

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

API 47-095-02408 County Tyler District Meade
Quad Middlebourne 7.5' Pad Name Neat Pad Field/Pool Name -----
Farm name Roger R. Weese Well Number Jim 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 4363557m Easting 505372m
Landing Point of Curve Northing 4361650.81m Easting 505317.71m
Bottom Hole Northing 4360221m Easting 505839m

Elevation (ft) 1005' 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 4/13/2017 Date drilling commenced 11/15/2017 Date drilling ceased 10/26/2018
Date completion activities began 12/14/2018 Date completion activities ceased 3/27/2019
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 100', 121', 166' 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 1441' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed JUN 14 2019
WV Department of Environmental Protection

Reviewed by:
JCB
6/24/2019

API 47-095 - 02408 Farm name Roger R. Weese Well number Jim 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"	105'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	370'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2659'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17986'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7080'		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 ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	204 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	320 sx	15.6	1.18	826	0'	8 Hrs.
Coal							
Intermediate 1	Class A	890 sx	15.6	1.18	1181	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	740 sx (Lead) 1715 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.53 (Lead), 1.83 (Tail)		-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 18006' MD, 6375' TVD (BHL), 6383' (Deepest Point Drilled) Loggers TD (ft) 18006' MD

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

Plug back procedure N/A

Kick off depth (ft) 6200'

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

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API 47- 095 - 02408 Farm name Roger R. Weese Well number Jim Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6262' (TOP)</u>	<u>TVD</u>	<u>7138' (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 2800 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 2514 mcfpd Oil 57 bpd NGL --- bpd Water 147 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 Road 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 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 6/10/2019

