Inc.	X	James D. VanCamp, et al
J	James D. VanCamp, et al	Y	Sybil Mae Gorby
K	James D. VanCamp, et al	Z	James D. VanCamp, et al
L	Kerry Lemasters, et ux	AA	BRC Appalachian Minerals I, LLC
M	Brenda L. Martin	AB	Lowmax R. Kunkel
N	James D. VanCamp, et al	AC	James D. VanCamp, et ux
O	Kay Christen	AD	Sherry Lynn Chefren



ID	TM/Par	Owner	Bk/Pg	Acres
1	10-2	Patricia Ann Heintzman	W13/384	73.26
2	10-1	Patricia Ann Heintzman	150/15	48.50
3	10-64	John E Roberts	W30/108	100.00
4	6-40	Alan D. Wyke	W40/195	42.20
5	9-13	Richard A. Mercer	321/197	16.00
6	6-36	Dennis & Clista Heintzman	297/640	417.60
7	6-35	Donald E. Forrester	343/381	25.75
8	6-35.1	Stephen & Andria Knowlton	289/20	13.32
9	6-35.2	Stephen & Andria Knowlton	224/77	29.02
10	6-35.4	Stephen & Andria Knowlton	340/412	17.46
11	6-35.3	Stephen & Andria Knowlton	224/77	3.00
12	6-23.2	Larry R. Henthorn	584/138	1.27
13	6-23	Randall Dennis, et al	W70/660	42.30
14	6-16.2	Stephen J. & Andria Knowlton	211/375	13.30
15	6-16.3	Michael L. Roberts	407/45	14.81
16	6-16	Kerry & Barbara Lemasters	215/548	33.76
17	6-16.7	Terry Andrew Jackson	388/271	1.23
18	6-16.1	James W. & Geneva Lancaster	443/639	3.44
19	6-16.6	Terry Andrew Jackson	388/271	0.25
20	6-16.8	James W. & Geneva Lancaster	443/639	0.55
21	6-22.1	Charles E. Dennis	348/160	1.25
22	6-22	Patricia Ann Greathouse	W38/671	169.90
23	6-22.2	Roger & Nadine Greathouse	334/770	2.61
24	6-15	James D. VanCamp, et al	W38/144	47.50
25	6-15.1	James D. VanCamp, et ux	174/451	2.28
26	6-14	James D. VanCamp, et al	W38/144	24.00
27	6-22.3	Lucinda J. Greathouse	350/674	10.00
28	6-4	James D. Vancamp, et al	W38/144	46.76
29	6-3	James D. Vancamp, et al	W38/144	23.87
30	6-3.2	Wayne L. Wade	220/322	0.05
31	6-3.3	Wayne L. Wade	220/322	0.03
32	6-3.4	Wayne L. Wade	268/478	0.12
33	6-2	Joel A. Prosser	387/736	6.64
34	6-1	Sybil Gorby	175/265	17.26
35	3-43	Joel A Prosser	387/736	23.62
36	5-1	James D. VanCamp, et al	W38/144	39.00
37	3-43.2	Larry & Kimberly Henthorn	642/513	2.05
38	3-43.1	Janet Johnson	W29/203	0.90
39	3-44.1	Tylor D. Hostuttler	592/109	0.98
40	3-44.2	Gary A & Penny K Midcap	272/632	0.88
41	3-44.4	Tylor D. Hostuttler	592/109	4.00
42	2-11	Rosalie B. Henry	W35/616	61.54
43	3-44.3	Wm J. & Melissa A. Buchanan	299/515	1.88
44	3-44	Jamie Leigh Parks	337/764	9.86
45	3-44.5	W.J. & Melissa Buchanan	326/348	1.72
46	2-8.4	Jonathan & Mary Belle Pittman	186/170	21.14
47	3-47	Donna & Matthew Cecil	462/582	8.61
48	3-46.1	Pamela R. Nelson-Lansford	328/699	2.96
49	3-46	Vada R Hart	40/469	1.54
50	3-47.1	Jack L. Throck-Morton	462/582	1.33
51	2-8	Jonathan & Mary Belle Pittman	186/170	70.93
52	2-8.5	Stanley G. Pittman	327/751	3.68
53	2-8.3	Teresa A. Morris	343/390	1.82
54	3-12.1	Josephine Kunkel	286/75	1.90
55	3-12	Lomax R. Kunkel	297/692	57.51
56	3-48	Linda Hoover	356/233	45.00
57	2-9	Linda L. Hoover	356/233	1.57
58	2-1.2	Donald E. Virden Jr.	421/281	0.41
59	2-1.1	Donald E. Virden, Jr.	421/281	68.20
60	2-1.3	Lou Ann & Donald E. Virden Jr.	325/907	0.55
61	2-1	Donald E. Virden, Jr.	421/281	30.84

FILE NO: 82-54-E-19
 DRAWING NO: Tygart Unit 2H As-Drilled
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 WVDOT, Harrisville, WV



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