WR-35
Rev. 8/23/13

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

API 47 - 085 - 10334 County Ritchie District Clay
Quad Pennsboro 7.5' Pad Name Hichman Pad Field/Pool Name -----
Farm name Radall Bond et al Well Number Graben 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 4354370m Easting 509974m
Landing Point of Curve Northing 4354280m Easting 510158m
Bottom Hole Northing 4352357m Easting 510850m

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 1/12/2018 Date drilling commenced 1/31/2018 Date drilling ceased 7/7/2018
Date completion activities began 2/4/2019 Date completion activities ceased 3/28/2019
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 - 10334 Farm name Radall Bond et al Well number Graben 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"	489'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2564'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	13966'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6883.9'		4.7#, L-80		
Packer type and depth set		N/A					

Comment Details

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ^{3}/sks)	Volume (ft ^{3})	Cement Top (MD)	WOC (hrs)
Conductor	Class A	204 sx	15.6	1.18	241	0'	8 Hrs.
Surface	Class A	420 sx	15.6	1.20	504	0'	8 Hrs.
Coal							
Intermediate 1	Class A	882 sx	15.6	1.20	1058	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	835 sx (Lead) 1225 sx (Tail)	14 (Lead), 15.2 (Tail)	1.45 (Lead), 1.83(Tail)	3453	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 13988' MD, 6690' TVD (BHL), 6690' (Deepest Point Drilled) Loggers TD (ft) 13988' MD

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

Plug back procedure N/A

Kick off depth (ft) 6000'

** 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 - 10334 Farm name Radall Bond et al Well number Graben Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)

***PLEASE SEE ATTACHED EXHIBIT 1**

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)

***PLEASE SEE ATTACHED EXHIBIT 2**

Please insert additional pages as applicable.

API 47- 085 - 10334 Farm name Radall Bond et al Well number Graben Unit 1H

PRODUCING FORMATION(S)	DEPTHS			
Marcellus	6,944' (TOP)	TVD	6,600' (TOP)	MD

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	Oil	NGL	Water	GAS MEASURED BY
	10986.32 mcfpd	85.09 bpd	--- bpd	781.62 bpd	□ Estimated ■ Orifice □ Pilot

LITHOLOGY/ FORMATION NAME	TOP DEPTH IN FT TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H_2S, ETC)
***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

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

API 47-085-10334 Farm Name Radall Bond et al Well Number Graben Unit 1H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	2/4/2019	13806.7	13861.2	60	Marcellus
2	2/4/2019	13606.15	13775.275	60	Marcellus
3	2/4/2019	13405.6	13574.725	60	Marcellus
4	2/5/2019	13205.05	13374.175	60	Marcellus
5	2/5/2019	13004.5	13173.625	60	Marcellus
6	2/5/2019	12803.95	12973.075	60	Marcellus
7	2/5/2019	12603.4	12772.525	60	Marcellus
8	2/6/2019	12402.85	12571.975	60	Marcellus
9	2/6/2019	12202.3	12371.425	60	Marcellus
10	2/6/2019	12001.75	12170.875	60	Marcellus
11	2/7/2019	11801.2	11970.325	60	Marcellus
12	2/7/2019	11600.65	11769.775	60	Marcellus
13	2/7/2019	11400.1	11569.225	60	Marcellus
14	2/8/2019	11199.55	11368.675	60	Marcellus
15	2/8/2019	10999	11168.125	60	Marcellus
16	2/8/2019	10798.45	10967.575	60	Marcellus
17	2/9/2019	10597.9	10767.025	60	Marcellus
18	2/9/2019	10397.35	10566.475	60	Marcellus
19	2/9/2019	10196.8	10365.925	60	Marcellus
20	2/10/2019	9996.25	10165.375	60	Marcellus
21	2/10/2019	9795.7	9964.825	60	Marcellus
22	2/10/2019	9595.15	9764.275	60	Marcellus
23	2/10/2019	9394.6	9563.725	60	Marcellus
24	2/11/2019	9194.05	9363.175	60	Marcellus
25	2/12/2019	8993.5	9162.625	60	Marcellus
26	2/12/2019	8792.95	8962.075	60	Marcellus
27	2/12/2019	8592.4	8761.525	60	Marcellus
28	2/13/2019	8391.85	8560.975	60	Marcellus
29	2/13/2019	8191.3	8360.425	60	Marcellus
30	2/14/2019	7990.75	8159.875	60	Marcellus
31	2/14/2019	7790.2	7959.325	60	Marcellus
32	2/15/2019	7589.65	7758.775	60	Marcellus
33	2/15/2019	7389.1	7558.225	60	Marcellus
34	2/16/2019	7188.55	7357.675	60	Marcellus
35	2/16/2019	6988	7157.125	60	Marcellus

