

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

API 47 - 017 - 06838 County Doddridge District West Union  
 Quad West Union 7.5' Pad Name Strickling Pad Field/Pool Name -----  
 Farm name John Paul Strickling, et al Well Number Jimmy 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 4353669.689m Easting 518636.964m  
 Landing Point of Curve Northing 4353584.04m Easting 518473.02m  
 Bottom Hole Northing 4350949.577m Easting 519576.036m

Elevation (ft) 1065' 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 7/13/2017 Date drilling commenced 9/5/2017 Date drilling ceased 4/12/2018  
 Date completion activities began 8/29/2018 Date completion activities ceased 10/4/2018  
 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 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:

WR-35  
Rev. 8/23/13

API 47-017 - 06838 Farm name John Paul Strickling, et al Well number Jimmy 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"	363'	New	54.5#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2568'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	16379'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7872'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	284 sx	15.6	1.18	335	0'	8 Hrs.
Surface	Class A	325 sx	15.6	1.2	390	0'	8 Hrs.
Coal							
Intermediate 1	Class A	892 sx	15.6	1.18	1053	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	732sx (Lead) 1523 sx (Tail)	14(Lead), 15.2 (Tail)	1.45 (Lead), 1.83 (Tail)	3848	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 16379' MD, 6576' TVD (BHL), 6788' (Deepest Point Drilled) Loggers TD (ft) 16379' MD

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

Plug back procedure N/A

Kick off depth (ft) 6101'

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- 017 - 06838 Farm name John Paul Strickling, et al Well number Jimmy Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
<b>*PLEASE SEE ATTACHED EXHIBIT 1</b>					

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)
<b>*PLEASE SEE ATTACHED EXHIBIT 2</b>								

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS		
Marcellus	6663' (TOP)	TVD	6948' (TOP) MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 3600 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 9995.49 mcfpd Oil 111.07 bpd NGL --- bpd Water 497.70 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 <sub>2</sub> 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.

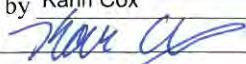
Drilling Contractor Frontier Drilling LLC  
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Nine Energy Service  
Address 125 Museum Rd City Washington State PA Zip 15301

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

Stimulating Company US Well Services  
Address 533 Industrial Park Road City Lane Jew State WV Zip 26378

Please insert additional pages as applicable.

Completed by Karin Cox Telephone 303-357-6820  
Signature  Title Permitting Agent Date 2/1/2019

API 47-017-06838 Farm Name John Paul Strickling, et al Well Number Jimmy Unit 1H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	8/29/2018	16230.4	16285	48	Marcellus
2	8/30/2018	16029.58	16198.93	48	Marcellus
3	8/30/2018	15828.76	15998.11	48	Marcellus
4	8/30/2018	15627.94	15797.29	48	Marcellus
5	8/31/2018	15427.12	15596.47	48	Marcellus
6	8/31/2018	15226.3	15395.65	48	Marcellus
7	9/1/2018	15025.48	15194.83	48	Marcellus
8	9/1/2018	14824.66	14994.01	48	Marcellus
9	9/2/2018	14623.84	14793.19	48	Marcellus
10	9/2/2018	14423.02	14592.37	48	Marcellus
11	9/2/2018	14222.2	14391.55	48	Marcellus
12	9/3/2018	14021.38	14190.73	48	Marcellus
13	9/3/2018	13820.56	13989.91	48	Marcellus
14	9/4/2018	13619.74	13789.09	48	Marcellus
15	9/4/2018	13418.92	13588.27	48	Marcellus
16	9/4/2018	13218.1	13387.45	48	Marcellus
17	9/5/2018	13017.28	13186.63	48	Marcellus
18	9/5/2018	12816.46	12985.81	48	Marcellus
19	9/6/2018	12615.64	12784.99	48	Marcellus
20	9/6/2018	12414.82	12584.17	48	Marcellus
21	9/7/2018	12214	12383.35	48	Marcellus
22	9/7/2018	12013.18	12182.53	48	Marcellus
23	9/8/2018	11812.36	11981.71	48	Marcellus
24	9/8/2018	11611.54	11780.89	48	Marcellus
25	9/8/2018	11410.72	11580.07	48	Marcellus
26	9/9/2018	11209.9	11379.25	48	Marcellus
27	9/9/2018	11009.08	11178.43	48	Marcellus
28	9/10/2018	10808.26	10977.61	48	Marcellus
29	9/11/2018	10607.44	10776.79	48	Marcellus
30	9/11/2018	10406.62	10575.97	48	Marcellus
31	9/12/2018	10205.8	10375.15	48	Marcellus
32	9/12/2018	10004.98	10174.33	48	Marcellus
33	9/13/2018	9804.16	9973.51	48	Marcellus
34	9/13/2018	9603.34	9772.69	48	Marcellus
35	9/13/2018	9402.52	9571.87	48	Marcellus
36	9/14/2018	9201.7	9371.05	48	Marcellus
37	9/14/2018	9000.88	9170.23	48	Marcellus
38	9/15/2018	8800.06	8969.41	48	Marcellus
39	9/15/2018	8599.24	8768.59	48	Marcellus
40	9/15/2018	8398.42	8567.77	48	Marcellus
41	9/16/2018	8197.6	8366.95	48	Marcellus
42	9/16/2018	7996.78	8166.13	48	Marcellus
43	9/16/2018	7795.96	7965.31	48	Marcellus
44	9/17/2018	7595.14	7764.49	48	Marcellus
45	9/17/2018	7394.32	7563.67	48	Marcellus
46	9/18/2018	7193.5	7362.85	48	Marcellus
47	9/18/2018	6992.68	7162.03	48	Marcellus

