

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

API 47 - 095 - 02366 County Tyler District Ellsworth
Quad Shirley 7.5' Pad Name Weigle East Pad Field/Pool Name ----
Farm name Edwin C. Weigle Well Number Owens 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 4368531m Easting 512689m
Landing Point of Curve Northing 4368677.09m Easting 512819.04m
Bottom Hole Northing 4370969m Easting 511998m

Elevation (ft) 812' 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
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 8/11/2016 Date drilling commenced 8/17/2016 Date drilling ceased 10/17/2016
Date completion activities began 5/9/2018 Date completion activities ceased 9/8/2018
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 9', 194', 366' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1136', 1931' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 1380', 1461' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:
Reviewed
JOB
4/23/2019

WR-35
Rev. 8/23/13

API 47-095 - 02366 Farm name Edwin C. Weigle Well number Owens 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"	79'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	504'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2530'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	14831'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6546'		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	155 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	624 sx	15.6	1.18	826	0'	8 Hrs.
Coal							
Intermediate 1	Class A	990 sx	15.6	1.18	1181	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	888 sx (Load) 1198 sx (Tail)	13.5 (Load), 15.2 (Tail)	1.62 (Load), 1.83 (Tail)	3774	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 14830' MD, 6297' TVD (BHL), 6312' (Deepest Point Drilled) Loggers TD (ft) 14830' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6039'

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Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

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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 47-095-02366 Farm Name <u>Edwin C. Weigle</u> Well Number <u>Owens Unit 1H</u>					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	7/8/2018	14559	14728	60	Marcellus
2	7/8/2018	14360	14528	60	Marcellus
3	7/9/2018	14162	14329	60	Marcellus
4	7/10/2018	13963	14131	60	Marcellus
5	7/10/2018	13764	13932	60	Marcellus
6	7/11/2018	13566	13733	60	Marcellus
7	7/11/2018	13367	13534	60	Marcellus
8	7/11/2018	13168	13336	60	Marcellus
9	7/12/2018	12969	13137	60	Marcellus
10	7/12/2018	12771	12938	60	Marcellus
11	7/13/2018	12572	12740	60	Marcellus
12	7/13/2018	12373	12541	60	Marcellus
13	7/14/2018	12175	12342	60	Marcellus
14	7/15/2018	11976	12143	60	Marcellus
15	7/15/2018	11777	11945	60	Marcellus
16	7/16/2018	11578	11746	60	Marcellus
17	7/17/2018	11380	11547	60	Marcellus
18	7/17/2018	11181	11349	60	Marcellus
19	7/18/2018	10982	11150	60	Marcellus
20	7/18/2018	10784	10951	60	Marcellus
21	7/19/2018	10585	10752	60	Marcellus
22	7/19/2018	10386	10554	60	Marcellus
23	7/20/2018	10187	10355	60	Marcellus
24	7/21/2018	9989	10156	60	Marcellus
25	7/21/2018	9790	9958	60	Marcellus
26	7/21/2018	9591	9759	60	Marcellus
27	7/22/2018	9392	9560	60	Marcellus
28	7/22/2018	9194	9361	60	Marcellus
29	7/23/2018	8995	9163	60	Marcellus
30	7/24/2018	8796	8964	60	Marcellus
31	7/24/2018	8598	8765	60	Marcellus
32	7/24/2018	8399	8566	60	Marcellus
33	7/25/2018	8200	8368	60	Marcellus
34	7/25/2018	8001	8169	60	Marcellus
35	7/26/2018	7803	7970	60	Marcellus
36	7/26/2018	7604	7772	60	Marcellus
37	7/26/2018	7405	7573	60	Marcellus
38	7/27/2018	7207	7374	60	Marcellus
39	7/27/2018	7008	7175	60	Marcellus
40	7/28/2018	6809	6977	60	Marcellus
41	7/28/2018	6610	6778	60	Marcellus