API 47-085-10334 **Farm Name** Radall Bond et al **Well Number** Graben Unit 1H

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	2/4/2019	70.4	7965	8671	4402	151600	5021.33	N/A
2	2/4/2019	82.33894	7938.113	5511	4453	400700	8397.15	N/A
3	2/4/2019	81.85322	8040.154	5487	4508	403450	8333.06	N/A
4	2/5/2019	82.72892	8191.339	5302	4520	401500	8318.5	N/A
5	2/5/2019	81.89751	7868.474	5191	4557	400700	8470.71	N/A
6	2/5/2019	77.48076	7942.943	5198	3904	401150	8328.24	N/A
7	2/5/2019	81.67791	8174.955	6073	4310	400550	8302.35	N/A
8	2/6/2019	77.79942	7973.63	5520	3622	394000	9080.19	N/A
9	2/6/2019	80.94018	7809.812	5880	4880	402100	8179.14	N/A
10	2/6/2019	81.20004	8167.591	5257	3439	401100	8220.71	N/A
11	2/7/2019	84.01974	8042.661	5956	3414	401950	8231.42	N/A
12	2/7/2019	83.95231	8087.206	5731	3756	402850	8295.27	N/A
13	2/7/2019	79.67897	7947.095	5769	3280	400950	8331.28	N/A
14	2/8/2019	85.63319	7905.314	6049	3384	402650	8262.81	N/A
15	2/8/2019	84.71071	7536.992	6281	3941	401600	8381.45	N/A
16	2/8/2019	84.57001	8122.096	5972	3353	403800	8239.06	N/A
17	2/9/2019	82.92109	7809.427	5959	3396	401700	8201.97	N/A
18	2/9/2019	79.00248	7747.727	5780	3823	402450	8306.14	N/A
19	2/9/2019	85.86065	8312.253	5712	3529	402800	8220.23	N/A
20	2/10/2019	87.2766	7617.278	5849	3300	400250	8168.98	N/A
21	2/10/2019	82.14706	7507.506	6058	3802	404210	8349.47	N/A
22	2/10/2019	85.22308	8242.429	6497	3384	400750	8167.86	N/A
23	2/10/2019	81.94617	7742.39	6005	3419	401700	8183.58	N/A
24	2/11/2019	83.42358	8047.583	6319	3238	402250	8172.04	N/A
25	2/12/2019	86.19591	8016	5387	4465	404920	8188.85	N/A
26	2/12/2019	81.51582	7377.22	5868	3679	403500	8335.37	N/A
27	2/12/2019	82.57098	6930.235	4749	4264	401450	8133.15	N/A
28	2/13/2019	77.16176	7915.652	6908	3404	400850	8377.95	N/A
29	2/13/2019	84.29776	7815.665	5775	3581	402550	8148	N/A
30	2/14/2019	80.33581	7706.253	7168	3408	401950	8039.17	N/A
31	2/14/2019	83.31795	7033.423	5355	3714	402200	8302.39	N/A
32	2/15/2019	75.15524	7120.813	7356	3891	401500	8375.29	N/A
33	2/15/2019	80.96621	7360.464	6542	3556	400700	8108.48	N/A
34	2/16/2019	83.84526	7358.499	6813	3892	401300	8158.56	N/A
35	2/16/2019	81.18398	7792.642	6458	3596	400300	9086.1	N/A
	AVG=	**82**	**7,805**	**6,012**	**3,802**	**13,807,980**	**287,416**	TOTAL

