

APPROVED

WR-35
Rev. 8/23/13

NAME: [Signature] Page of

DATE 1/3/18

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

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API 47 - 017 - 06703 County Doddridge District Central
Quad Oxford 7.5' Pad Name James Webb Pad Field/Pool Name ----
Farm name James E. Webb Well Number Hunter 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 4343274m Easting 510953m
Landing Point of Curve Northing 4343237.565m Easting 511227.767m
Bottom Hole Northing 4340303m Easting 512558m

Elevation (ft) 991' 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 03/25/2015 Date drilling commenced 07/31/2015 Date drilling ceased 07/09/2016
Date completion activities began 01/29/2017 Date completion activities ceased 09/09/2017
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 62', 173' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1145' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 1552', 1632' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by: _____

01/05/2018

API 47-017 - 06703 Farm name James E. Webb Well number Hunter Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	52'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	450'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2567'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17763'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6743'		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	60 sx	15.6	1.18	71	0'	8 Hrs.
Surface	Class A	521 sx	15.6	1.19	620	0'	8 Hrs.
Coal							
Intermediate 1	Class A	998 sx	15.6	1.18	1178	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	804 sx (Lead) 1373 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.44 (Lead), 1.84 (Tail)	3684	-600' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17763' MD, 8516' TVD (BHL) & 6530' TVD (Deepest Point Drilled) Loggers TD (ft) 17750' MD

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

Plug back procedure N/A

Kick off depth (ft) 5710'

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Mahogany Unit 2H API #47-017-06702). Please reference the wireline logs submitted with Form WR-35 for Mahogany Unit 2H. 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

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API 47- 017 - 06703 Farm name James E. Webb Well number Hunter Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6467' (TOP)</u> TVD	<u>6938' (TOP)</u> 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 10367 mcfpd Oil 135 bpd NGL --- bpd Water 1251 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 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 Rd. City North Huntingdon 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 717 17th Street City Denver State CO Zip 80202

Please insert additional pages as applicable.

Completed by Samantha Klaas Telephone 303-357-6759
Signature  Title Permitting Agent Date 11/29/2017

