

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

API 47-095-02416 County Tyler District Centerville
Quad Middlebourne 7.5' Shirley 7.5' Pad Name Dawson Pad Field/Pool Name -----
Farm name Gary D. Dawson et ux Well Number Pierson Unit 4H
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 4359047m Easting 510875m
Landing Point of Curve Northing 4359094.46m Easting 510668.36m
Bottom Hole Northing 4361647m Easting 509760m

Elevation (ft) 1009' 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 5/9/2017 Date drilling commenced 6/30/2017 Date drilling ceased 1/2/2018
Date completion activities began 3/23/2018 Date completion activities ceased 9/5/2018
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 N/A Open mine(s) (Y/N) depths No
Salt water depth(s) ft N/A 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

Reviewed by:

JEB
2/21/2019

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API 47- 095 - 02416

Farm name Gary D. Dawson et ux

Well number Pierson Unit 4H

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"	583'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2574'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	15878'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6731'		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 ²)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	204 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	480 sx	15.6	1.18	826	0'	8 Hrs.
Coal							
Intermediate 1	Class A	860 sx	15.6	1.18	1181	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	700 sx (Lead) 1400 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.45 (Lead), 1.94 (Tail)		~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 15898' MD, 6451' TVD (BHL), 6488' (Deepest Point Drilled)

Loggers TD (ft) 15898' MD

Deepest formation penetrated Marcellus

Plug back to (ft) N/A

Plug back procedure N/A

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Kick off depth (ft) 5942'

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Check all wireline logs run

- caliper density deviated/directional induction
 neutron resistivity gamma ray temperature

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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 - 02416 Farm name Gary D. Dawson et ux Well number Pierson Unit 4H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6468' (TOP)</u> TVD	<u>6779' (TOP)</u> 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 12432 mcfpd Oil 105 bpd NGL --- bpd Water 473 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**

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Please insert additional pages as applicable.

Drilling Contractor Patterson - UTI Drilling Company LLC
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Allied Horizontal Wireline Services
Address 381 Colonial Manor Road City North Huntington State PA Zip 15642

Cementing Company BJ Services
Address 1036 East Main Street City Bridgeport State WV Zip 26330

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 10/4/2018

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

API 47-095-02416 Farm Name Gary D. Dawson Well Number Pierson Unit 4H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	4/6/2018	15725		60	Marcellus
2	4/7/2018	15522	15693	60	Marcellus
3	4/7/2018	15319	15491	60	Marcellus
4	4/7/2018	15117	15288	60	Marcellus
5	4/7/2018	14914	15085	60	Marcellus
6	4/8/2018	14711	14882	60	Marcellus
7	4/8/2018	14508	14679	60	Marcellus
8	4/8/2018	14305	14476	60	Marcellus
9	4/9/2018	14102	14273	60	Marcellus
10	4/9/2018	13899	14070	60	Marcellus
11	4/9/2018	13696	13867	60	Marcellus
12	4/9/2018	13494	13665	60	Marcellus
13	4/10/2018	13291	13462	60	Marcellus
14	4/10/2018	13088	13259	60	Marcellus
15	4/10/2018	12885	13056	60	Marcellus
16	4/10/2018	12682	12853	60	Marcellus
17	4/11/2018	12479	12650	60	Marcellus
18	4/11/2018	12276	12447	60	Marcellus
19	4/11/2018	12073	12244	60	Marcellus
20	4/12/2018	11871	12042	60	Marcellus
21	4/12/2018	11668	11839	60	Marcellus
22	4/12/2018	11465	11636	60	Marcellus
23	4/12/2018	11262	11433	60	Marcellus
24	4/13/2018	11059	11230	60	Marcellus
25	4/13/2018	10856	11027	60	Marcellus
26	4/13/2018	10653	10824	60	Marcellus
27	4/14/2018	10450	10621	60	Marcellus
28	4/14/2018	10247	10419	60	Marcellus
29	4/14/2018	10045	10216	60	Marcellus
30	4/14/2018	9842	10013	60	Marcellus
31	4/15/2018	9639	9810	60	Marcellus
32	4/15/2018	9436	9607	60	Marcellus
33	4/15/2018	9233	9404	60	Marcellus
34	4/16/2018	9030	9201	60	Marcellus
35	4/16/2018	8827	8998	60	Marcellus
36	4/16/2018	8624	8796	60	Marcellus
37	4/16/2018	8422	8593	60	Marcellus
38	4/17/2018	8219	8390	60	Marcellus
39	4/18/2018	8016	8187	60	Marcellus
40	4/18/2018	7813	7984	60	Marcellus
41	4/18/2018	7610	7781	60	Marcellus
42	4/19/2018	7407	7578	60	Marcellus
43	4/19/2018	7204	7375	60	Marcellus
44	4/19/2018	7001	7173	60	Marcellus
45	4/19/2018	6799	6970	60	Marcellus

