

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

API 47-085-10194 County Ritchie District Clay
Quad Pennsboro 7.5' Pad Name Kelly Pad Field/Pool Name ----
Farm name Eddy D. Waggoner et al Well Number Aubie Unit 2H
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 4351659m Easting 503215m
Landing Point of Curve Northing 4351751.893m Easting 503701.435m
Bottom Hole Northing 4348952m Easting 504823m

Elevation (ft) 1127' 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

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Date permit issued 02/26/2015 Date drilling commenced 08/10/2016 Date drilling ceased 11/29/2016
Date completion activities began 05/15/2017 Date completion activities ceased 09/15/2017
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 337' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1099' 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
Michael Daff

9/5/18

Reviewed by:

09/07/2018

API 47-085 - 10194 Farm name Eddy D. Waggoner et al Well number Aubie Unit 2H

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"	46'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	509'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2670'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17022'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6760'		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	102 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	630 sx	15.6	1.19	750	0'	8 Hrs.
Coal							
Intermediate 1	Class A	1042 sx	15.6	1.18	1230	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	697 sx (Lead) 1471 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.65 (Lead), 1.83 (Tail)	3842	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17022' MD, 6421' TVD (BHL), 6426' (Deepest Point Drilled) Loggers TD (ft) 17022' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

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Kick off depth (ft) 6210'

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 - 10194 Farm name Eddy D. Waggoner et al Well number Aubie Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>			
<u>Marcellus</u>	<u>6381' (TOP)</u>	<u>TVD</u>	<u>6836' (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 7623 mcfpd Oil --- bpd NGL --- bpd Water 1202 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**

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Please insert additional pages as applicable.

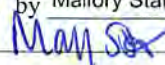
Drilling Contractor Precision Drilling Company, LP
Address 2640 Reach Road City Williamsport State PA Zip 17701

Logging Company Pro Oilfield Services LLC
Address 3141 Pulaski Rd City New Castle State PA Zip 16105

Cementing Company Nabors Completion & Production Services, Co.
Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

Stimulating Company FTS International
Address 1432 Route 519 City Eighty Four State PA Zip 15330

Please insert additional pages as applicable.

Completed by Mallory Stanton Telephone 303-357-7182
Signature  Title Permitting Supervisor Date 05/9/2018

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

09/07/2018

API 47-085-10194 Farm Name Eddy D. Waggoner et al Well Number Aubie Unit 2H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	5/15/2017	16751	16921	48	Marcellus
2	5/25/2017	16549	16719	48	Marcellus
3	5/26/2017	16348	16518	48	Marcellus
4	5/27/2017	16146	16316	48	Marcellus
5	5/29/2017	15945	16115	48	Marcellus
6	5/29/2017	15743	15913	48	Marcellus
7	5/30/2017	15542	15712	48	Marcellus
8	5/30/2017	15340	15510	48	Marcellus
9	5/31/2017	15139	15309	48	Marcellus
10	6/1/2017	14937	15107	48	Marcellus
11	6/2/2017	14736	14905	48	Marcellus
12	6/3/2017	14534	14704	48	Marcellus
13	6/3/2017	14332	14502	48	Marcellus
14	6/4/2017	14131	14301	48	Marcellus
15	6/4/2017	13929	14099	48	Marcellus
16	6/5/2017	13728	13898	48	Marcellus
17	6/5/2017	13526	13696	48	Marcellus
18	6/6/2017	13325	13495	48	Marcellus
19	6/6/2017	13123	13293	48	Marcellus
20	6/7/2017	12922	13092	48	Marcellus
21	6/7/2017	12720	12890	48	Marcellus
22	6/8/2017	12518	12688	48	Marcellus
23	6/9/2017	12317	12487	48	Marcellus
24	6/9/2017	12115	12285	48	Marcellus
25	6/10/2017	11914	12084	48	Marcellus
26	6/10/2017	11712	11882	48	Marcellus
27	6/11/2017	11511	11681	48	Marcellus
28	6/12/2017	11309	11479	48	Marcellus
29	6/12/2017	11108	11278	48	Marcellus
30	6/13/2017	10906	11076	48	Marcellus
31	6/15/2017	10704	10874	48	Marcellus
32	8/3/2017	10503	10673	48	Marcellus
33	8/3/2017	10301	10471	48	Marcellus
34	8/4/2017	10100	10270	48	Marcellus
35	8/5/2017	9898	10068	48	Marcellus
36	8/6/2017	9697	9867	48	Marcellus
37	8/6/2017	9495	9665	48	Marcellus
38	8/7/2017	9294	9464	48	Marcellus
39	8/8/2017	9092	9262	48	Marcellus
40	8/8/2017	8891	9060	48	Marcellus
41	8/9/2017	8689	8859	48	Marcellus
42	8/10/2017	8487	8657	48	Marcellus
43	8/11/2017	8286	8456	48	Marcellus
44	8/11/2017	8084	8254	48	Marcellus
45	8/11/2017	7883	8053	48	Marcellus
46	8/12/2017	7681	7851	48	Marcellus
47	8/12/2017	7480	7650	48	Marcellus
48	8/13/2017	7278	7448	48	Marcellus
49	8/13/2017	7077	7247	48	Marcellus
50	8/13/2017	6875	7045	48	Marcellus

