

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

API 47 - 085 - 10332 County Ritchie District Clay
Quad Pennsboro 7.5' Pad Name Hichman Pad Field/Pool Name -----
Farm name Radall Bond et al Well Number Hex Unit 1H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4354338m Easting 509965m
Landing Point of Curve Northing 4354354m Easting 509588m
Bottom Hole Northing 4357537m Easting 508583m

Elevation (ft) 1250' 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 12/26/2017 Date drilling commenced 1/31/2018 Date drilling ceased 8/31/2018
Date completion activities began 11/29/2018 Date completion activities ceased 3/20/2019
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 None Identified Open mine(s) (Y/N) depths No
Salt water depth(s) ft None Identified 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:

API 47-085 - 10332 Farm name Radall Bond et al Well number Hex Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	95'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	445'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2616'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	18279'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6960.1'		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	204 sx	15.6	1.18	241	0'	8 Hrs.
Surface	Class A	525 sx	15.6	1.20	630	0'	8 Hrs.
Coal							
Intermediate 1	Class A	905 sx	15.6	1.20	1086	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	790 sx (Lead) 1940 sx (Tail)	14 (Lead), 15.2 (Tail)	1.45 (Lead), 1.83(Tail)	4696	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 18299' MD, 6658' TVD (BHL), 6658' (Deepest Point Drilled) Loggers TD (ft) 18299' MD

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

Plug back procedure N/A

Kick off depth (ft) 6200'

** This is a subsequent Well. Antero only runs wireline logs on one well on a multi-well pad (Centerville Unit 2H API#47-085-10338). A Cement Bond Log has been included with this submittal.

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- 085 - 10332 Farm name Radall Bond et al Well number Hex Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6594' (TOP)</u>	<u>TVD</u>	<u>7038' (TOP)</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3000 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 11052.87 mcfpd Oil 193.85 bpd NGL --- bpd Water 681.81 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 Allied Horizontal Wireline Services
Address 381 Colonial Manor Rd City North Huntington State PA Zip 15642

Cementing Company C&J Energy Services
Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

Stimulating Company CalFrac Well Services
Address 171 17th Street, Wuite 1445 City Denver State CO Zip 80202

Please insert additional pages as applicable.

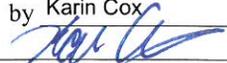
Completed by Karin Cox Telephone 303-357-6820
Signature  Title Permitting Agent Date 6/7/2019

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	11/29/2018	18121.80	18177.100	60	Marcellus
2	11/30/2018	17921.07	18090.345	60	Marcellus
3	12/1/2018	17720.34	17889.615	60	Marcellus
4	12/1/2018	17519.61	17688.885	60	Marcellus
5	12/2/2018	17318.88	17488.155	60	Marcellus
6	12/2/2018	17118.15	17287.425	60	Marcellus
7	12/3/2018	16917.42	17086.695	60	Marcellus
8	12/3/2018	16716.69	16885.965	60	Marcellus
9	12/4/2018	16515.96	16685.235	60	Marcellus
10	12/4/2018	16315.23	16484.505	60	Marcellus
11	12/5/2018	16114.50	16283.775	60	Marcellus
12	12/5/2018	15913.77	16083.045	60	Marcellus
13	12/5/2018	15713.04	15882.315	60	Marcellus
14	12/6/2018	15512.31	15681.585	60	Marcellus
15	12/8/2018	15311.58	15480.855	60	Marcellus
16	12/8/2018	15110.85	15280.125	60	Marcellus
17	12/9/2018	14910.12	15079.395	60	Marcellus
18	12/9/2018	14709.39	14878.665	60	Marcellus
19	12/10/2018	14508.66	14677.935	60	Marcellus
20	12/10/2018	14307.93	14477.205	60	Marcellus
21	12/11/2018	14107.20	14276.475	60	Marcellus
22	12/11/2018	13906.47	14075.745	60	Marcellus
23	12/12/2018	13705.74	13875.015	60	Marcellus
24	12/12/2018	13505.01	13674.285	60	Marcellus
25	12/12/2018	13304.28	13473.555	60	Marcellus
26	12/13/2018	13103.55	13272.825	60	Marcellus
27	12/13/2018	12902.82	13072.095	60	Marcellus
28	12/14/2018	12702.09	12871.365	60	Marcellus
29	12/14/2018	12501.36	12670.635	60	Marcellus
30	12/14/2018	12300.63	12469.905	60	Marcellus
31	12/16/2018	12099.90	12269.175	60	Marcellus
32	12/17/2018	11899.17	12068.445	60	Marcellus
33	12/17/2018	11698.44	11867.715	60	Marcellus
34	12/18/2018	11497.71	11666.985	60	Marcellus
35	12/18/2018	11296.98	11466.255	60	Marcellus
36	12/19/2018	11096.25	11265.525	60	Marcellus
37	12/19/2018	10895.52	11064.795	60	Marcellus
38	12/19/2018	10694.79	10864.065	60	Marcellus
39	12/20/2018	10494.06	10663.335	60	Marcellus
40	12/21/2018	10293.33	10462.605	60	Marcellus
41	12/21/2018	10092.60	10261.875	60	Marcellus
42	12/22/2018	9891.87	10061.145	60	Marcellus
43	12/23/2018	9691.14	9860.415	60	Marcellus
44	12/23/2018	9490.41	9659.685	60	Marcellus
45	12/26/2018	9289.68	9458.955	60	Marcellus
46	12/26/2018	9088.95	9258.225	60	Marcellus
47	12/27/2018	8888.22	9057.495	60	Marcellus
48	12/27/2018	8687.49	8856.765	60	Marcellus
49	12/28/2018	8486.76	8656.035	60	Marcellus
50	12/28/2018	8286.03	8455.305	60	Marcellus
51	12/29/2018	8085.30	8254.575	60	Marcellus
52	12/30/2018	7884.57	8053.845	60	Marcellus
53	12/30/2018	7683.84	7853.115	60	Marcellus
54	12/30/2018	7483.11	7652.385	60	Marcellus
55	12/31/2018	7282.38	7451.655	60	Marcellus
56	1/1/2019	7081.65	7250.925	60	Marcellus