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EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	4/6/2018	77.6	7508	5244	4049	16801	5603	N/A
2	4/7/2018	78	7524	5187	4370	17081	8326	N/A
3	4/7/2018	80.4	7762	5398	4293	17453	8009	N/A
4	4/7/2018	80.5	7677	5126	4880	17683	8086	N/A
5	4/7/2018	78.4	7569	5273	4132	16974	7998	N/A
6	4/8/2018	78.4	7641	5335	3944	16920	8115	N/A
7	4/8/2018	80.3	7790	5551	4490	17831	8008	N/A
8	4/8/2018	79.2	7795	5846	2722	16363	8258	N/A
9	4/9/2018	79.7	7719	5997	4088	17804	8187	N/A
10	4/9/2018	80.2	7727	6574	4380	18681	7856	N/A
11	4/9/2018	80.8	7724	5631	4344	17699	7930	N/A
12	4/9/2018	79.3	7330	5281	3699	16310	8010	N/A
13	4/10/2018	79.1	7441	4805	5122	17368	8004	N/A
14	4/10/2018	78.6	7570	5498	4373	17441	7955	N/A
15	4/10/2018	79.1	7435	5576	3856	16867	7975	N/A
16	4/10/2018	80.5	7398	6157	3893	17448	8184	N/A
17	4/11/2018	78	7327	5959	4053	17339	7937	N/A
18	4/11/2018	78	7296	6074	4158	17528	7939	N/A
19	4/11/2018	79	7263	6605	3971	17839	7882	N/A
20	4/12/2018	79.5	7343	5960	4042	17345	7964	N/A
21	4/12/2018	78.7	7056	5783	4360	17199	8016	N/A
22	4/12/2018	78.2	6953	5275	3704	15932	8052	N/A
23	4/12/2018	79.4	7171	4834	4014	16019	9278	N/A
24	4/13/2018	80.6	7327	5743	3893	16963	7889	N/A
25	4/13/2018	80.5	7111	5794	4178	17083	7868	N/A
26	4/13/2018	79.4	6857	6183	3942	16982	7912	N/A
27	4/14/2018	79.1	7066	5159	4231	16456	8091	N/A
28	4/14/2018	77.3	7030	6018	4827	17875	7740	N/A
29	4/14/2018	78.3	6793	6145	3810	16748	7819	N/A
30	4/14/2018	80.2	7053	5387	4077	16517	7956	N/A
31	4/15/2018	80	7095	5832	4440	17367	8055	N/A
32	4/15/2018	79.7	7116	5859	3971	16946	7725	N/A
33	4/15/2018	79.7	6946	6471	3855	17272	7756	N/A
34	4/16/2018	79.6	6805	6082	3964	16851	8056	N/A
35	4/16/2018	75.1	6687	5829	3954	16470	8089	N/A
36	4/16/2018	74.3	6350	5861	4417	16628	7626	N/A
37	4/16/2018	79.9	6624	5091	3730	15445	7866	N/A
38	4/17/2018	80.1	6605	5866	3804	16275	7844	N/A
39	4/18/2018	77.6	6761	5544	4240	16545	7776	N/A
40	4/18/2018	79.5	6339	5054	4028	15421	7476	N/A
41	4/18/2018	80	6508	4766	4015	15289	7861	N/A
42	4/19/2018	76.6	6346	6014	3771	16131	8095	N/A
43	4/19/2018	78.1	6438	6312	3543	16293	7744	N/A
44	4/19/2018	80.5	6397	6642	3659	16698	7691	N/A
45	4/19/2018	81.1	6659	6438	3767	16864	7669	N/A
	AVG=	79.1	7,132	5,712	4,068	761,041	356,176	TOTAL