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API 47-085-10194 Farm Name Eddy D. Waggoner et al Well Number Aubie Unit 2H

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	5/15/2017	81	7773	5044	4525	415265	8754	N/A
2	5/25/2017	74	7396	5756	3545	415255	8826	N/A
3	5/26/2017	74	7424	5957	3436	415900	10947	N/A
4	5/27/2017	74	7690	5967	3595	415900	9105	N/A
5	5/29/2017	74	7363	4855	3420	415900	8518	N/A
6	5/29/2017	74	7498	5174	3924	417397	9921	N/A
7	5/30/2017	72	7743	6209	3413	417271	8462	N/A
8	5/30/2017	72	7565	5930	3420	416327	8116	N/A
9	5/31/2017	78	7416	5610	3517	417565	8627	N/A
10	6/1/2017	80	7461	5638	3545	414625	8433	N/A
11	6/2/2017	75	7785	4526	3586	418700	8632	N/A
12	6/3/2017	78	7315	4878	4358	419241	9705	N/A
13	6/3/2017	74	7477	5780	3545	419066	8524	N/A
14	6/4/2017	79	7347	5486	3915	414826	8413	N/A
15	6/4/2017	77	7612	5785	4105	413323	8326	N/A
16	6/5/2017	73	7648	5429	3528	415822	8391	N/A
17	6/5/2017	72	7330	5585	3390	424832	11794	N/A
18	6/6/2017	64	7210	5761	3425	418090	8482	N/A
19	6/6/2017	75	7458	5305	3470	415685	8375	N/A
20	6/7/2017	81	7643	4520	3539	416924	8480	N/A
21	6/7/2017	76	7968	6049	3787	418458	8443	N/A
22	6/8/2017	79	7457	5790	3825	417418	8371	N/A
23	6/9/2017	77	7722	5255	3696	412609	8343	N/A
24	6/9/2017	78	7740	5976	3408	416116	8375	N/A
25	6/10/2017	75	7458	5305	3470	418815	10434	N/A
26	6/10/2017	81	7643	4520	3539	417286	8078	N/A
27	6/11/2017	75	7959	58277	3864	414016	8290	N/A
28	6/12/2017	76	7187	5953	6834	418479	8614	N/A
29	6/12/2017	77	7063	5937	3760	417440	8334	N/A
30	6/13/2017	77	7196	3402	3845	418920	8448	N/A
31	6/15/2017	74	7319	5710	4694	247056	9072	N/A
32	8/3/2017	77	7344	5951	3861	418500	8375	N/A
33	8/3/2017	79	7262	6517	3866	420223	8298	N/A
34	8/4/2017	77	6950	6981	3955	402144	7909	N/A
35	8/5/2017	76	7799	6131	4715	160946	13291	N/A
36	8/6/2017	77	6756	5880	3779	411832	9797	N/A
37	8/6/2017	77	7164	7043	4024	416336	8318	N/A
38	8/7/2017	75	7029	6945	3824	412925	8120	N/A
39	8/8/2017	74	6970	7677	3701	414783	8252	N/A
40	8/8/2017	66	6902	7266	3754	413954	8210	N/A
41	8/9/2017	72	7071	7265	4012	419403	9341	N/A
42	8/10/2017	73	7073	6829	3838	411895	8045	N/A
43	8/11/2017	54	6071	7624	3998	416461	10846	N/A
44	8/11/2017	72	7139	6207	3834	417482	8210	N/A
45	8/11/2017	76	7011	7617	3811	419655	8248	N/A
46	8/12/2017	78	6821	6149	3749	424737	8209	N/A