API 47-017-06838 Farm Name John Paul Strickling, et al Well Number Jimmy 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	8/29/2018	70.7151	8187.012	6484	4043	261700	10799	N/A
2	8/30/2018	79.8102	8289.799	5713	4092	400690	7965	N/A
3	8/30/2018	77.6117	8105.432	5795	4022	405700	8310	N/A
4	8/30/2018	80.274	8197.547	5738	3926	404700	7945	N/A
5	8/31/2018	80.2218	8245.837	5565	3752	403700	7876	N/A
6	8/31/2018	77.6621	8033.825	5556	3976	404450	7881	N/A
7	9/1/2018	78.208	7907.871	6507	4042	402040	7844	N/A
8	9/1/2018	79.344	7824.815	6099	4192	403600	7832	N/A
9	9/2/2018	78.3103	7898.46	6059	4006	402320	7781	N/A
10	9/2/2018	79.0473	8185.554	5888	4074	423800	7948	N/A
11	9/2/2018	77.6994	8142.844	5756	4092	402890	7749	N/A
12	9/3/2018	78.405	7945.07	4945	3877	404500	8354	N/A
13	9/3/2018	74.737	8229.818	6335	4081	135300	6382	N/A
14	9/4/2018	78.1432	8075.122	6232	4149	402090	7776	N/A
15	9/4/2018	77.0148	8119.618	6110	3842	456250	8453	N/A
16	9/4/2018	79.0603	8098.665	5930	4281	460610	8493	N/A
17	9/5/2018	79.4588	7695.844	5688	3737	456200	8516	N/A
18	9/5/2018	79.1872	7739.263	5730	4066	404780	7750	N/A
19	9/6/2018	78.8912	7903.571	5847	3935	403210	7914	N/A
20	9/6/2018	79.2805	8092.456	5746	4026	403460	7717	N/A
21	9/7/2018	79.4134	7881.445	5810	4322	403850	7715	N/A
22	9/7/2018	77.6567	7395.702	6063	3873	402750	7814	N/A
23	9/8/2018	79.3461	7710.072	5997	4163	402790	7687	N/A
24	9/8/2018	79.1011	7858.344	5800	4132	403330	7707	N/A
25	9/8/2018	79.2662	7733.436	5912	4039	403620	7646	N/A
26	9/9/2018	78.2233	7451.466	5659	4149	404900	8690	N/A
27	9/9/2018	78.9753	7738.59	6088	4775	403780	7632	N/A
28	9/10/2018	79.7664	7800.189	5363	3755	403055	7584	N/A
29	9/11/2018	78.1972	7375.983	5550	4032	405400	8431	N/A
30	9/11/2018	78.3968	7153.384	5960	4645	405000	7698	N/A
31	9/12/2018	80.8207	7353.845	5621	3952	405100	7590	N/A
32	9/12/2018	79.3675	7355.294	5932	4636	405050	7705	N/A
33	9/13/2018	79.8498	7507.502	5623	5095	401600	7584	N/A
34	9/13/2018	79.0871	7246.257	5560	5643	402730	7695	N/A
35	9/13/2018	78.8187	7436.492	5461	4766	393950	7770	N/A
36	9/14/2018	80.1803	7233.862	5058	5148	404300	7560	N/A
37	9/14/2018	78.895	7397.113	6090	3828	404800	7902	N/A
38	9/15/2018	79.1758	7695.353	4294	3999	404800	7569	N/A
39	9/15/2018	79.3367	7301.491	6214	3874	404900	7631	N/A
40	9/15/2018	77.0767	7677.761	5748	4064	398000	7715	N/A
41	9/16/2018	78.8933	7466.538	6000	4017	403200	7549	N/A
42	9/16/2018	78.9829	7397.445	5982	3922	405050	7601	N/A
43	9/16/2018	79.5593	7197.945	6080	4057	403700	7492	N/A
44	9/17/2018	79.5535	7471.244	5948	4283	402680	7857	N/A
45	9/17/2018	79.4047	7543.276	5689	4106	402640	7543	N/A
46	9/18/2018	80.2829	6939.341	6179	4863	401300	7440	N/A
47	9/18/2018	79.7206	7114.456	6549	4291	401670	7667	N/A
	AVG=	79	7,710	5,829	4,184	18,725,935	369,759	TOTAL