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LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Fresh Water	227'	N/A	227'	N/A
Sandstone	0	N/A	0	N/A
Silty Sandstone	300	N/A	300	N/A
Sandy Siltstone	440	N/A	440	N/A
Sandstone	600	N/A	600	N/A
Sandy Marlstone	700	N/A	700	N/A
Calcareous Sandstone	880	N/A	880	N/A
Silty Marlstone	1,070	N/A	1,070	N/A
Sandstone w/interbedded coal	1,280	N/A	1,280	N/A
Sandstone w/trace coal	1,440	N/A	1,440	N/A
Calcareous Shale	1,590	N/A	1,590	N/A
Coal/Shale	1,650	N/A	1,650	N/A
Calcareous Shale	1,670	N/A	1,670	N/A
Calcareous Sandstone	1,840	N/A	1,840	N/A
Big Lime	1,913	N/A	1,913	N/A
Big Injun	2,038	N/A	2,038	N/A
Gantz Sand	2,589	N/A	2,589	N/A
Fifty Foot Sandstone	2,674	N/A	2,674	N/A
Gordon	2,793	N/A	2,793	N/A
Fifth Sandstone	2,970	N/A	2,971	N/A
Bayard	3,150	N/A	3,153	N/A
Warren	3,469	N/A	3,478	N/A
Speechley	3,838	N/A	3,856	N/A
Balltown	4,247	N/A	4,275	N/A
Bradford	4,531	N/A	4,565	N/A
Benson	4,781	N/A	4,823	N/A
Alexander	5,179	N/A	5,230	N/A
Rhinestreet	5,766	N/A	5,830	N/A
Sycamore	6,131	N/A	6,217	N/A
Middlesex	6,290	N/A	6,415	N/A
Burkett	6,404	N/A	6,601	N/A
Tully	6,439	N/A	6,680	N/A
Marcellus	6,468	N/A	6,779	N/A

*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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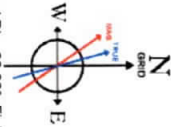
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ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
 Field: Tyler
 Facility: Dawson Pad

Slot: Slot #04
 Well: Pierson Unit 4H
 Wellbore: Pierson Unit 4H PWB



User specified Dip: 66.62° Field: 51991 nT
 Magnetic North is 7.62 degrees West of True North (at 12/24/2017)
 Grid North is 0.08 degrees East of True North
 To correct azimuth from True to Grid subtract 0.08 degrees
 To correct azimuth from Magnetic to Grid subtract 7.70 degrees

Projected MD @ TD: 15898MD / 6451'TVD : 6450.77ft TVD, 8534.82ft N, 3662.59ft W

Plot reference wellpath is Pierson Unit 4H PWP RevA.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to Patterson 342 (RKB)	North Reference: Grid north
Measured depths are referenced to Patterson 342 (RKB)	Scale: True distance
Patterson 342 (RKB) to Mean Sea Level: 1035 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: Slot #04): -1010 feet	Created by: mcebrun on 2018-05-08
Coordinates are in feet referenced to Slot	Database: WA_MPL_EASTERNUS_Dein

Gyrodata MS Gyro <12-1/4">(549)(631-721) : 0.19° Inc. 631.00ft MD, 630.99ft TVD, -2.23ft VS

Directional ONE MWD <12-1/4">(721)(783-2522) : 0.41° Inc. 783.00ft MD, 782.99ft TVD, -2.74ft VS

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Dawson Pad	1676049.728	14300592.517	39°22'50.710"N	80°52'26.030"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)
Slot #04	0.00	1676049.728	14300592.517	39°22'50.710"N
Comment:	Pierson Unit 4H			
Patterson 342 (RKB) to Ground level (At Slot: Slot #04)	25ft			
Mean Sea Level to Ground level (At Slot: Slot #04)	-1010ft			
Patterson 342 (RKB) to Mean Sea Level	1035ft			