47	8/12/2017	76	6693	7535	3979	428370	8397	N/A
48	8/13/2017	60	6376	7613	3896	419877	11332	N/A
49	8/13/2017	75	6823	6946	3929	415917	8444	N/A
50	8/13/2017	75	6536	5594	3985	419624	8161	N/A
	AVG=	74.7	7,293	7,023	3,849	20,419,591	443,436	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
Fresh Water	337'	N/A	337'	N/A
Sandstone	0	221	0	221
siltstone	est. 221	241	est. 221	241
shale	est. 241	381	est. 241	381
Coal	est. 381	401	est. 381	401
Sandstone	est. 401	441	est. 401	441
Limestone	est. 441	561	est. 441	561
Sandstone	est. 561	621	est. 561	621
Sandstone	est. 621	761	est. 621	761
Sandstone	est. 761	941	est. 761	941
Limestone	est. 941	1,989	est. 941	2,019
Big Lime	1,989	2,502	2,019	2,562
Gantz	2,502	2,882	2,562	2,958
Fifty Foot Sandstone	2,882	2,981	2,958	3,064
Gordon	2,981	3,357	3,064	3,463
Fifth Sandstone	3,357	3,415	3,463	3,524
Bayard	3,415	3,955	3,524	4,094
Speechley	3,955	4,224	4,094	4,376
Baltown	4,224	4,615	4,376	4,787
Bradford	4,615	5,001	4,787	5,195
Benson	5,001	5,240	5,195	5,447
Alexander	5,240	5,532	5,447	5,754
Elk	5,532	5,810	5,754	6,045
Rhinestreet	5,810	6,134	6,045	6,398
Sycamore	6,134	6,229	6,398	6,527
Middlesex	6,229	6,334	6,527	6,709
Burkett	6,334	6,363	6,709	6,777
Tully	6,363	6,381	6,777	6,836
Marcellus	6,381	NA	6,836	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:	5/24/2017
Job End Date:	8/13/2017
State:	West Virginia
County:	Ritchie
API Number:	47-085-10194-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Aubie 2H
Latitude:	39.31432200
Longitude:	-80.96270600
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,400
Total Base Water Volume (gal):	18,647,538
Total Base Non Water Volume:	52,592



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	88.17800	
Other Chemical (s)	Listed Above	See Trade Name (s) List					
			Water	7732-18-5	60.00000	0.03948	

			Water	7732-18-5	30.00000	0.00008	
			Water	7732-18-5	85.00000	0.13156	
			Water	7732-18-5	97.00000	0.01469	
			Water	7732-18-5	30.00000	0.00350	
K-BAC-1020	FTSI	Biocide					
				Listed Below			
40/70 White	FTSI	Proppant					
				Listed Below			
HVG-1 4.0	FTSI	Water gelling agent					
				Listed Below			
30/50 White	FTSI	Proppant					
				Listed Below			
LTB-1	FTSI	Breaker					
				Listed Below			
CS-750 SI	FTSI	Scale Inhibitor					
				Listed Below			
100 Mesh Sand	FTSI	Proppant					