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

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	1/29/2017	17490	17660	60	Marcellus
2	1/29/2017	17288	17458	60	Marcellus
3	1/29/2017	17086	17256	60	Marcellus
4	1/30/2017	16883	17054	60	Marcellus
5	1/30/2017	16681	16852	60	Marcellus
6	1/30/2017	16479	16650	60	Marcellus
7	1/31/2017	16277	16448	60	Marcellus
8	1/31/2017	16075	16246	60	Marcellus
9	1/31/2017	15873	16044	60	Marcellus
10	2/1/2017	15671	15842	60	Marcellus
11	2/1/2017	15469	15640	60	Marcellus
12	2/2/2017	15267	15437	60	Marcellus
13	2/2/2017	15065	15235	60	Marcellus
14	2/2/2017	14863	15033	60	Marcellus
15	2/2/2017	14661	14831	60	Marcellus
16	2/3/2017	14459	14629	60	Marcellus
17	2/3/2017	14257	14427	60	Marcellus
18	2/3/2017	14055	14225	60	Marcellus
19	2/4/2017	13853	14023	60	Marcellus
20	2/4/2017	13651	13821	60	Marcellus
21	2/4/2017	13449	13619	60	Marcellus
22	2/4/2017	13247	13417	60	Marcellus
23	2/5/2017	13045	13215	60	Marcellus
24	2/5/2017	12842	13013	60	Marcellus
25	2/5/2017	12640	12811	60	Marcellus
26	2/5/2017	12438	12609	60	Marcellus
27	2/6/2017	12236	12407	60	Marcellus
28	2/6/2017	12034	12205	60	Marcellus
29	2/6/2017	11832	12003	60	Marcellus
30	2/6/2017	11630	11801	60	Marcellus
31	2/7/2017	11428	11599	60	Marcellus
32	2/7/2017	11226	11396	60	Marcellus
33	2/7/2017	11024	11194	60	Marcellus
34	2/8/2017	10822	10992	60	Marcellus
35	2/8/2017	10620	10790	60	Marcellus
36	2/8/2017	10418	10588	60	Marcellus
37	2/8/2017	10216	10386	60	Marcellus
38	2/8/2017	10014	10184	60	Marcellus
39	2/9/2017	9812	9982	60	Marcellus
40	2/9/2017	9610	9780	60	Marcellus
41	2/9/2017	9408	9578	60	Marcellus
42	2/9/2017	9206	9376	60	Marcellus
43	2/10/2017	9004	9174	60	Marcellus
44	2/10/2017	8801	8972	60	Marcellus
45	2/10/2017	8599	8770	60	Marcellus
46	2/10/2017	8397	8568	60	Marcellus
47	2/11/2017	8195	8366	60	Marcellus
48	2/11/2017	7993	8164	60	Marcellus
49	2/11/2017	7791	7962	60	Marcellus
50	2/11/2017	7589	7760	60	Marcellus
51	2/11/2017	7387	7558	60	Marcellus
52	2/12/2017	7185	7355	60	Marcellus
53	2/12/2017	6983	7153	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	1/29/2017	68.4	8155	6780	3031	392650	13557	N/A
2	1/29/2017	72.3	7831	6275	4920	390400	9535	N/A
3	1/29/2017	75.4	7840	5779	4711	412450	13972	N/A
4	1/30/2017	75.8	7557	5633	3481	412400	9467	N/A
5	1/30/2017	75.0	7554	5678	3556	412150	9496	N/A
6	1/30/2017	72.8	7708	5494	4569	411750	10421	N/A
7	1/31/2017	72.0	7519	5392	3484	411700	10101	N/A
8	1/31/2017	74.6	7817	5934	4130	401700	9939	N/A
9	1/31/2017	71.7	7577	5750	3111	413200	9380	N/A
10	2/1/2017	72.6	7512	5623	3253	413200	9349	N/A
11	2/1/2017	76.2	7501	5478	3115	413800	9295	N/A
12	2/2/2017	76.5	7660	5306	3615	412950	9275	N/A
13	2/2/2017	75.5	7699	5883	3176	413000	9379	N/A
14	2/2/2017	73.7	7530	5517	3075	412850	10303	N/A
15	2/2/2017	74.6	7493	5403	3190	412650	9320	N/A
16	2/3/2017	75.1	7524	5952	3106	412450	9265	N/A
17	2/3/2017	74.4	7603	5750	3308	412800	9259	N/A
18	2/3/2017	73.9	7495	5612	3140	412700	9358	N/A
19	2/4/2017	75.9	7510	5768	3020	413400	9200	N/A
20	2/4/2017	77.3	7445	5298	2980	413950	9204	N/A
21	2/4/2017	76.3	7333	5669	2995	413300	9236	N/A
22	2/4/2017	77.9	7206	5545	3233	412400	9149	N/A
23	2/5/2017	78.2	7425	5103	3580	412550	9193	N/A
24	2/5/2017	76.5	7445	5639	3354	413550	9206	N/A
25	2/5/2017	78.1	7497	5633	3215	413950	9130	N/A
26	2/5/2017	77.9	7766	5366	4080	412900	11602	N/A
27	2/6/2017	76.8	7540	5771	3148	412700	9123	N/A
28	2/6/2017	77.0	7416	5776	2963	412750	9150	N/A
29	2/6/2017	77.6	7066	7041	3022	413800	9121	N/A
30	2/6/2017	77.8	7157	5557	3123	412800	9146	N/A
31	2/7/2017	78.3	7347	6020	3406	412000	9116	N/A
32	2/7/2017	78.5	7381	6223	5292	411300	9516	N/A
33	2/7/2017	71.3	7764	5510	4464	411900	12189	N/A
34	2/8/2017	76.6	7408	5357	4203	412300	10423	N/A
35	2/8/2017	78.7	7445	5464	3991	412750	9054	N/A
36	2/8/2017	78.2	7397	5227	3763	412450	9117	N/A
37	2/8/2017	78.4	7190	5330	3379	413650	9108	N/A
38	2/8/2017	78.0	7075	5586	3530	412650	9093	N/A
39	2/9/2017	78.6	7148	5647	3645	412250	9103	N/A
40	2/9/2017	77.1	7098	5647	3296	413900	9032	N/A
41	2/9/2017	78.9	7290	5551	3296	412900	8984	N/A
42	2/9/2017	78.7	7357	5219	4741	412550	11029	N/A
43	2/10/2017	78.9	7474	5219	5011	351300	10406	N/A
44	2/10/2017	77.5	7121	5090	4098	413450	9053	N/A
45	2/10/2017	76.9	7134	5129	4386	412150	9018	N/A
46	2/10/2017	77.2	7054	5326	4585	412250	9258	N/A
47	2/11/2017	79.5	6996	5703	3352	412400	8927	N/A
48	2/11/2017	77.3	6676	6286	3088	413300	8906	N/A
49	2/11/2017	75.7	7267	6167	3588	413300	10225	N/A
50	2/11/2017	78.6	6574	6397	3005	414550	8944	N/A
51	2/11/2017	74.1	6903	6228	3311	413700	8951	N/A
52	2/12/2017	79.4	7002	5201	3174	412100	8935	N/A
53	2/12/2017	78.4	6375	5798	3047	413750	8899	N/A
AVG=		76.3	7,375	5,674	3,591	21,765,700	510,417	TOTAL