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	11/29/2018	62.7	8060	6600	3617	152250	8422.73	N/A
2	11/30/2018	70.3	8061	6116	4240	376170	8413.01	N/A
3	12/1/2018	68.9	8055	5884	4142	401500	8397.63	N/A
4	12/1/2018	68.0	8132	5920	3308	401700	7947.38	N/A
5	12/2/2018	69.0	8249	8125	3047	403150	8142.37	N/A
6	12/2/2018	65.6	8578	6176	3796	402750	8203.59	N/A
7	12/3/2018	63.1	8372	6524	3473	402750	8693.16	N/A
8	12/3/2018	68.4	8153	5630	4422	402300	7923.59	N/A
9	12/4/2018	67.2	7899	5786	4295	402500	8015.94	N/A
10	12/4/2018	65.8	8085	6809	4053	402900	7943.08	N/A
11	12/5/2018	73.0	7958	6274	4200	401450	7764.95	N/A
12	12/5/2018	68.3	8212	6141	3986	401600	8095.88	N/A
13	12/5/2018	61.7	8194	5912	3966	407100	10563.15	N/A
14	12/6/2018	54.6	8250	5596	7513	206700	7093.01	N/A
15	12/8/2018	65.5	7792	6109	4202	403450	12477.94	N/A
16	12/8/2018	66.3	7314	6132	5182	404100	8110.96	N/A
17	12/9/2018	67.0	6969	5674	4589	406250	8352.05	N/A
18	12/9/2018	68.9	7192	5999	4756	402450	8214.92	N/A
19	12/10/2018	73.8	7567	5993	4626	402800	7796.15	N/A
20	12/10/2018	72.7	7924	6232	4353	403100	7812.86	N/A
21	12/11/2018	78.4	7513	5928	4762	398750	7864.00	N/A
22	12/11/2018	68.4	7918	6600	3646	402350	7751.00	N/A
23	12/12/2018	73.1	7570	6048	4447	402500	7477.00	N/A
24	12/12/2018	73.6	7841	6873	3284	404000	7822.00	N/A
25	12/12/2018	79.4	7766	6813	3983	402950	7901.00	N/A
26	12/13/2018	27.0	8108	7240	4200	401650	7757.00	N/A
27	12/13/2018	79.4	7865	6489	3651	403450	7420.00	N/A
28	12/14/2018	77.4	7835	7039	4271	402450	7447.00	N/A
29	12/14/2018	77.4	7905	7016	4491	403700	7441.00	N/A
30	12/14/2018	78.4	7967	7180	4784	402800	7450.00	N/A
31	12/16/2018	76.2	7932	6863	3660	400800	7717.00	N/A
32	12/17/2018	74.8	8036	6881	3730	405600	7493.00	N/A
33	12/17/2018	78.3	7521	7180	3512	403000	7676.00	N/A
34	12/18/2018	78.1	7815	7147	3777	404600	7556.00	N/A
35	12/18/2018	72.4	7795	7136	3346	402500	7428.00	N/A
36	12/19/2018	77.7	8080	7435	4780	401300	7730.00	N/A
37	12/19/2018	80.4	7797	6699	3906	401100	7821.40	N/A
38	12/19/2018	76.4	7587	6610	3338	401250	7777.00	N/A
39	12/20/2018	80.0	7582	6520	4099	400450	7678.00	N/A
40	12/21/2018	77.6	7487	7000	3840	360750	9799.50	N/A
41	12/21/2018	78.6	7547	6954	3415	397200	7712.00	N/A
42	12/22/2018	80.4	7717	7083	3027	401450	7735.10	N/A
43	12/23/2018	77.6	7382	6331	3814	400750	8322.00	N/A
44	12/23/2018	79.0	7702	7330	3671	401350	8867.00	N/A
45	12/26/2018	80.9	7167	5893	3592	401650	10335.50	N/A
46	12/26/2018	80.6	7773	7020	3306	401750	7798.00	N/A
47	12/27/2018	82.3	7266	7510	3846	402500	7896.00	N/A
48	12/27/2018	84.1	7754	7469	3498	400850	7846.00	N/A
49	12/28/2018	79.6	7482	7303	3235	403150	7924.00	N/A
50	12/28/2018	80.0	7502	6794	3274	402250	7726.10	N/A
51	12/29/2018	81.3	7235	7319	2850	401650	7973.00	N/A
52	12/30/2018	85.5	7748	7442	3348	402500	7895.00	N/A
53	12/30/2018	80.3	7279	7160	3183	401300	7740.00	N/A
54	12/30/2018	72.8	7459	6995	4372	401550	8117.00	N/A
55	12/31/2018	80.8	7113	6821	3045	401800	8734.00	N/A
56	1/1/2019	80.2	7582	7426	3262	403250	7900.00	N/A
	AVG=	73	7,762	6,664	3,929	22,017,870	453,911	TOTAL

EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
No Data collected	0	445	0	445
Silty Shale	445	505	445	505
Shaly Siltstone	505	685	505	685
Sandy Siltstone	685	765	685	765
Silty Sandstone	765	845	765	845
Sandy Siltstone	845	905	845	905
Shaly Sandstone	905	945	905	945
Sandy Shale	945	1,085	945	1,085
Shaly sandstone tr coal	1,085	1,145	1,085	1,145
Shaly Sandstone	1,145	1,265	1,145	1,265
Silty Shale with intermitten SS	1,265	1,625	1,265	1,625
Sandstone	1,625	1,785	1,625	1,785
Sandy Shale	1,785	2,110	1,785	2,137
Big Lime	2,110	2,972	2,137	3,032
Fifty Foot Sandstone	2,972	3,078	3,032	3,143
Gordon	3,078	3,230	3,143	3,302
Fifth Sandstone	3,230	3,448	3,302	3,530
Bayard	3,448	3,968	3,530	4,072
Speechley	3,968	4,212	4,072	4,325
Balltown	4,212	4,782	4,325	4,915
Bradford	4,782	5,115	4,915	5,259
Benson	5,115	5,366	5,259	5,516
Alexander	5,366	6,311	5,516	6,492
Sycamore	6,311	6,417	6,492	6,633
Middlesex	6,417	6,530	6,633	6,844
Burkett	6,530	6,561	6,844	6,928
Tully	6,561	6,594	6,928	7,038
Marcellus	6,594	NA	7,038	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:	11/29/2018
Job End Date:	1/1/2019
State:	West Virginia
County:	Ritchie
API Number:	47-085-10332-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Hex Unit 1H
Latitude:	39.33832800
Longitude:	-80.88453300
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,657
Total Base Water Volume (gal):	19,690,304
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	87.79676	
Hydrochloric Acid	CWS	Clean Perforations		Listed Below			