				Listed Below			
APB-1	FTSI	Gel breaker					
				Listed Below			
FRW-900	FTSI	Friction Reducer					
				Listed Below			
CI-150	FTSI	Acid Corrosion Inhibitor					
				Listed Below			
10.1%-15.0% HCL	FTSI	Acid					
				Listed Below			

Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.

			Silica, Quartz	14808-60-7	100.00000	5.28514	
			Silica, Quartz	14808-60-7	100.00000	3.29986	
			Silica, Quartz	14808-60-7	100.00000	2.96534	
			Hydrotreated Light Distillate	64742-47-8	40.00000	0.02632	
			Anionic polymer	Proprietary	40.00000	0.02632	
			Hydrogen Chloride	7647-01-0	15.00000	0.02322	
			2-Propenoic acid, polymer with 2 propenamide	9003-06-9	30.00000	0.01974	
			Petroleum Distillate	64742-47-8	55.00000	0.01019	
			Guar gum	9000-30-0	55.00000	0.01019	
			Raffinates, Sorption Process	64741-85-1	55.00000	0.01019	
			Glycerol	56-81-5	10.00000	0.00658	
			Polyethylene glycol	25322-68-3	50.00000	0.00583	

			Ammonium Persulfate	7727-54-0	84.00000	0.00462	
			Sodium chloride (NaCl)	7647-14-5	5.00000	0.00329	
			Ethoxylated Alcohols	Proprietary	5.00000	0.00329	
			Sorbitan, mono-(9Z)-9-octadecenoate	1338-43-8	5.00000	0.00329	
			Alcohols, C10-C16, ethoxylated	68002-97-1	5.00000	0.00329	
			2,2-Dibromo-3-nitrilopropionamide	10222-01-2	21.00000	0.00245	
			Proprietary Scale Inhibitor	Proprietary	10.00000	0.00151	
			Cured acrylic resin	25085-19-2	22.00000	0.00121	
			Suspending Agent	1302-78-9	5.00000	0.00093	
			Quartz	14808-60-7	4.00000	0.00074	
			Isotridecanol, ethoxylated	9043-30-5	2.00000	0.00037	
			Isopropanol	67-63-0	60.00000	0.00016	
			Ethoxylated fatty alcohol	Proprietary	30.00000	0.00008	
			Fatty amino compound salt	Proprietary	30.00000	0.00008	
			Talc	14807-96-6	0.60000	0.00003	
			Ethoxylated Alcohol	Proprietary	10.00000	0.00003	
			Aromatic aldehyde	Proprietary	8.00000	0.00002	
			Alkoxylated fatty amine	Proprietary	5.00000	0.00001	
			Methanol	67-56-1	0.10000	0.00000	
			Ammonium Persulfate	7727-54-0	100.00000		

* 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)