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Fresh Water	62'	N/A	62'	N/A
Fresh Water	173'	N/A	173'	N/A
Siltstone	est. 0	177	est. 0	177
Sandstone	est. 177	237	est. 177	237
Siltstone	est. 237	567	est. 237	567
Sandstone	est. 567	1552	est. 567	1552
Coal	est. 1552	1557	est. 1552	1557
Shale	est. 1557	1587	est. 1557	1587
Sandstone	est. 1587	1632	est. 1587	1632
Coal	est. 1632	1634	est. 1632	1634
Sandstone	est. 1634	2045	est. 1634	2046
Big Lime	2045	2131	2046	2132
Big Injun	2131	2440	2132	2441
Gantz Sand	2440	2686	2441	2687
Fifty Foot Sandstone	2686	2763	2687	2764
Gordon	2763	3080	2764	3081
Fifth Sandstone	3080	3105	3081	3107
Bayard	3105	3433	3107	3434
Warren	3433	3797	3434	3798
Speechley	3797	4541	3798	4542
Bradford	4541	4933	4542	4935
Benson	4933	5199	4935	5200
Alexander	5199	5354	5200	5356
Elk	5354	5804	5356	5806
Rhinestreet	5804	6127	5806	6235
Sycamore	6127	6293	6235	6506
Middlesex	6293	6411	6506	6747
Burkett	6411	6440	6747	6827
Tully	6440	6467	6827	6938
Marcellus	6467	NA	6938	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:	1/29/2017
Job End Date:	2/12/2017
State:	West Virginia
County:	Doddridge
API Number:	47-017-06703-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Hunter 1H
Latitude:	39.23861667
Longitude:	-80.87333333
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,530
Total Base Water Volume (gal):	22,181,804
Total Base Non Water Volume:	0

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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	100.00000	89.33229	
Acetic Acid	CWS	Acid					
				Listed Below			

Sand (Proppant)	CWS	Propping Agent				
				Listed Below		
DWP-111	CWS	Gel Slurry				
				Listed Below		
DAP-902	CWS	Scale Inhibitor				
				Listed Below		
DAP-925	CWS	Acid Corrosion Inhibitor				
				Listed Below		
DWP-975	CWS	Breaker				
				Listed Below		
DWP-641	CWS	Friction Reducer				
				Listed Below		
SANIFRAC 8844	CWS	Biocide				
				Listed Below		
DAP-103	CWS	Iron Control				
				Listed Below		
Other Chemical (s)	Listed Above	See Trade Name (s) List				