CI-9100G	CWS	Corrosion Inhibitor		Listed Below				
Calbreak 5501	CWS	Breaker						
				Listed Below				
DAP-902	CWS	Scale Inhibitor						
				Listed Below				
DWP-641	CWS	Friction Reducer						
				Listed Below				
DWP-111	CWS	Gel Slurry						
				Listed Below				
Sand (Proppant)	CWS	Propping Agent						
				Listed Below				
DAP-103	CWS	Iron Control						
				Listed Below				
SaniFrac 8844	CWS	Biocide						
				Listed Below				
Other Chemical (s)	Listed Above	See Trade Name (s) List						

				Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00124	
				Sorbitol tetraoleate	61723-83-9	2.00000	0.00123	
				Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00061	
				Citric acid	77-92-9	60.00000	0.00054	
				Sodium bromide	7647-15-6	4.00000	0.00042	
				Dibromoacetonitrile	3252-43-5	3.00000	0.00032	
				Alkylloxypolyethyleneoxy ethanol	84133-50-6	0.50000	0.00031	
				Vinylidene chloride-methyl acrylate copolymer	69418-26-4	20.00000	0.00030	
				Acrylamide	79-06-1	0.10000	0.00006	
				Ethylene glycol	107-21-1	40.00000	0.00003	
				Diethylene glycol, monomethyl ether	34590-94-8	20.00000	0.00002	
				Tar bases, quinolone derivs, benzyl chloride-quetenized	72480-70-7	10.00000	0.00001	
				Isopropyl alcohol	67-63-0	5.00000	0.00001	
				Formic Acid	64-18-6	10.00000	0.00001	
				Cinnamaldehyde	104-55-2	10.00000	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.

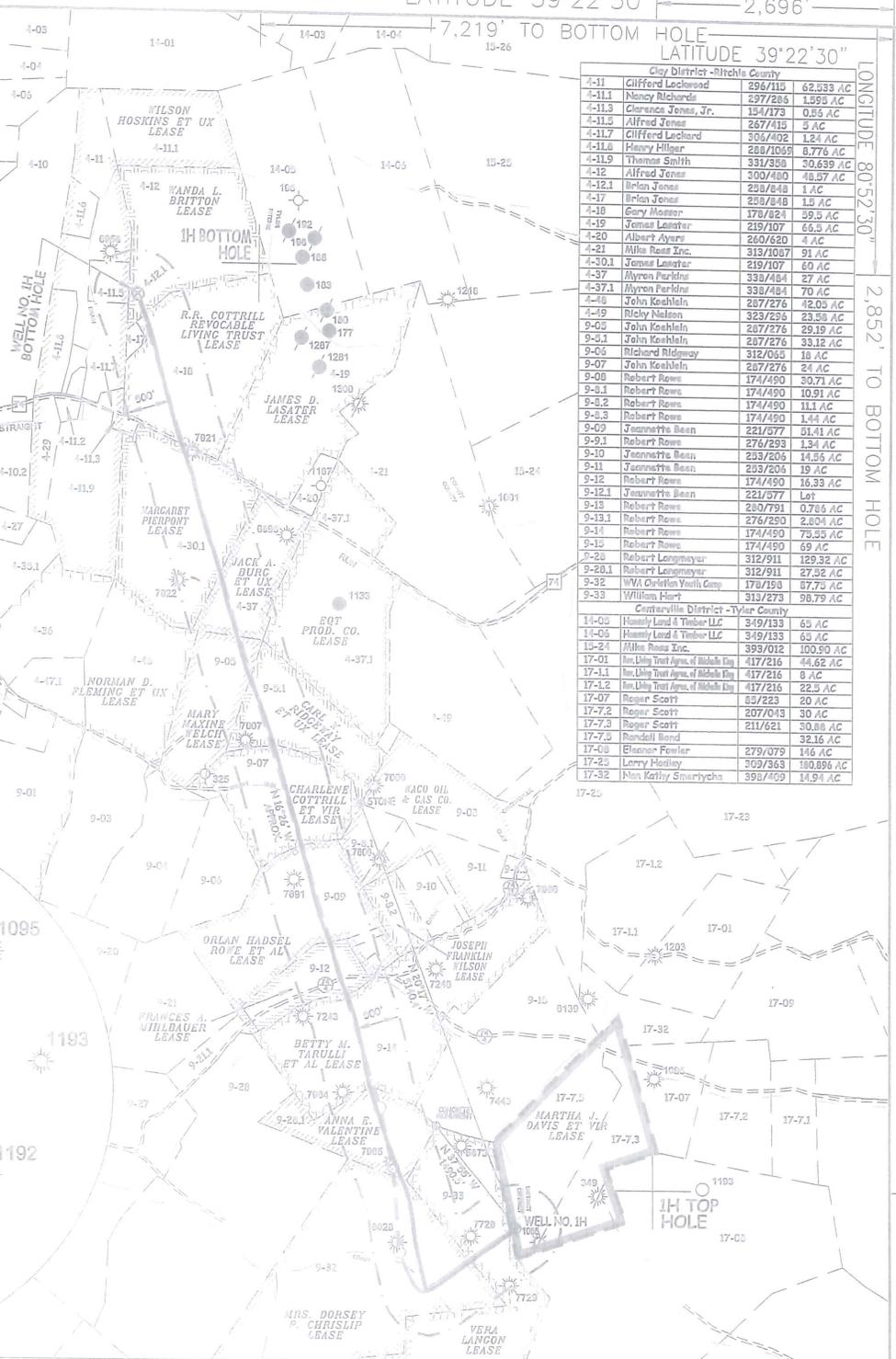
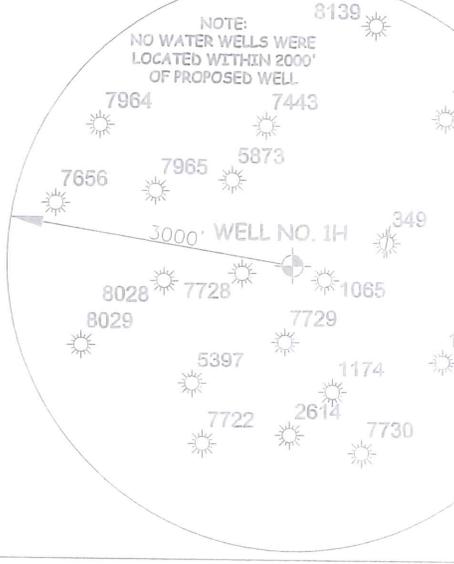
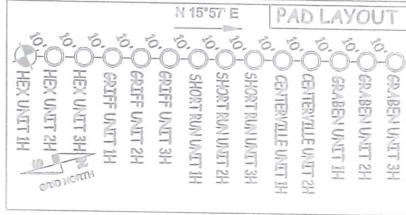
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