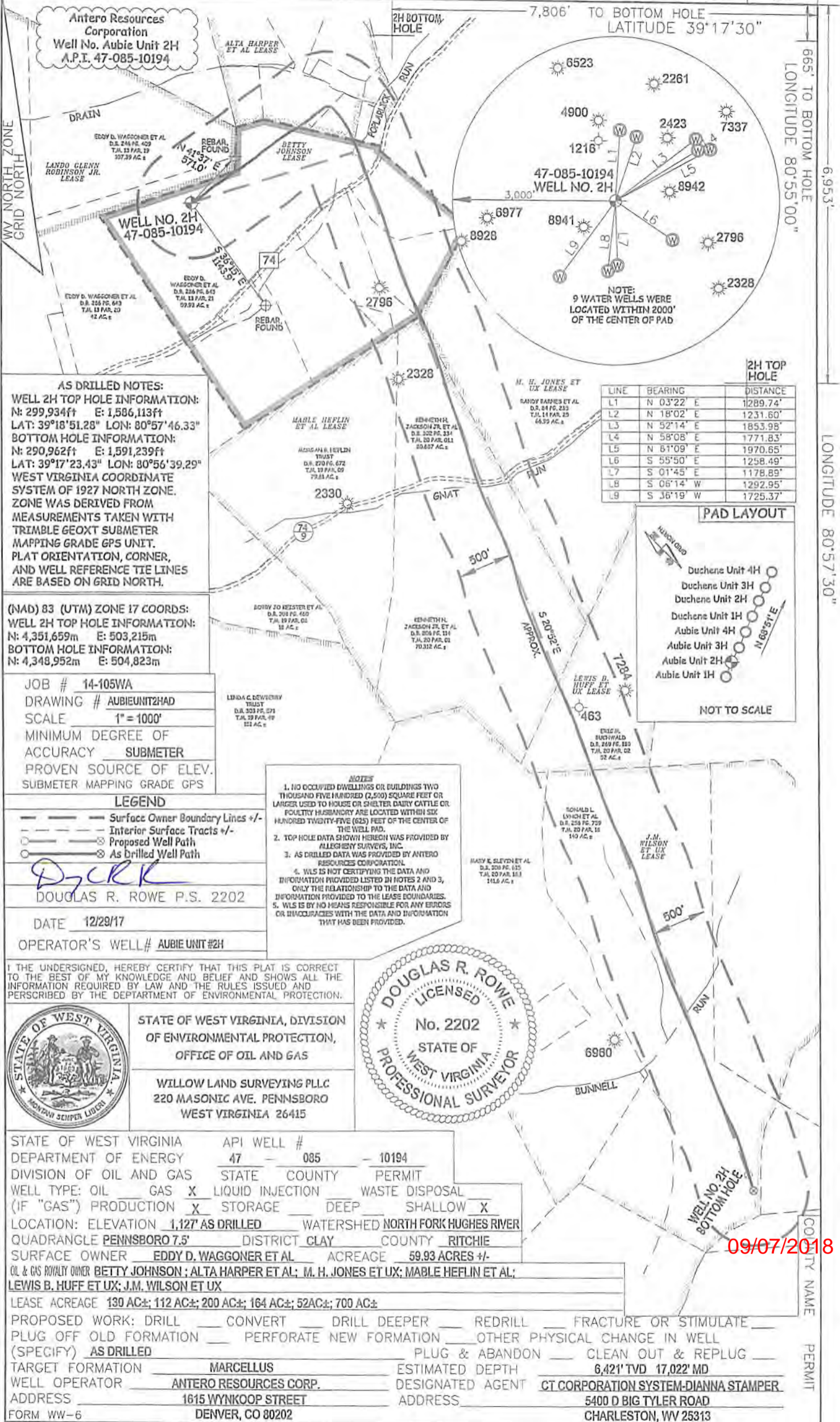
LATITUDE 39°20'00" 1,284'

7,806' TO BOTTOM HOLE
LATITUDE 39°17'30"

665' TO BOTTOM HOLE
LONGITUDE 80°55'00"

6,953'

LONGITUDE 80°57'30"



AS DRILLED NOTES:
WELL 2H TOP HOLE INFORMATION:
 N: 299,934ft E: 1,586,113ft
 LAT: 39°18'51.28" LON: 80°57'46.33"
BOTTOM HOLE INFORMATION:
 N: 290,962ft E: 1,591,239ft
 LAT: 39°17'23.43" LON: 80°56'39.29"
 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 2H TOP HOLE INFORMATION:
 N: 4,351,659m E: 503,215m
BOTTOM HOLE INFORMATION:
 N: 4,348,952m E: 504,823m