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				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	10.45202	
			Hydrochloric acid	7647-01-0	37.00000	0.04797	
			Polymer	26100-47-0	45.00000	0.02905	
			Guar gum	9000-30-0	60.00000	0.02315	
			Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.02315	
			Paraffinic hydrocarbon solvent	64742-47-8	30.00000	0.01937	
			Calcite	471-34-1	1.00000	0.01651	
			Illite	12173-60-3	1.00000	0.00711	
			Ammonium chloride	12125-02-9	11.00000	0.00710	
			Polyethylene glycol mixture	25322-68-3	54.50000	0.00626	
			2-Propenoic acid, homopolymer, sodium salt	9003-04-7	40.00000	0.00621	
			Goethite	1310-14-1	0.10000	0.00499	
			Biotite	1302-27-8	0.10000	0.00342	
			Apatite	64476-38-6	0.10000	0.00342	
			Ilmenite	98072-94-7	0.10000	0.00263	
			Sorbitan monooleate	1338-43-8	4.00000	0.00258	
			2,2-Dibromo-3-Nitrilopropionamide	10222-01-2		0.00230	
			Polyethylene glycol monooleate	9004-96-0	3.00000	0.00194	
			Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00193	
			1,2-Propanediol	57-55-6	10.00000	0.00155	
			Sorbitol tetraoleate	61723-83-9	2.00000	0.00129	
			Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00065	

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			Ammonium Persulfate	7727-54-0	100.00000	0.00062	
			Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00058	
			Sodium bromide	7647-15-6	4.00000	0.00046	
			Citric acid	77-92-9	60.00000	0.00045	
			Dibromoacetonitrile	3252-43-5	3.00000	0.00034	
			Alcohols, C12-14, ethoxylated	84133-50-6	0.50000	0.00032	
			Vinylidene chloride-methyl acrylate copolymer	25038-72-6	30.00000	0.00013	
			Acrylamide	79-06-1	0.10000	0.00006	
			Methanol	67-56-1	60.00000	0.00003	
			Modified thiourea polymer	68527-49-1	30.00000	0.00002	
			Poly(tetrafluoroethylene)	9002-84-0	1.00000	0.00002	
			Hydrated magnesium silicate	14807-96-6	1.00000	0.00002	
			Fatty acids, tall-oil	61790-12-3	30.00000	0.00002	
			Alcohols, C14-15, ethoxylated	68951-67-7	30.00000	0.00002	
			Propargyl Alcohol	107-19-7	10.00000	0.00001	
			Alkenes, C>10 a-	64743-02-8	5.00000	0.00001	
			Formaldehyde	50-00-0	0.10000	0.00001	
			Sodium chloride	7647-14-5	1.00000	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)

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LATITUDE 39°15'00"

11,306'