LATITUDE 39°22'30" 7,219' TO BOTTOM HOLE 2,696'

Antero Resources Corporation
Well No. Hex Unit 1H

NOTES:
WELL 1H TOP HOLE INFORMATION:
N: 308,353ft E: 1,608,411ft
LAT: 39°20'17.98" LON: 80°53'04.32"
BOTTOM HOLE INFORMATION:
N: 318,928ft E: 1,604,050ft
LAT: 39°22'01.82" LON: 80°54'01.92"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM 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 1H TOP HOLE INFORMATION:
N: 4,354,338m E: 509,965m
BOTTOM HOLE INFORMATION:
N: 4,357,537m E: 508,583m



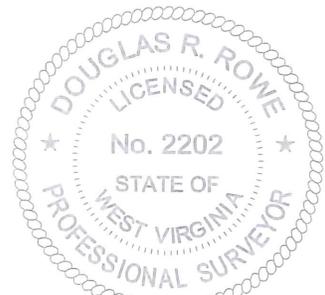
Clay District - Ritchie County	
4-11	Gifford Leckwood 296/115 62.833 AC
4-11.1	Nancy Richards 297/285 1.590 AC
4-11.3	Clarence Jones, Jr. 154/173 0.56 AC
4-11.5	Alfred Jones 267/415 5 AC
4-11.7	Gifford Leckwood 305/402 1.21 AC
4-11.8	Henry Hilner 282/205 0.776 AC
4-11.9	Thomas Smith 200/480 20.639 AC
4-12	Alfred Jones 300/480 18.87 AC
4-12.1	Brian Jones 258/648 1 AC
4-17	Brian Jones 258/648 1.5 AC
4-18	Gary Mosser 178/824 89.5 AC
4-19	Jemal Lesater 219/107 66.5 AC
4-20	Albert Ayers 260/620 4 AC
4-21	Alma Ross Inc. 315/287 91 AC
4-30.1	Jemal Lesater 219/107 66.5 AC
4-37	Myron Perkins 338/484 27 AC
4-37.1	Myron Perkins 338/484 70 AC
4-48	John Keshlain 287/276 42.05 AC
4-19	Ricky Nelson 323/236 23.58 AC
9-05	John Keshlain 287/276 29.19 AC
9-01	John Keshlain 312/293 18 AC
9-04	Richard Ridgway 287/276 33.12 AC
9-07	John Keshlain 287/276 24 AC
9-08	Robert Rees 174/490 30.71 AC
9-8.1	Robert Rees 174/490 10.91 AC
9-8.2	Robert Rees 174/490 11.1 AC
9-8.3	Robert Rees 174/490 1.44 AC
9-9	Jeanette Bean 221/977 51.41 AC
9-9.1	Robert Rees 174/490 69 AC
9-10	Jeanette Bean 235/205 14.33 AC
9-11	Jeanette Bean 235/205 19.3 AC
9-12	Robert Rees 174/490 16.33 AC
9-12.1	Jeanette Bean 221/977 Lot
9-13	Robert Rees 260/791 0.786 AC
9-13.1	Robert Rees 276/250 2.804 AC
9-14	Robert Rees 174/490 73.33 AC
9-15	Robert Rees 174/490 69 AC
9-20	Robert Longmeyer 312/911 129.32 AC
9-20.1	Robert Longmeyer 312/911 27.32 AC
9-32	WVA Christian Youth Camp 178/198 87.75 AC
9-33	William Hart 313/273 98.79 AC
Centerville District - Tyler County	
14-05	Heavenly Land & Timber LLC 349/133 65 AC
14-05	Heavenly Land & Timber LLC 349/133 65 AC
14-24	Alma Ross Inc. 393/812 100.90 AC
17-01	Ann Lily Trust Opus of Middle Km 417/216 8 AC
17-1.1	Ann Lily Trust Opus of Middle Km 417/216 8 AC
17-1.2	Ann Lily Trust Opus of Middle Km 417/216 22.5 AC
17-07	Roger Scott 85/223 20 AC
17-7.2	Roger Scott 207/043 30 AC
17-7.3	Roger Scott 211/621 30.88 AC
17-7.8	Randall Beard 417/216 32.16 AC
17-10	Eleanor Fowler 279/079 116 AC
17-23	Lenny Hodley 302/363 180.896 AC
17-32	Man Kathy Smariyeha 398/409 14.94 AC

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 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

- NOTE**
- 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 ALLEGHENY SURVEYS, INC.
 - 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 DATA AND 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.



JOB # 17-006WA
DRAWING # HEX1HR1
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

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

DOUGLAS R. ROWE P.S. 2202
DATE 06/03/19
OPERATOR'S WELL# HEX UNIT 1H

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ 47 - 085 - 10332
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X STATE COUNTY PERMIT
LOCATION: ELEVATION 1,250' AS BUILT WATERSHED NORTH FORK HUGHES RIVER
QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RICHTIE
SURFACE OWNER RADALL BOND ET AL ACREAGE 32.16 ACRES +/-
OIL & GAS ROYALTY OWNER MARTHA J. DAVIS ET VIR; VERA LANGON; MRS. DORSEY P. CHRISLIP; ANNA E. VALENTINE; BETTY M. TARULLI ET AL; FRANCES A. MIHLBAUSER; ORLAN HADSEL ROWE ET AL; CHARLENE COTTRILL ET VIR; CARL W. RIDGWAY ET UX; MARY MAXINE WELCH; JACK A. BURG ET UX; MARGARET PIERPONT; R.R. COTTRILL REVOCABLE LIVING TRUST; WANDA L. BRITTON LEASE ACREAGE 70 AC±; 98.79 AC±; 87.75 AC±; 28 AC±; 76 AC±; 19.59 AC±; 57 AC±; 24 AC±; 33 AC±; 29.33 AC±; 27 AC±; 60 AC±; 59.5 AC±; 48.57 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 6,658' TVD 18,299' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP ST. DENVER, CO 80202 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

LONGITUDE 80°52'30" 2,852' TO BOTTOM HOLE 1,3357' LONGITUDE 80°52'30"