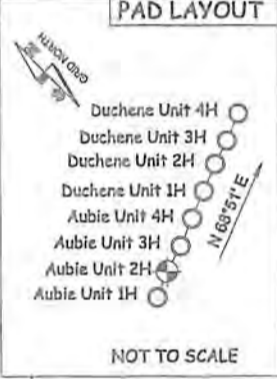
JOB # 14-105WA
 DRAWING # AUBIEUNIT2HAD
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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

D.R. Rowe
 DOUGLAS R. ROWE P.S. 2202
 DATE 12/29/17
 OPERATOR'S WELL # AUBIE UNIT #2H

NOTES
 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 SHOW 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.
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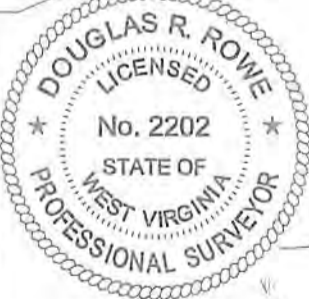
LINE	BEARING	DISTANCE
L1	N 03°22' E	1289.74'
L2	N 18°02' E	1231.60'
L3	N 52°14' E	1853.98'
L4	N 58°08' E	1771.83'
L5	N 61°09' E	1970.65'
L6	S 55°50' E	1258.49'
L7	S 01°45' E	1178.89'
L8	S 06°14' W	1292.95'
L9	S 36°19' W	1725.37'



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



STATE OF WEST VIRGINIA API WELL # 47 - 085 - 10194
 DEPARTMENT OF ENERGY
 DIVISION OF OIL AND GAS STATE COUNTY PERMIT
 WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1,127' AS DRILLED WATERSHED NORTH FORK HUGHES RIVER
 QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHIE
 SURFACE OWNER EDDY D. WAGGONER ET AL ACREAGE 59.93 ACRES +/-
 OIL & GAS ROYALTY OWNER BETTY JOHNSON; ALTA HARPER ET AL; M. H. JONES ET UX; MABLE HEFLIN ET AL; LEWIS B. HUFF ET UX; J.M. WILSON ET UX
 LEASE ACREAGE 130 AC±; 112 AC±; 200 AC±; 164 AC±; 52AC±; 700 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 6,421' TVD 17,022' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT CT CORPORATION SYSTEM-DIANNA STAMPER
 ADDRESS 1615 WYNNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
 FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