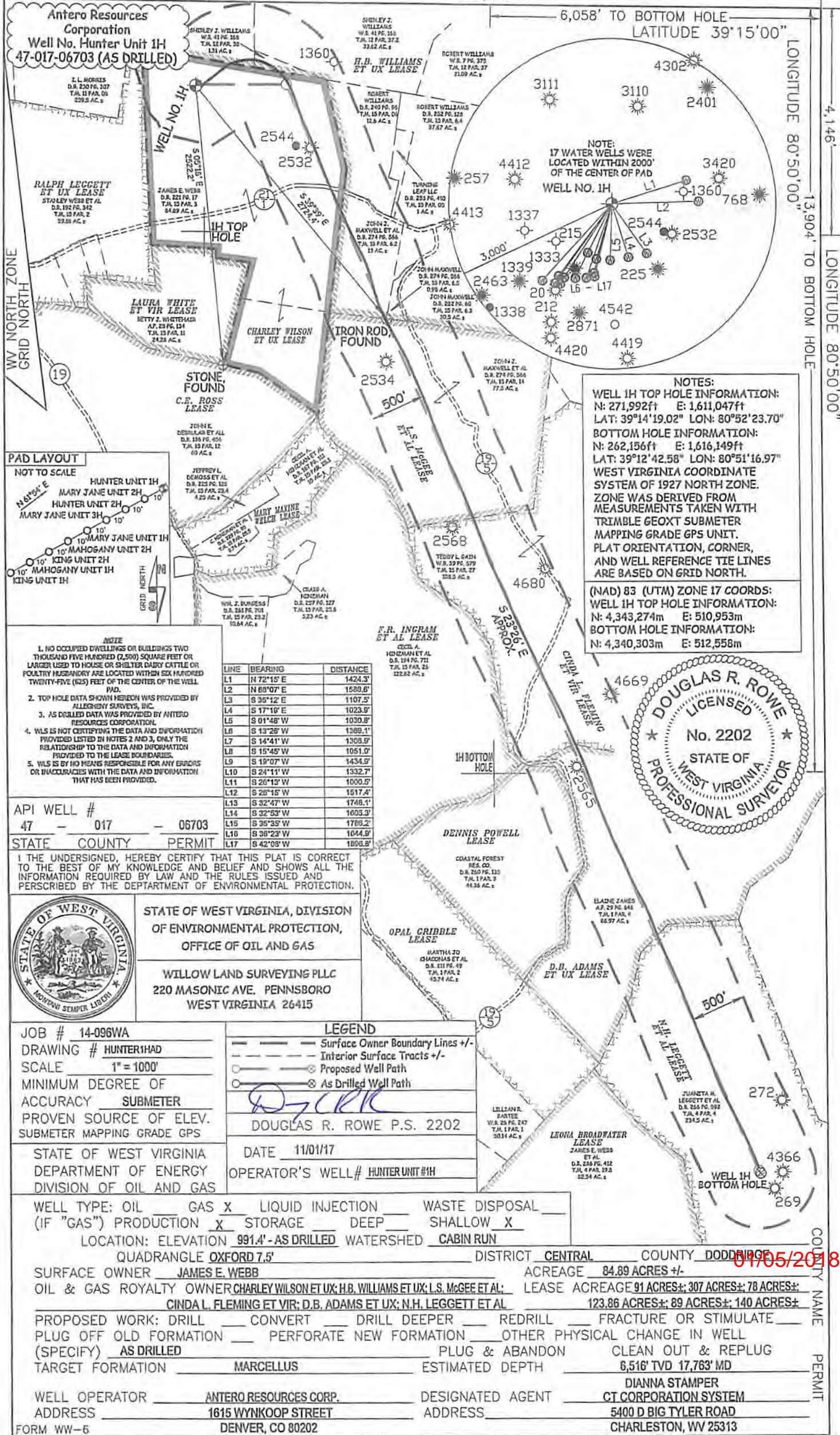
6,058' TO BOTTOM HOLE

LATITUDE 39°15'00"

LONGITUDE 80°50'00"

4,146'

LONGITUDE 80°50'00"



Antero Resources Corporation
Well No. Hunter Unit 1H
47-017-06703 (AS DRILLED)

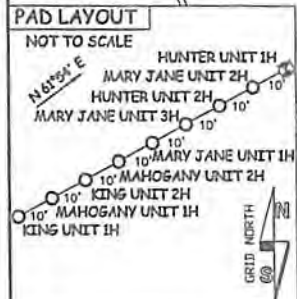
NOTES:
 17 WATER WELLS WERE LOCATED WITHIN 2000' OF THE CENTER OF PAD WELL NO. 1H

WELL 1H TOP HOLE INFORMATION:
 N: 271,992ft E: 1,611,047ft
 LAT: 39°14'19.02" LON: 80°52'23.70"

BOTTOM HOLE INFORMATION:
 N: 262,156ft E: 1,616,149ft
 LAT: 39°12'42.58" LON: 80°51'16.97"

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: 4,343,274m E: 510,953m
BOTTOM HOLE INFORMATION:
 N: 4,340,303m E: 512,558m



LINE	BEARING	DISTANCE
L1	N 72°15' E	1424.3'
L2	N 60°07' E	1589.6'
L3	S 35°12' E	1107.5'
L4	S 17°16' E	1023.9'
L5	S 01°48' W	1030.8'
L6	S 13°26' W	1389.1'
L7	S 14°41' W	1308.9'
L8	S 15°45' W	1051.0'
L9	S 19°07' W	1434.9'
L10	S 24°11' W	1332.7'
L11	S 26°15' W	1000.5'
L12	S 26°15' W	1517.4'
L13	S 32°47' W	1748.1'
L14	S 32°53' W	1603.3'
L15	S 35°35' W	1786.2'
L16	S 38°23' W	1044.9'
L17	S 42°09' W	1806.8'

- 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 IN ANY MANNER 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.