Directional ONE MWD <8-3/4">(2522)(2659-6434) : 0.48° Inc. 2659.00ft MD, 2658.86ft TVD, 3.70ft VS

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (7100ft)	VS (ft)
The On	6434.00	44.640	331.180	6303.72	-306.16	-463.25	9.15	-130.58
End of 3D Arc	6512.00	54.000	332.000	6354.51	-254.18	-491.34	12.03	-72.14
End of 3D Arc	6787.49	76.200	341.754	6470.00	-25.43	-586.92	8.66	175.48
End of Build	6946.03	90.000	341.750	6489.00	123.88	-636.09	8.70	332.42
End of 3D Arc	7026.49	90.000	340.140	6489.00	199.74	-662.36	2.00	412.88
End of Tangent	15897.03	90.000	340.140	6489.00	8542.72	-662.36	0.00	9283.41

Well Data

Slot	Well	Wellbore	Wellpath
Slot #04	Pierson Unit 4H	Pierson Unit 4H AWB	Pierson Unit 4H AWB Prof. 15898
Slot #04	Pierson Unit 4H	Pierson Unit 4H PWB	Pierson Unit 4H PWP RevA.0

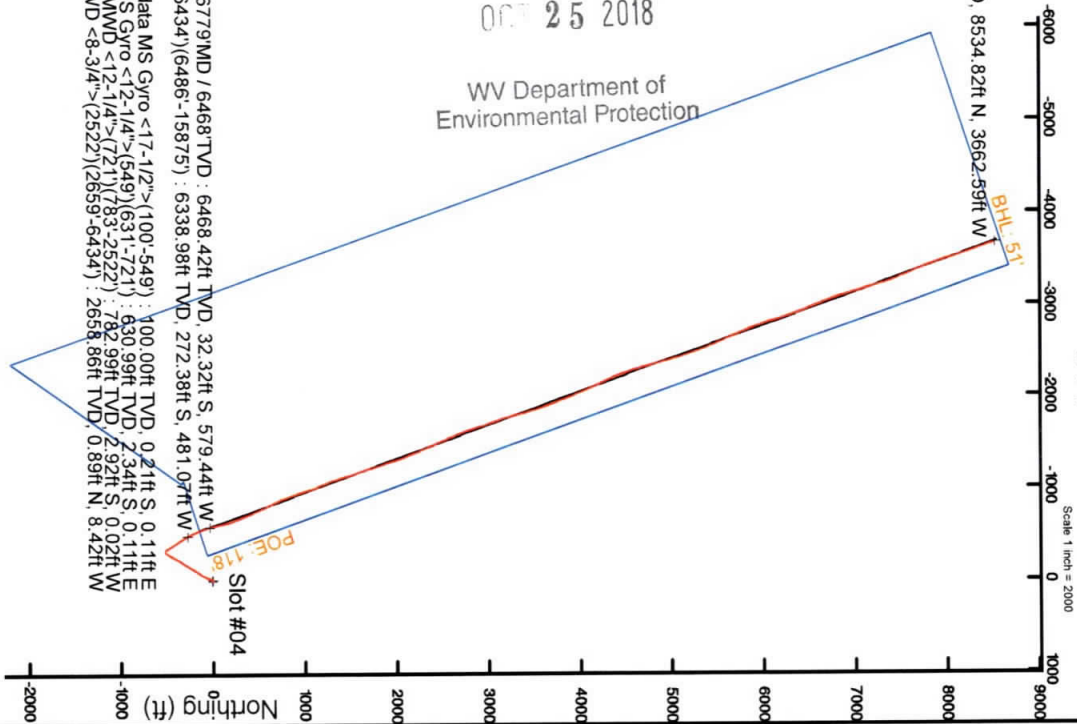
BH ATC <8.5">(6434)(6486-15875) : 49.94° Inc. 6486.00ft MD, 6338.98ft TVD, -92.75ft VS

Projected MD @ TD: 15898MD / 6451'TVD : 90.49° Inc. 15898.00ft MD, 6450.77ft TVD, 9277.49ft VS

POE Marcellus @ 6779MD / 6468TVD : 77.00° Inc. 6779.00ft MD, 6468.42ft TVD, 166.45ft VS