09/07/2018

COUNTY NAME

PERMIT

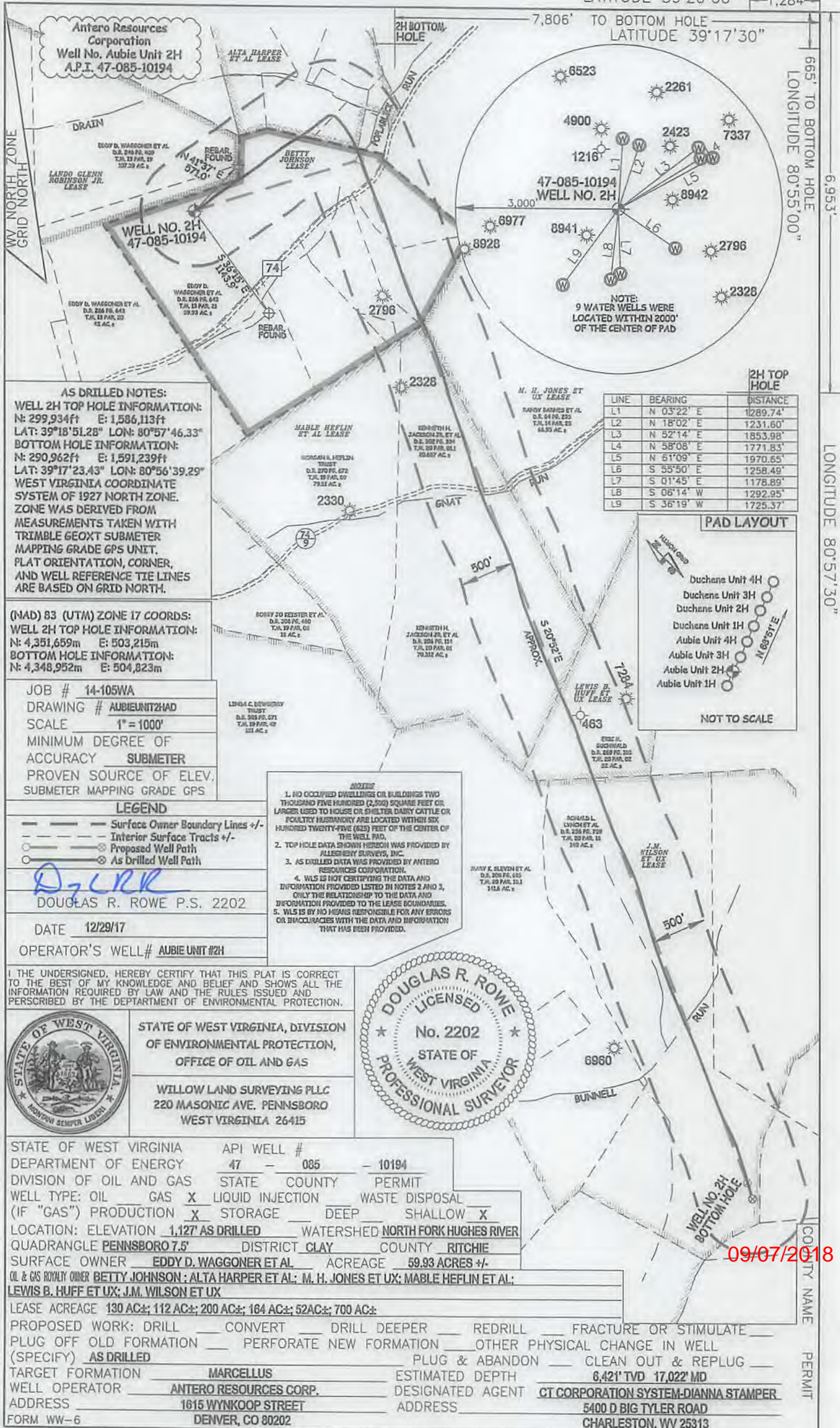
LATITUDE 39°20'00" | 1,284'

7,806' TO BOTTOM HOLE
LATITUDE 39°17'30"

665' TO BOTTOM HOLE
LONGITUDE 80°55'00"

6,953'

LONGITUDE 80°57'30"



Antero Resources Corporation
Well No. Aubie Unit 2H
A.P.I. 47-085-10194

AS DRILLED NOTES:
WELL 2H TOP HOLE INFORMATION:
N: 299,934ft E: 1,586,113ft
LAT: 39°18'51.28" LON: 80°57'46.33"
BOTTOM HOLE INFORMATION:
N: 290,962ft E: 1,591,239ft
LAT: 39°17'23.43" LON: 80°56'39.29"
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 2H TOP HOLE INFORMATION:
N: 4,351,659m E: 503,215m
BOTTOM HOLE INFORMATION:
N: 4,348,952m E: 504,823m

JOB # 14-105WA
DRAWING # AUBIEUNIT2HAD
SCALE 1" = 1000'
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

D.R.R.
DOUGLAS R. ROWE P.S. 2202
DATE 12/29/17
OPERATOR'S WELL# AUBIE UNIT #2H

NOTICE
 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.
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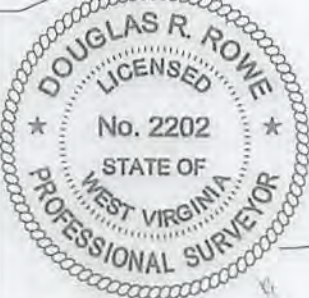
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