API WELL #
 47 - 017 - 06703

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 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 # 14-096WA
 DRAWING # HUNTER1HAD
 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 11/01/17
 OPERATOR'S WELL # HUNTER UNIT #1H

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 991.4' - AS DRILLED WATERSHED CABIN RUN
 QUADRANGLE OXFORD 7.5' DISTRICT CENTRAL COUNTY DODD RIVER

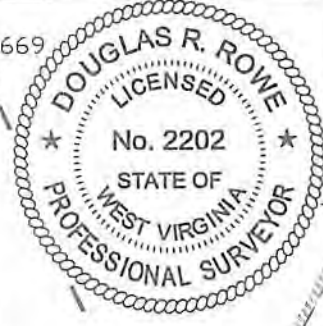
SURFACE OWNER JAMES E. WEBB ACREAGE 84.89 ACRES +/-

OIL & GAS ROYALTY OWNER CHARLEY WILSON ET UX; H.B. WILLIAMS ET UX; L.S. MCGEE ET AL; LEASE ACREAGE 91 ACRES +/-; 307 ACRES +/-; 78 ACRES +/-
 CINDA L. FLEMING ET VIR; D.B. ADAMS ET UX; N.H. LEGGETT ET AL 123.86 ACRES +/-; 89 ACRES +/-; 140 ACRES +/-

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

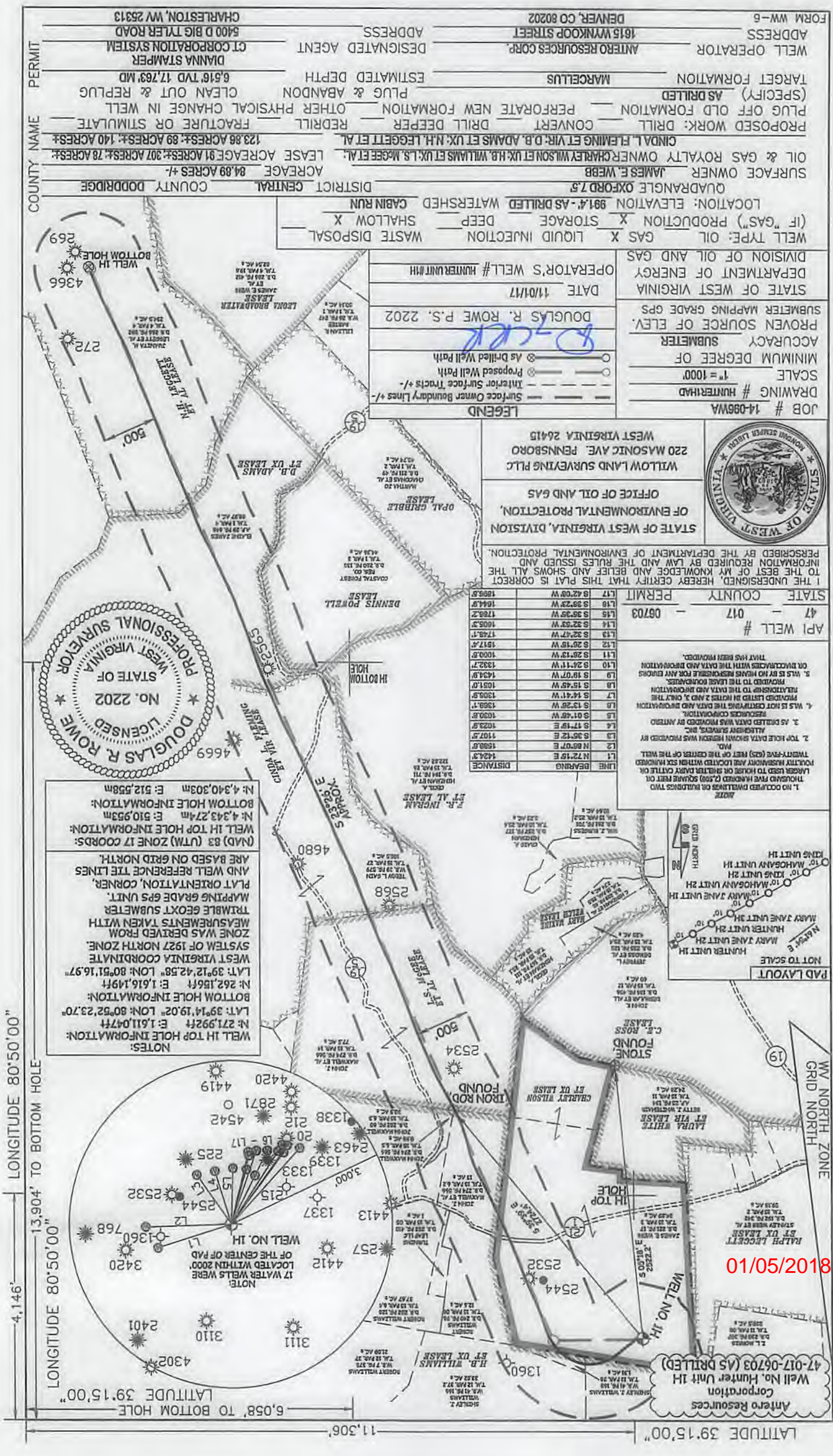
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,516' TVD 17,763' MD