API 47-095-02408 Farm Name Roger R. Weese Well Number Jim Unit 1H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	2/16/2019	17830.8		60	Marcellus
2	2/17/2019	17633.592	17799.932	60	Marcellus
3	2/17/2019	17436.384	17602.724	60	Marcellus
4	2/18/2019	17239.176	17405.516	60	Marcellus
5	2/18/2019	17041.968	17208.308	60	Marcellus
6	2/19/2019	16844.76	17011.1	60	Marcellus
7	2/19/2019	16647.552	16813.892	60	Marcellus
8	2/20/2019	16450.344	16616.684	60	Marcellus
9	2/21/2019	16253.136	16419.476	60	Marcellus
10	2/21/2019	16055.928	16222.268	60	Marcellus
11	2/23/2019	15858.72	16025.06	60	Marcellus
12	2/24/2019	15661.512	15827.852	60	Marcellus
13	2/24/2019	15464.304	15630.644	60	Marcellus
14	2/24/2019	15267.096	15433.436	60	Marcellus
15	2/25/2019	15069.888	15236.228	60	Marcellus
16	2/25/2019	14872.68	15039.02	60	Marcellus
17	2/25/2019	14675.472	14841.812	60	Marcellus
18	2/26/2019	14478.264	14644.604	60	Marcellus
19	2/26/2019	14281.056	14447.396	60	Marcellus
20	2/26/2019	14083.848	14250.188	60	Marcellus
21	2/27/2019	13886.64	14052.98	60	Marcellus
22	2/27/2019	13689.432	13855.772	60	Marcellus
23	2/27/2019	13492.224	13658.564	60	Marcellus
24	2/27/2019	13295.016	13461.356	60	Marcellus
25	2/28/2019	13097.808	13264.148	60	Marcellus
26	2/28/2019	12900.6	13066.94	60	Marcellus
27	3/1/2019	12703.392	12869.732	60	Marcellus
28	3/1/2019	12506.184	12672.524	60	Marcellus
29	3/1/2019	12308.976	12475.316	60	Marcellus
30	3/1/2019	12111.768	12278.108	60	Marcellus
31	3/2/2019	11914.56	12080.9	60	Marcellus
32	3/2/2019	11717.352	11883.692	60	Marcellus
33	3/2/2019	11520.144	11686.484	60	Marcellus
34	3/3/2019	11322.936	11489.276	60	Marcellus
35	3/3/2019	11125.728	11292.068	60	Marcellus
36	3/3/2019	10928.52	11094.86	60	Marcellus
37	3/3/2019	10731.312	10897.652	60	Marcellus
38	3/4/2019	10534.104	10700.444	60	Marcellus
39	3/4/2019	10336.896	10503.236	60	Marcellus
40	3/4/2019	10139.688	10306.028	60	Marcellus
41	3/5/2019	9942.48	10108.82	60	Marcellus
42	3/6/2019	9745.272	9911.612	60	Marcellus
43	3/7/2019	9548.064	9714.404	60	Marcellus
44	3/7/2019	9350.856	9517.196	60	Marcellus
45	3/7/2019	9153.648	9319.988	60	Marcellus
46	3/8/2019	8956.44	9122.78	60	Marcellus
47	3/8/2019	8759.232	8925.572	60	Marcellus
48	3/8/2019	8562.024	8728.364	60	Marcellus
49	3/9/2019	8364.816	8531.156	60	Marcellus
50	3/9/2019	8167.608	8333.948	60	Marcellus
51	3/9/2019	7970.4	8136.74	60	Marcellus
52	3/9/2019	7773.192	7939.532	60	Marcellus
53	3/10/2019	7575.984	7742.324	60	Marcellus
54	3/10/2019	7378.776	7545.116	60	Marcellus
55	3/10/2019	7181.568	7347.908	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	2/16/2019	62.6	8004	6975	3789	18768	5144.857	N/A
2	2/17/2019	70.47	8339	6514	3539	18392	8607.952	N/A
3	2/17/2019	70.3	8239	6478	3941	18658	8258.071	N/A
4	2/18/2019	70.85	8373	5882	3646	17901	8284.5	N/A
5	2/18/2019	72.9	8372	5796	3252	17420	8284.905	N/A
6	2/19/2019	74.77	8202	6031	3732	17965	9427.405	N/A
7	2/19/2019	72.08	8282	5718	3759	17759	8097.595	N/A
8	2/20/2019	74.03	8375	5915	3901	18191	8297.714	N/A
9	2/21/2019	75.03	8211	5158	3696	17065	8405.048	N/A
10	2/21/2019	76.19	8253	5800	3689	17742	8240.381	N/A
11	2/23/2019	74.33	8261	5692	3501	17454	8349.476	N/A
12	2/24/2019	71.89	8104	6015	3405	17524	8047.476	N/A
13	2/24/2019	76.1	8367	5749	3545	17661	8044.571	N/A
14	2/24/2019	77.32	8242	5671	3807	17720	8090.476	N/A
15	2/25/2019	77.69	8223	5250	3442	16915	8020.119	N/A
16	2/25/2019	78	8191	5028	3687	16906	8109.024	N/A
17	2/25/2019	78.32	8205	6640	3922	18767	8204.286	N/A
18	2/26/2019	77.48	8192	5335	3603	17130	8335.452	N/A
19	2/26/2019	76.68	8443	5500	3905	17848	8176.405	N/A
20	2/26/2019	74.49	8346	5552	3844	17742	8230.833	N/A
21	2/27/2019	78	8289	5461	4012	17762	8202.31	N/A
22	2/27/2019	76.05	8209	5595	3917	17721	8033.857	N/A
23	2/27/2019	75.92	8207	5630	3601	17438	7907.214	N/A
24	2/27/2019	75.77	8122	5625	3778	17525	8086.548	N/A
25	2/28/2019	78.58	8133	5564	4001	17698	7994.714	N/A
26	2/28/2019	73.48	8122	5747	4050	17919	7888.833	N/A
27	3/1/2019	78.34	8070	5722	3876	17668	8154	N/A
28	3/1/2019	78.64	8247	5451	3858	17556	8065.524	N/A
29	3/1/2019	77.19	8041	5364	4191	17596	8134.405	N/A
30	3/1/2019	68.4	7630	5506	4505	17641	8093.071	N/A
31	3/2/2019	74.03	8267	5756	4015	18038	9082.048	N/A
32	3/2/2019	77.56	7714	5975	4225	17914	7887.048	N/A
33	3/2/2019	79.41	8009	6068	4265	18342	8058.143	N/A
34	3/3/2019	79.87	8184	5955	3911	18050	7802	N/A
35	3/3/2019	77.2	7792	5845	3779	17416	7984.524	N/A
36	3/3/2019	73.6	7686	5916	3799	17401	8247.048	N/A
37	3/3/2019	76.34	7770	5833	3862	17465	7974.31	N/A
38	3/4/2019	78.17	7757	5635	3882	17274	8074.548	N/A
39	3/4/2019	78.7	7813	4947	4508	17268	9271.667	N/A
40	3/4/2019	79.98	7751	4987	3327	16065	7981.286	N/A
41	3/5/2019	76.96	7697	5456	3444	16597	8117.548	N/A
42	3/6/2019	77.7	7857	5698	3517	17072	8093.786	N/A
43	3/7/2019	75.23	7315	5080	3809	16204	8317.524	N/A
44	3/7/2019	79.2	7705	6133	3963	17801	7929.333	N/A
45	3/7/2019	78.6	7672	6107	3772	17551	8132.214	N/A
46	3/8/2019	70.35	7678	6517	3443	17638	8043.643	N/A
47	3/8/2019	75.3	7146	6404	3825	17375	7867.762	N/A
48	3/8/2019	77.8	7183	5965	3713	16861	8471.476	N/A
49	3/9/2019	80.58	7699	6554	3807	18060	7921.786	N/A
50	3/9/2019	80.3	7366	6575	3819	17760	7794.262	N/A
51	3/9/2019	76.17	7444	6831	3653	17928	7759.024	N/A
52	3/9/2019	78.61	7078	6538	3834	17450	7853.69	N/A
53	3/10/2019	76.31	6968	6252	3840	17060	7804.143	N/A
54	3/10/2019	80.37	6928	6554	4193	17675	7791.762	N/A
55	3/10/2019	78.14	6724	5657	3929	16310	8660.667	N/A
		75.7	8,073	5,728	3,810	792,510	366,170	TOTAL