API 47-085-10334 Farm Name Radall Bond et al Well Number Graben Unit 1H				
EXHIBIT 3				
LITHOLOGY/ FORMATION	**TOP DEPTH (TVD) From Surface**	**BOTTOM DEPTH (TVD) From Surface**	**TOP DEPTH (MD) From Surface**	**BOTTOM DEPTH (MD) From Surface**
No Data collected	0	445	0	445
Silty Shale	est 445	505	est 445	505
Shaly Siltstone	est 505	685	est 505	685
Sandy Siltstone	est 685	765	est 685	765
Silty Sandstone	est 765	845	est 765	845
Sandy Siltstone	est 845	905	est 845	905
Shaly Sandstone	est 905	945	est 905	945
Sandy Shale	est 945	1,085	est 945	1,085
Shaly sandstone tr coal	est 1,085	1,145	est 1,085	1,145
Shaly Sandstone	est 1,145	1,265	est 1,145	1,265
Silty Shale with intermittend SS	est 1,265	1,625	est 1,265	1,625
Sandstone	est 1,625	1,785	est 1,625	1,785
Sandy Shale	est 1,785	2,078	est 1,785	2,079
Big Lime	2,078	2,932	2,079	2,932
Fifty Foot Sandstone	2,932	3,037	2,932	3,039
Gordon	3,037	3,201	3,039	3,205
Fifth Sandstone	3,201	3,391	3,205	3,399
Bayard	3,391	3,929	3,399	3,947
Speechley	3,929	4,171	3,947	4,195
Balltown	4,171	4,720	4,195	4,757
Bradford	4,720	5,053	4,757	5,098
Benson	5,053	5,296	5,098	5,346
Alexander	5,296	6,309	5,346	6,408
Sycamore	6,309	6,422	6,408	6,560
Middlesex	6,422	6,537	6,560	6,760
Burkett	6,537	6,567	6,760	6,835
Tully	6,567	6,600	6,835	6,944
Marcellus	6,600	NA	6,944	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:	2/4/2019
Job End Date:	2/26/2019
State:	West Virginia
County:	Ritchie
API Number:	47-085-10334-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Graben Unit 1H
Latitude:	39.33861900
Longitude:	-80.88443100
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,689
Total Base Water Volume (gal):	12,310,252
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	95.07639	
DAP-902	CWS	Scale Inhibitor					
				Listed Below			