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05/31/2019

API 47-095-02366 Farm Name Edwin C. Weigle Well Number Owens 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	7/8/2018	74.7	7106	5690	4391	311600	8304	N/A
2	7/8/2018	75	7213	5939	4704	401450	8219	N/A
3	7/9/2018	77.9	7273	6609	4161	402650	8141	N/A
4	7/10/2018	74.4	7155	5689	4658	401650	7997	N/A
5	7/10/2018	75.9	7153	6156	4067	402800	8273	N/A
6	7/11/2018	73.8	6973	6032	4745	401500	7881	N/A
7	7/11/2018	77.9	7064	5680	4658	382750	8203	N/A
8	7/11/2018	76.7	7136	5927	4369	402550	7858	N/A
9	7/12/2018	74.9	7023	6391	4956	401200	8026	N/A
10	7/12/2018	78.1	7170	5869	4638	401700	7994	N/A
11	7/13/2018	78.1	7132	6130	4595	401800	9181	N/A
12	7/13/2018	63.7	7787	6013	4569	395550	10757	N/A
13	7/14/2018	76	6864	6126	4061	401350	8301	N/A
14	7/15/2018	78.2	7290	6029	4011	402200	9391	N/A
15	7/15/2018	73.2	6883	6354	4088	401900	7875	N/A
16	7/16/2018	72.3	7048	6076	3862	402500	7885	N/A
17	7/17/2018	73.9	6732	6329	3818	402500	8162	N/A
18	7/17/2018	77	6968	6733	4078	402350	7914	N/A
19	7/18/2018	74.7	6801	6515	3751	404700	8003	N/A
20	7/18/2018	76.4	6808	6613	4183	403000	7852	N/A
21	7/19/2018	74.9	6875	6246	4113	401650	8415	N/A
22	7/19/2018	76.1	6951	5583	4395	422650	8062	N/A
23	7/20/2018	72.9	7046	6447	4316	402150	8024	N/A
24	7/21/2018	73	7134.5	6667	4034	402450	7854	N/A
25	7/21/2018	71	7151	5829	3902	402400	7869	N/A
26	7/21/2018	75.7	7208.4	5908	4076	411750	8003	N/A
27	7/22/2018	73	6642	6194	3968	403650	7828	N/A
28	7/22/2018	74.1	6673.4	5842	3910	384550	7541	N/A
29	7/23/2018	74.3	6401.4	6072	4077	402250	7734	N/A
30	7/24/2018	74	6568.5	5717	3924	402650	7612	N/A
31	7/24/2018	70.3	6569	5542	3661	402500	7832	N/A
32	7/24/2018	72.1	6516.2	6228	3917	401900	7492	N/A
33	7/25/2018	76.9	6677	6125	4472	414350	7977	N/A
34	7/25/2018	75.6	6672.4	5688	4808	401550	7673	N/A
35	7/26/2018	76.66	6616	6259	4068	414600	7823	N/A
36	7/26/2018	72.97	6369	6534	5072	382450	8889	N/A
37	7/26/2018	72.5	6442.7	5995	3961	401850	8307	N/A
38	7/27/2018	72.8	6442	6268	4167	401700	7747	N/A
39	7/27/2018	75.7	6472.8	6285	4065	401600	7763	N/A
40	7/28/2018	77.3	6609	6683	4710	402000	7750	N/A
41	7/28/2018	73.6	6272.6	5891	4213	401200	7775	N/A
	AVG=	74.6	6,875	6,120	4,249	16,389,550	332,187	TOTAL

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API 47-095-02366 Farm Name <u>Edwin C. Weigle</u> Well Number <u>Owens Unit 1H</u>				
EXHIBIT 3				
LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Siltstone	0	221	0	221
Siltstone & Coal	221	269	221	269
Siltstone	269	405	269	405
Sandstone	405	536	405	536
Shale w/trace Coal	536	561	536	561
Shale w/trace Coal	561	761	561	761
Siltstone	761	801	761	801
Shale w/trace Coal	801	941	801	941
Siltstone	941	1133	941	1133
Sandstone	1,133	1195	1,133	1195
Siltstone	1,195	1231	1,195	1231
Sandstone	1,231	1311	1,231	1311
Siltstone	1,311	1721	1,311	1723
Big Lime	1,683	1826	1,687	1829
Big Injun	1,826	2281	1,829	2248
Gantz Sand	2,281	2478	2,248	2481
Fifty Food Sandstone	2,478	2592	2,481	2596
Gordon	2,592	2926	2,596	2929
Fifth Sandstone	2,926	2971	2,929	2974
Bayard	2,971	3319	2,974	3233
Warren	3,319	3715	3,233	3791
Speechley	3,715	4419	3,791	4445
Balltown	4,003	4794	4,014	4836
Bradford	4,419	4794	4,445	4836
Benson	4,794	5052	4,836	5104
Alexander	5,052	5202	5,104	5261
Elk	5,202	5596	5,261	5671
Rhinestreet	5,577	5960	5,652	6047
Sycamore	5,960	6132	6,047	6249
Middlesex	6,132	6227	6,249	6397
Burkett	6,227	6252	6,397	6452
Tully	6,252	6294	6,452	6571
Marcellus	6,294	N/A	6,571	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.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	7/8/2018
Job End Date:	7/28/2018
State:	West Virginia
County:	Tyler
API Number:	47-095-02366-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Owens 1H
Latitude:	39.46618600
Longitude:	-80.85265600
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,299
Total Base Water Volume (gal):	14,394,328
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	87.59422	
DAP-103	CWS	Iron Control					
				Listed Below			