API 47-017-06838 Farm Name John Paul Strickling, et al Well Number Jimmy 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
Sandstone	0	187	0	187
Sandstone tr coal	est 187	267	est 187	267
Sandy shale	est 267	807	est 267	807
Calcareous Shale	est 807	1,187	est 807	1,187
Shale tr coal	est 1187	1,207	est 1187	1,207
Sandy Shale	est 1207	1,527	est 1207	1,527
Sandstone	est 1527	1,567	est 1527	1,567
Silty shale	est 1567	1,667	est 1567	1,667
Sandstone	est 1667	1,787	est 1667	1,787
Sandy shale	est 1787	1,947	est 1787	1,947
Big Lime	1,947	2,518	1,947	2,518
Fifty Foot Sandstone	2,518	2,728	2,518	2,728
Gordon	2,728	2,925	2,728	2,925
Fifth Sandstone	2,925	2,986	2,925	2,986
Bayard	2,986	3,793	2,986	3,796
Speechley	3,793	4,068	3,796	4,077
Balltown	4,068	4,564	4,077	4,589
Bradford	4,564	5,011	4,589	5,052
Benson	5,011	5,279	5,052	5,329
Alexander	5,279	6,278	5,329	6,372
Sycamore	6,278	6,450	6,372	6,576
Middlesex	6,450	6,586	6,576	6,785
Burkett	6,586	6,617	6,785	6,845
Tully	6,617	6,663	6,845	6,948
Marcellus	6,663	N/A	6,948	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.

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/29/2018
Job End Date:	9/18/2018
State:	West Virginia
County:	Doddridge
API Number:	47-017-06838-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Jimmy 1H
Latitude:	39.33216400
Longitude:	-80.78393100
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,788
Total Base Water Volume (gal):	16,021,292
Total Base Non Water Volume:	0



## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Service Abstract Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Antero Resources	Carrier/Base Fluid	Water	7732-18-5	100.00000	87.52012	
Sand	J.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	12.26657	
HCL Acid (12.6%-17.5%)	J.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.40000	0.13355	
WFRA-405	J.S. Well Services, LLC	Friction Reducer	Hydrogen Chloride	7647-01-0	17.50000	0.03105	
LGC-15	J.S. Well Services, LLC	Gelling Agents	2-Propenoic acid, polymer with propanamide Hydrated light distillate (petroleum)	29003-06-9 64742-47-8	30.00000 30.00000	0.01601 0.01289	
			Guar Gum	9000-30-0	50.00000	0.00599	
			Petroleum Distillates	64742-47-8	60.00000	0.00567	
			Suspending agent (solid)	14808-60-7	3.00000	0.00092	
			Surfactant	68439-51-0	3.00000	0.00036	