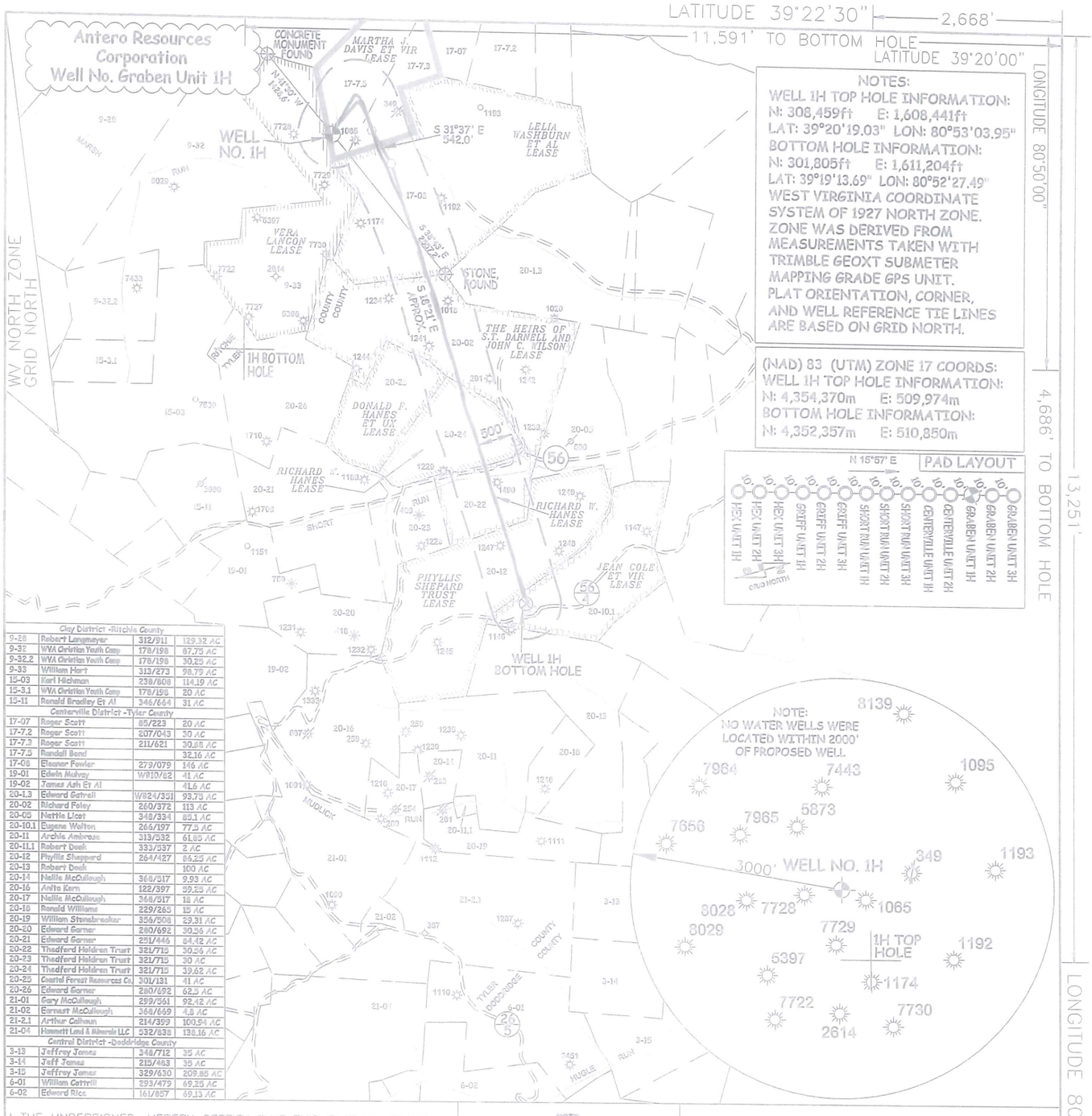
DAP-103	CWS	Iron Control					
				Listed Below			
Sand (Proppant)	CWS	Propping Agent					
				Listed Below			
SaniFrac 8844	CWS	Biocide					
				Listed Below			
Hydrochloric Acid	CWS	Clean Perforations					
				Listed Below			
CI-9100G	CWS	Corrosion Inhibitor					
				Listed Below			
Calbreak 5501	CWS	Breaker					
				Listed Below			
DWP-641	CWS	Friction Reducer					
				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	4.62862	
			Hydrochloric acid	7647-01-0	37.00000	0.06449	

			Calcite	471-34-1	1.00000	0.04625	
			Guar gum	9000-30-0	60.00000	0.04256	
			Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.04256	
			Polymer	26100-47-0	45.00000	0.02812	
			Distillates (petroleum), hydrotreated light	64742-47-8	30.00000	0.01875	
			Ammonium chloride	12125-02-9	11.00000	0.00687	
			2-Propenoic acid, homopolymer, sodium salt	9003-04-7	40.00000	0.00654	
			Polyethylene glycol mixture	25322-68-3	54.50000	0.00638	
			Biotite	1302-27-8	0.10000	0.00463	
			Apatite	64476-38-6	0.10000	0.00463	
			Goethite	1310-14-1	0.10000	0.00463	
			Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00355	
			Sorbitan monooleate	1338-43-8	4.00000	0.00250	
			2,2-Dibromo-3-Nitrilopropionamide	10222-01-2	20.00000	0.00234	
			Polyethylene glycol monooleate	9004-96-0	3.00000	0.00187	
			1,2-Propanediol	57-55-6	10.00000	0.00164	
			Ammonium Persulfate	7727-54-0	100.00000	0.00157	
			Sorbitol tetraoleate	61723-83-9	2.00000	0.00125	
			Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00106	
			Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00062	
			Citric acid	77-92-9	60.00000	0.00058	
			Sodium bromide	7647-15-6	4.00000	0.00047	
			Dibromoacetonitrile	3252-43-5	3.00000	0.00035	