Vertical Section (ft)
 Azimuth 340.14° with reference 0.00 N, 0.00 E

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API: 47-095-02416-0000
 BH Job #: 8937228
 Rig: Patterson 342
 Duration: 12/27/17 - 12/29/17

Scale 1 inch = 1500

Hydraulic Fracturing Fluid Product Component Information Disclosure

25 2018

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Environmental Protection

Job Start Date:	4/6/2018
Job End Date:	4/19/2018
State:	West Virginia
County:	Tyler
API Number:	47-095-02416-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Pierson Unit 4H
Latitude:	39.38075300
Longitude:	-80.87389700
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,452
Total Base Water Volume (gal):	15,441,932
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	70.00000	87.46760	
Cl-9100G	CWS	Corrosion Inhibitor		Listed Below			



Hydrochloric Acid	CWS	Clean Perforations		Listed Below				
DWP-111	CWS	Gel Slurry		Listed Below				
SANIFRAC 8844	CWS	Biocide		Listed Below				
DAP-103	CWS	Iron Control		Listed Below				
DAP-902	CWS	Scale Inhibitor		Listed Below				
DWP-641	CWS	Friction Reducer		Listed Below				
Calbreak 5501	CWS	Breaker		Listed Below				
Sand (Proppant)	CWS	Propping Agent		Listed Below				
Other Chemical (s)	Listed Above	See Trade Name (s) List						

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Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients.				Listed Below				
			Crystalline silica (Quartz)	14808-60-7	100.00000	12.21046		
			Illite	12173-60-3	1.00000	0.12210		
			Hydrochloric acid	7647-01-0	37.00000	0.05856	RECEIVED	
			Polymer	26100-47-0	45.00000	0.02593	Office of Oil and Gas	
			Distillates (petroleum), hydrotreated light	64742-47-8	30.00000	0.01729	25 2018	
			Biotite	1302-27-8	0.10000	0.01221	WV Department of	
			Goethite	1310-14-1	0.10000	0.01221	Environmental Protection	
			Ilmenite	98072-94-7	0.10000	0.01221		
			Apatite	64476-38-6	0.10000	0.01221		
			Guar gum	9000-30-0	60.00000	0.00794		
			Disillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.00794		
			Ammonium chloride	12125-02-9	11.00000	0.00634		
			2-Propenoic acid, homopolymer, sodium salt	9003-04-7	40.00000	0.00600		
			Polyethylene glycol mixture	25322-68-3	54.50000	0.00596		
			Ammonium Persulfate	64742-47-8	100.00000	0.00251		
			Sorbitan monooleate	1338-43-8	4.00000	0.00230		
			2,2-Dibromo-3-Nitriopropionamide	10222-01-2	20.00000	0.00219		
			Polyethylene glycol monooleate	9004-96-0	3.00000	0.00173		
			1,2-Propanediol	57-55-6	10.00000	0.00150		
			Sorbitol tetraoleate	61723-83-9	2.00000	0.00115		
			Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00066		
			Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00058		

LATITUDE 39°25'00"

11,466'

3,339' TO BOTTOM HOLE

LATITUDE 39°25'00"

LONGITUDE 80°52'30"

13,081'

LONGITUDE 80°50'00"