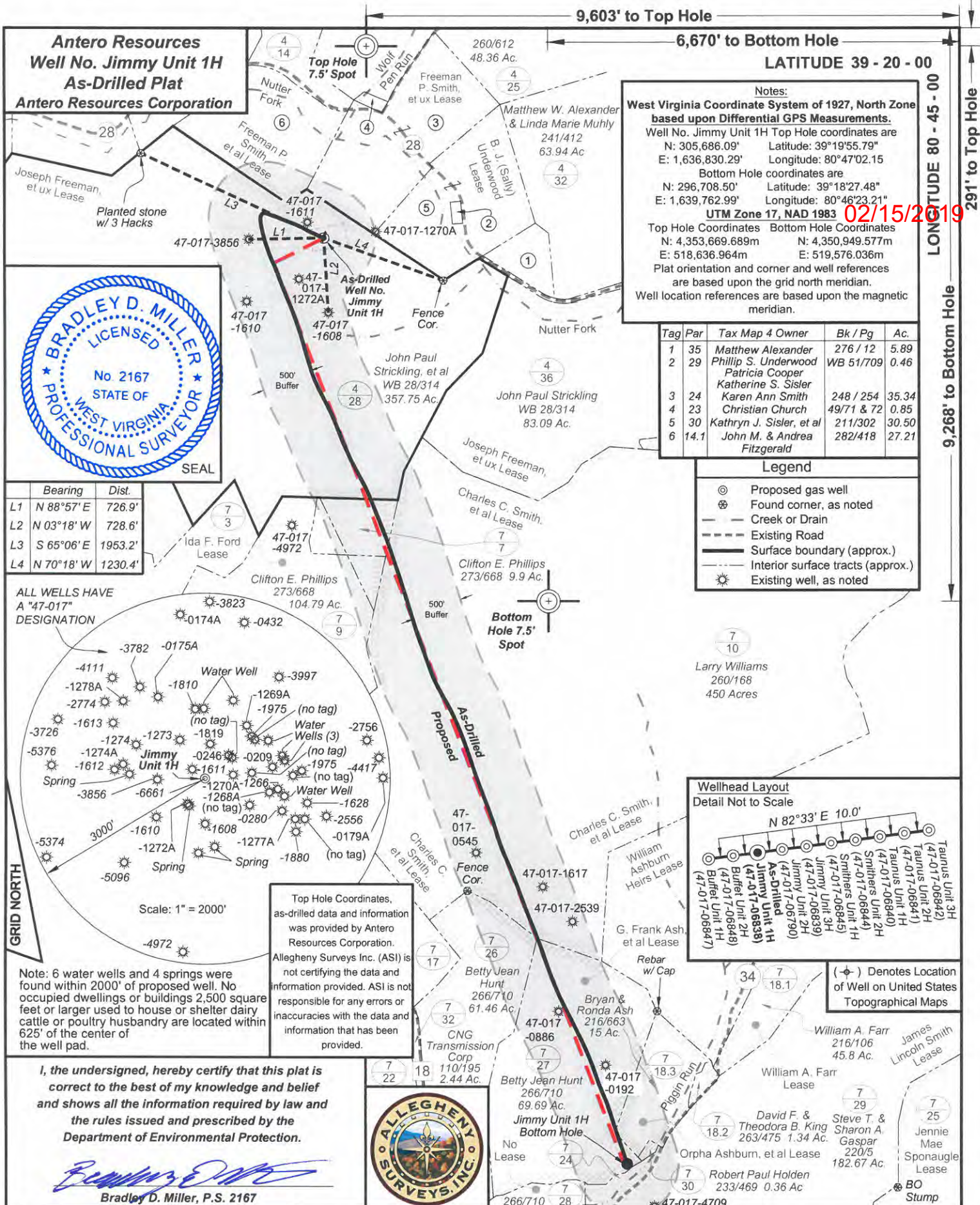
Bioclear 2000	J.S. Well Services, LLC	Anti-Bacterial Agent							
			2,2-dibromo-3-nitropropionamide	10222-01-2		20.00000		0.00404	
			Deionized Water	7732-18-5		28.00000		0.00231	
SI-1200s	J.S. Well Services, LLC	Scale Inhibitor							
			Proprietary Scale Inhibitor	Proprietary		10.00000		0.00126	
AP One	J.S. Well Services, LLC	Gel Breakers							
			Ammonium Persulfate	7727-54-0		100.00000		0.00016	
AI-303	J.S. Well Services, LLC	Acid Corrosion Inhibitors							
			Ethylene glycol	107-21-1		40.00000		0.00004	
			Cinnamaldehyde	104-55-2		20.00000		0.00002	
			Formic acid	64-18-6		20.00000		0.00002	
			Butyl cellosolve	111-76-2		20.00000		0.00001	
			Polyether	60828-78-6		10.00000		0.00001	
			Acetophenone, thiourea, formaldehyde polymer	68527-49-1		5.00000		0.00000	