			Vinylidene chloride-methyl acrylate copolymer	25038-72-6	20.00000	0.00031	
			Alkyloxypolyethyleneoxy ethanol	84133-50-6	0.50000	0.00031	
			Acrylamide	79-06-1	0.10000	0.00006	
			Ethylene glycol	107-21-1	40.00000	0.00004	
			Diethylene glycol, monomethyl ether	34590-94-8	20.00000	0.00002	
			Tar bases, quinolone derivs, benzyl chloride-quatenized	72480-70-7	10.00000	0.00001	
			Formic Acid	64-18-6	10.00000	0.00001	
			Cinnamaldehyde	104-55-2	10.00000	0.00001	
			Isopropyl alcohol	67-63-0	5.00000	0.00001	

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100%
*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.
Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)



Clay District -Ritchie County			
9-28	Robert Langmeyer	312/911	129.32 AC
9-32	WVA Christian Youth Camp	178/198	87.75 AC
9-32.2	WVA Christian Youth Camp	178/198	30.25 AC
9-33	William Hart	313/273	98.75 AC
15-03	Karl Hickman	238/606	114.19 AC
15-3.1	WVA Christian Youth Camp	178/196	20 AC
15-11	Ronald Bradley Et Al	344/654	31 AC
Centerville District -Tyler County			
17-07	Roger Scott	65/223	20 AC
17-7.2	Roger Scott	207/043	30 AC
17-7.3	Roger Scott	211/621	30.88 AC
17-7.5	Randall Bond		32.16 AC
17-08	Eleanor Fowler	273/079	146 AC
19-01	Edwin Mulvey	WB10/62	41 AC
19-02	James Ash Et Al		41.6 AC
20-1.3	Edward Gatrell	WB24/351	93.75 AC
20-02	Richard Foley	260/372	113 AC
20-05	Nettie Lisel	348/334	65.1 AC
20-10.1	Eugene Walton	265/197	77.5 AC
20-11	Archie Ambrose	313/332	61.85 AC
20-11.1	Robert Deak	333/337	2 AC
20-12	Phyllis Sheppard	264/427	86.25 AC
20-13	Robert Deak		100 AC
20-14	Nellie McCullough	368/517	9.93 AC
20-16	Anita Kern	122/397	59.25 AC
20-17	Nellie McCullough	368/517	18 AC
20-18	Ronald Williams	229/265	15 AC
20-19	William Stensbreaker	356/206	29.31 AC
20-20	Edward Garner	280/692	30.56 AC
20-21	Edward Garner	251/446	84.42 AC
20-22	Thedford Holdren Trust	321/715	30.25 AC
20-23	Thedford Holdren Trust	321/715	30 AC
20-24	Thedford Holdren Trust	321/715	39.62 AC
20-25	Coastal Forest Resources Co.	301/131	41 AC
20-26	Edward Garner	280/692	62.5 AC
21-01	Gary McCullough	299/361	92.42 AC
21-02	Earnest McCullough	368/669	4.8 AC
21-2.1	Arthur Calhoun	214/399	100.54 AC
21-04	Hammett Land & Minerals LLC	332/835	138.16 AC
Central District -Doddridge County			
3-13	Jeffrey James	348/712	35 AC
3-14	Jeff James	219/363	38 AC
3-15	Jeffrey James	329/630	209.85 AC
6-01	William Cottrill	293/479	69.25 AC
6-02	Edward Rice	161/857	69.13 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 DEPTARTMENT 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
1. 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.
2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
4. 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.
5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

DOUGLAS R. ROWE LICENSED No. 2202 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

JOB # 17-010WA
DRAWING # GRABEN1HAD
SCALE 1" = 2000'
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 06/03/19
OPERATOR'S WELL# GRABEN UNIT #1H

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 1,250' AS BUILT WATERSHED NORTH FORK HUGHES RIVER
QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHIE
SURFACE OWNER RADALL BOND ET AL ACREAGE 32.16 ACRES +/-
OIL & GAS ROYALTY OWNER MARTHA J. DAVIS ET VIR; LELIA WASHBURN ET AL; LEASE ACREAGE 70 AC±; 150 AC±;
THE HEIRS OF S.T. DARNELL AND JOHN C. WILSON; RICHARD W. HANES; RICHARD W. HANES; 113 AC±; 39.63 AC±; 30.5 AC±;
PHYLLIS SHEPARD TRUST; JEAN COLE ET VIR 86.25 AC±; 77.5 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 6,690' TVD 13,988' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

47 – 085 – 10334
STATE COUNTY PERMIT

COUNTY NAME PERMIT

FORM WW-6