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Silty Sandstone	0	190	0	190
Sandy siltstone	190	290	190	290
Sandstone	290	600	290	600
Silty Sandstone	600	870	600	870
limey siltstone	870	945	870	945
silty sandstone, tr. coal	945	1,095	945	1,095
silty sandstone	1,095	1,490	1,095	1,490
silty shale	1,490	1,620	1,490	1,620
sandstone, tr coal	1,620	1,630	1,620	1,630
silty sandstone	1,630	1,670	1,630	1,670
sandstone	1,670	1,745	1,670	1,745
sandy shale	1,745	1,770	1,745	1,770
shaly sand	1,770	1,860	1,770	1,905
Big Lime	1,875	2,625	1,920	2,715
Fifty Foot Sandstone	2,625	2,733	2,715	2,830
Gordon	2,733	3,065	2,830	3,193
Fifth Sandstone	3,065	3,127	3,193	3,260
Bayard	3,127	3,895	3,260	4,148
Speechley	3,895	4,197	4,148	4,494
Balltown	4,197	4,569	4,494	4,931
Bradford	4,569	4,922	4,931	5,344
Benson	4,922	5,148	5,344	5,606
Alexander	5,148	6,161	5,606	6,842
Sycamore	6,019	6,137	6,637	6,818
Middlesex	6,137	6,226	6,818	7,013
Burkett	6,226	6,250	7,013	7,091
Tully	6,250	6,262	7,091	7,138
Marcellus	6,262	NA	7,138	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.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	2/16/2019
Job End Date:	3/10/2019
State:	West Virginia
County:	Tyler
API Number:	47-095-02408-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Jim Unit 1H
Latitude:	39.42144700
Longitude:	-80.93775300
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,382
Total Base Water Volume (gal):	19,412,474
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	87.81436	Density = 8.340
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.21364	

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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	11.93686
			Hydrochloric acid	7647-01-0	15.00000	0.02477
			Inorganic salt	Proprietary	30.00000	0.01641
			Acrylamide acrylate polymer	Proprietary	30.00000	0.01641
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01641
			Ethylene glycol	107-21-1	60.00000	0.00869
			Guar gum	9000-30-0	100.00000	0.00575
			Glutaraldehyde	111-30-8	30.00000	0.00253
			Telmer	Proprietary	10.00000	0.00145
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5.00000	0.00042
			Sodium persulfate	7775-27-1	100.00000	0.00016
			Sodium polyacrylate	9003-04-7	1.00000	0.00014
			Methanol	67-56-1	100.00000	0.00013
			Ethanol	64-17-5	1.00000	0.00008
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00004
			Modified thiourea polymer	Proprietary	30.00000	0.00004
			Phosphoric acid	7664-38-2	0.10000	0.00001
			Hexadecene	629-73-2	5.00000	0.00001
			Propargyl alcohol	107-19-7	5.00000	0.00001
			Ethoxylated alcohols	Proprietary	5.00000	0.00001
			Acrylic acid	79-10-7	0.01000	0.00000