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

\* Total Water Volume sources may include fresh water, produced water, and/or recycled water

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

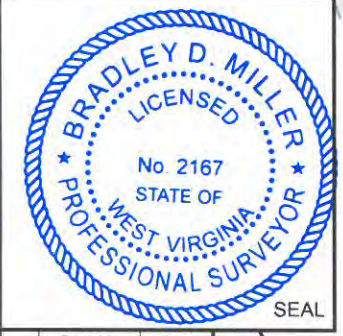
Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided. Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)



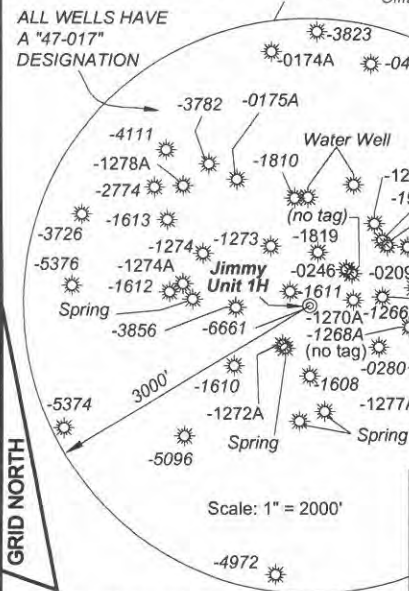
**Notes:**  
**West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.**  
 Well No. Jimmy Unit 1H Top Hole coordinates are  
 N: 305,686.09' Latitude: 39°19'55.79"  
 E: 1,636,830.29' Longitude: 80°47'02.15"  
 Bottom Hole coordinates are  
 N: 296,708.50' Latitude: 39°18'27.48"  
 E: 1,639,762.99' Longitude: 80°46'23.21"  
**UTM Zone 17, NAD 1983**  
 Top Hole Coordinates Bottom Hole Coordinates  
 N: 4,353,669.689m N: 4,350,949.577m  
 E: 518,636.964m E: 519,576.036m  
 Plat orientation and corner and well references are based upon the grid north meridian.  
 Well location references are based upon the magnetic meridian.

Tag	Par	Tax Map 4 Owner	Bk / Pg	Ac.
1	35	Matthew Alexander	276 / 12	5.89
2	29	Phillip S. Underwood Patricia Cooper Katherine S. Sisler	WB 51/709	0.46
3	24	Karen Ann Smith	248 / 254	35.34
4	23	Christian Church	49/71 & 72	0.85
5	30	Kathryn J. Sisler, et al	211/302	30.50
6	14.1	John M. & Andrea Fitzgerald	282/418	27.21

- Legend**
- ⊙ Proposed gas well
  - ⊕ Found corner, as noted
  - Creek or Drain
  - - - Existing Road
  - Surface boundary (approx.)
  - - - Interior surface tracts (approx.)
  - ☀ Existing well, as noted



	Bearing	Dist.
L1	N 88°57' E	726.9'
L2	N 03°18' W	728.6'
L3	S 65°06' E	1953.2'
L4	N 70°18' W	1230.4'



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.

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



FILE NO: 50-30-WU-14  
 DRAWING NO: Jimmy 1H As-Drilled Plat  
 SCALE: 1" = 1200'  
 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: December 27 2018  
 OPERATOR'S WELL NO. Jimmy Unit 1H  
 API WELL NO. 47 - 017 - 06838

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION: ELEVATION: As-Built - 1065' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: West Union  
 DISTRICT: West Union Orpha Ashburn, et al; COUNTY: Doddridge  
 SURFACE OWNER: John Paul Strickling, et al Joseph Freeman, et ux ACREAGE: 357.75  
 ROYALTY OWNER: Charles C. Smith, et al; G. Frank Ash, et al; Ida F. Ford LEASE NO: ACREAGE: 140; 450; 114  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,756' TVD  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 16,379' 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