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



01/05/2018

COUNTY NAME PERMIT



01/05/2018

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER

ADDRESS 1615 WYNKOOP STREET DENVER, CO 80202 ADDRESS 6400 D BIG TLER ROAD CHARLESTON, WV 25313

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,516 TVD 17,769 MD

PROPOSED WORK: DRILL AS DRILLED PLUG & ABANDON CLEAN OUT & REFLUG

CONVERT FRACURE OR STIMULATE REDRILL OTHER PHYSICAL CHANGE IN WELL

SURFACE OWNER JAMES E. WEBB ACRES 84.89 ACRES +/- COUNTY DODDRIDGE

OIL & GAS ROYALTY OWNER CHARLEY WILSON ET UX; H.B. WILLIAMS ET UX; L.S. MCCOY ET AL. LEASE ACRES 91 ACRES +/-

CINDA L. FLEMING ET VIR.; D.B. ADAMS ET UX; M.H. LEGGETT ET AL. LEASE ACRES 89 ACRES +/- COUNTY CENTRAL



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

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STATE COUNTY PERMIT

47	017	06703
API WELL #		

SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY SUBMETER

PROVEN SOURCE OF ELEV. SUBMETER

DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

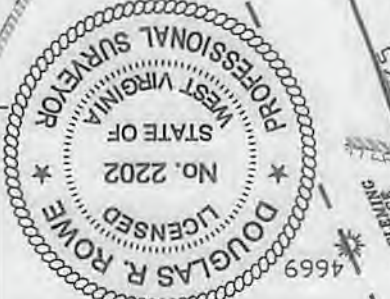
JOB # 14-096WA DRAWING # HUNTERHAD

DATE 11/01/17 OPERATOR'S WELL # HUNTER UNIT 1H

DOUGLAS R. ROWE P.S. 2202

LEGEND

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



NOTES:

WELL 1H TOP HOLE INFORMATION: N: 271.992ft E: 1.611,047ft LAT: 39°14'19.02" LON: 80°52'23.70"

BOTTOM HOLE INFORMATION: N: 262.156ft E: 1.616,149ft LAT: 39°12'42.58" LON: 80°51'16.97"

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 LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS: WELL 1H TOP HOLE INFORMATION: N: 4,343,274m E: 510,953m N: 4,340,303m E: 512,558m