Antero Resources Corporation
Well No. Pierson Unit 4H

CARL W. ASH LEASE

WELL 4H
BOTTOM HOLE

3 WATER WELLS WERE
LOCATED WITHIN 2000'
OF CENTER OF PAD

WELL NO. 4H

4H BOTTOM
HOLE

NORTH ZONE
GRID NORTH

JOSEPH McGRAY
D.B. 352 PG. 440
T.M. 12 PAR. 11.1
61.79 AC. ±

JOSEPH McGRAY
D.B. 352 PG. 440
T.M. 12 PAR. 31
240.81 AC. ±

MOUNTAINEER LD
& TIMBER CO.
D.B. 353 PG. 273
T.M. 11 PAR. 11
65 AC. ±

WILMA J. HOWARD
ET AL
LEASE

MOUNTAINEER LD
& TIMBER CO.
D.B. 353 PG. 273
T.M. 12 PAR. 26
210.37 AC. ±

BRYAN KUNGLE
D.B. 308 PG. 438
T.M. 11 PAR. 17.2
18 AC. ±

BRYAN KUNGLE
D.B. 308 PG. 438
T.M. 11 PAR. 17.1
11.11 AC. ±

MOUNTAINEER LD
& TIMBER CO.
D.B. 353 PG. 273
T.M. 12 PAR. 27
28 AC. ±

BRYAN KUNGLE
D.B. 308 PG. 438
T.M. 11 PAR. 17
65.81 AC. ±

GARY DAWSON
D.B. 274 PG. 114
T.M. 12 PAR. 23
59 AC. ±

DAVID E. BOWYER
LEASE

DAVID BOWYER
D.B. 362 PG. 411
T.M. 12 PAR. 9
137.50 AC. ±

KARLA SPENCER
D.B. 316 PG. 496
T.M. 12 PAR. 9.1
61.89 AC. ±

KARLA R.
SPENCER LEASE

KARLA SPENCER
D.B. 316 PG. 496
T.M. 12 PAR. 9.4
8.88 AC. ±

GARY DAWSON
D.B. 351 PG. 506
T.M. 15 PAR. 27
35 AC. ±

GARY D. DAWSON
ET UX
LEASE

GARY DAWSON
D.B. 307 PG. 268
T.M. 13 PAR. 01
104.27 AC. ±

KARLA SPENCER
D.B. 316 PG. 496
T.M. 12 PAR. 9.3
37 AC. ±

KARLA SPENCER
D.B. 316 PG. 496
T.M. 12 PAR. 9.3
37 AC. ±

WARREN SUKER JR.
D.B. 286 PG. 330
T.M. 12 PAR. 14
50.7 AC. ±

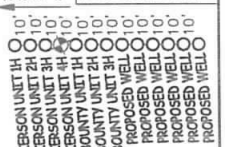
ROBERT C. DEAN
LEASE

GARY DAWSON
D.B. 351 PG. 506
T.M. 15 PAR. 28
93.43 AC. ±

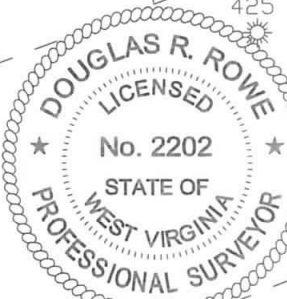
GARY DAWSON
D.B. 351 PG. 506
T.M. 15 PAR. 27
35 AC. ±

COASTAL FOREST
RESOURCES CO.
D.B. 324 PG. 95
T.M. 15 PAR. 28
109 AC. ±

REBAR FOUND
PAD LAYOUT



NOT TO SCALE



JOB # 16-043WA
DRAWING # PIERSON4HAD
SCALE 1" = 1000'
MINIMUM DEGREE OF
ACCURACY SUBMETER
PROVEN SOURCE OF ELEV.
SUBMETER MAPPING GRADE GPS

LEGEND

- Surface Owner Boundary Lines +/-
- Interior Surface Tracts +/-
- Proposed Well Path
- As Drilled Well Path

DOUGLAS R. ROWE P.S. 2202

DATE 08/29/2018

OPERATOR'S WELL# PIERSON UNIT #4H

API WELL #

47 - 095 - 02416

STATE COUNTY PERMIT

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 REGULATIONS ISSUED AND PERSCRIBED 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

STATE OF WEST VIRGINIA DEPT. 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 1,009' - AS BUILT WATERSHED HEADWATERS MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' (TH) MIDDLEBOURNE 7.5' (BH) DISTRICT CENTERVILLE COUNTY TYLER

SURFACE OWNER GARY D. DAWSON ET UX ACREAGE 104.27 ACRES +/-

OIL & GAS ROYALTY OWNER GARY D. DAWSON ET UX; CARL ASH; KARLA R. SPENCER; LEASE ACREAGE 104.27 AC. ±; 37 AC. ±; 85.2 AC. ±;
DAVID E. BOWYER; WILMA J. HOWARD ET AL; CARL W. ASH 137.5 AC. ±; 239 AC. ±; 362.8 AC. ±

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL
(SPECIFY) AS DRILLED PLUG & ABANDON CLEAN OUT & REPLUG

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,451' TVD 15,898' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313