Denise Tuck,
Halliburton, 3000 N.
Sam Houston Pkwy E.,
Houston, TX 77032,
281-871-6226

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			Sodium sulfate	7757-82-6	0.10000	0.00000
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- * 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)

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LATITUDE 39°27'30"

5,957'

4,436' TO BOTTOM HOLE
LATITUDE 39°25'00"

LONGITUDE 80°55'00"

9,209' TO BOTTOM HOLE

13,437'

LONGITUDE 80°55'00"

Antero Resources Corporation
Well No. Jim Unit 1H
47-095-02408

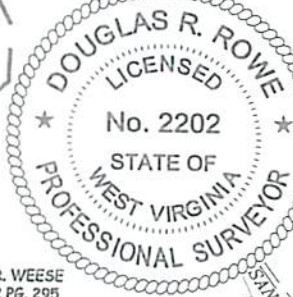
NOTES:
WELL 1H TOP HOLE INFORMATION:
N: 338,859ft E: 1,593,844ft
LAT: 39°25'17.20" LON: 80°56'15.91"
BOTTOM HOLE INFORMATION:
N: 327,887ft E: 1,595,192ft
LAT: 39°23'28.98" LON: 80°55'56.50"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. FLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
N: 4,363,557m E: 505,372m
BOTTOM HOLE INFORMATION:
N: 4,360,221m E: 505,839m

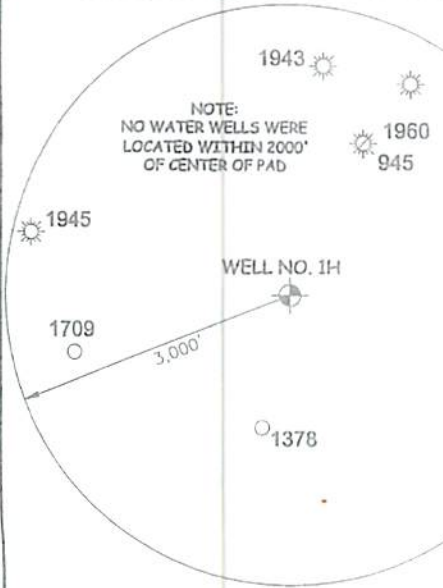
PAD LAYOUT



WV NORTH ZONE
GRID NORTH



- 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 ANTERO RESOURCES CORPORATION.
 - 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.



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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

JOB # 14-128WA
DRAWING # JIMHAD
SCALE 1" = 1000'
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 06/04/19
OPERATOR'S WELL# JIM UNIT #1H

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION 1,005' - AS BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
QUADRANGLE MIDDLEBOURNE 7.5' DISTRICT MEADE COUNTY TYLER
SURFACE OWNER ROGER R. WEESE ACREAGE 177.31 ACRES +/-
OIL & GAS ROYALTY OWNER ROGER R. WEESE; JAMES A. SMITH; STEVEN P. CARSE;
RONNIE LEE SMITH; DAVID QUENTIN CARSE; DAVID QUENTIN CARSE; DAVID QUENTIN CARSE; CHARLES E. STULL ET UX; LEEMAN W. MASON ET UX; GRACE SEWELL DeCARLO; JAMES McCULLOUGH ET UX; RONALD P. FLETCHER; RICHARD HALL BARNARD
OIL & GAS ROYALTY OWNER 196,709 AC±; 31,919 AC±; 81.57 AC±; 97,544 AC±;
3,623 AC±; 14,022 AC±; 10 AC±; 105 AC±; 37.69 AC±; 85.52 AC±; 78 AC±; 44.35 AC±; 284.33 AC±
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL
FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
PLUG & ABANDON CLEAN OUT & REPLUG PERFORATE NEW FORMATION
OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,375' TVD 18,006' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

47 - 095 - 02408
STATE COUNTY PERMIT