DWP-111	CWS	Gel Slurry			Listed Below					
Calbreak 5501	CWS	Breaker			Listed Below					
Cl-9100G	CWS	Corrosion Inhibitor			Listed Below					
Sand (Proppant)	CWS	Propping Agent			Listed Below					
DWP-641	CWS	Friction Reducer			Listed Below					
SANIFRAC 8844	CWS	Biocide			Listed Below					
DAP-902	CWS	Scale Inhibitor			Listed Below					
Hydrochloric Acid	CWS	Clean Perforations			Listed Below					
Other Chemical (s)	Listed Above	See Trade Name (s) List			Listed Below					

				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	12.02243
				Calcite	471-34-1	1.00000	0.08021
				Hydrochloric acid	7647-01-0	37.00000	0.05807
				Illite	12173-60-3	1.00000	0.03998
				Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.03801
				Guar gum	9000-30-0	60.00000	0.03801
				Polymer	26100-47-0	45.00000	0.02521
				Distillates (petroleum), hydrotreated light	64742-47-8	30.00000	0.01681
				Goethite	1310-14-1	0.10000	0.01202
				Apatite	64476-38-6	0.10000	0.01202
				Biotite	1302-27-8	0.10000	0.01202
				Ammonium Persulfate	64742-47-8	100.00000	0.01092
				Polyethylene glycol mixture	25322-68-3	54.50000	0.00628
				Ammonium chloride	12125-02-9	11.00000	0.00616
				2-Propenoic acid, homopolymer, sodium salt	9003-04-7	40.00000	0.00612
				Ilmenite	98072-94-7	0.10000	0.00400
				Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-56-2	5.00000	0.00317
				2,2-Dibromo-3-Nitripropionamide	10222-01-2	20.00000	0.00231
				Sorbitan monooleate	1338-43-8	4.00000	0.00224
				Vinylidene chloride-methyl acrylate copolymer	69418-26-4	20.00000	0.00218
				Polyethylene glycol monooleate	9004-96-0	3.00000	0.00168

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				1,2-Propanediol	57-55-6	10.00000	0.00153	
				Sorbitol tetraoleate	61723-83-9	2.00000	0.00112	
				Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00095	
				Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00056	
				Citric acid	77-92-9	60.00000	0.00053	
				Sodium bromide	7647-15-6	4.00000	0.00046	
				Dibromoacetonitrile	3252-43-5	3.00000	0.00035	
				Alkyloxypolyethyleneoxy ethanol	84133-50-6	0.50000	0.00028	
				Acrylamide	79-06-1	0.10000	0.00006	
				Ethylene glycol	107-21-1	40.00000	0.00003	
				Diethylene glycol (mono) methyl ether	34590-94-8	20.00000	0.00002	
				Isopropanol	67-63-0	5.00000	0.00001	
				Ethoxylated alcohols	Proprietary	10.00000	0.00001	Proprietary CAS
				Tar bases, quinolone derivs	68513-87-1	1.00000	0.00001	
				Tar bases, quinolone derivs, benzyl chloride- quaternized	72480-70-7	10.00000	0.00001	
				Formic Acid	64-18-6	10.00000	0.00001	
				Cinnamaldehyde	104-55-2	10.00000	0.00001	
				Diethylene glycol	111-46-6	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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05/31/2019



Antero Resources
1615 Wynkoop Street
Denver, CO 80202
Office 303.357.7310
Fax 303.357.7315

March 28, 2019

West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street
Charleston, WV 25304

To Whom It May Concern:

Please find enclosed the Well Operator's Report of Well Work, Form WR-35 (including As-Drilled Survey Plat, Directional Survey and FracFocus report), Discharge Monitoring Report Form WR-34 and corresponding logs for the following wells:

- Owens Unit 1H (API # 47-095-02366)—Weigle East Pad
- Owens Unit 2H (API # 47-095-02367)—Weigle East Pad

If you have any questions please feel free to contact me at (303) 357-7223.

Sincerely,

A handwritten signature in black ink, appearing to read "Megan Griffith", with a long horizontal flourish extending to the right.

Megan Griffith
Permitting Agent
Antero Resources Corporation

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Enclosures

LATITUDE 39°30'00"

5,455'

LATITUDE 39°30'00"

LONGITUDE 80°50'00"

12,316'

LONGITUDE 80°50'00"

COUNTY NAME

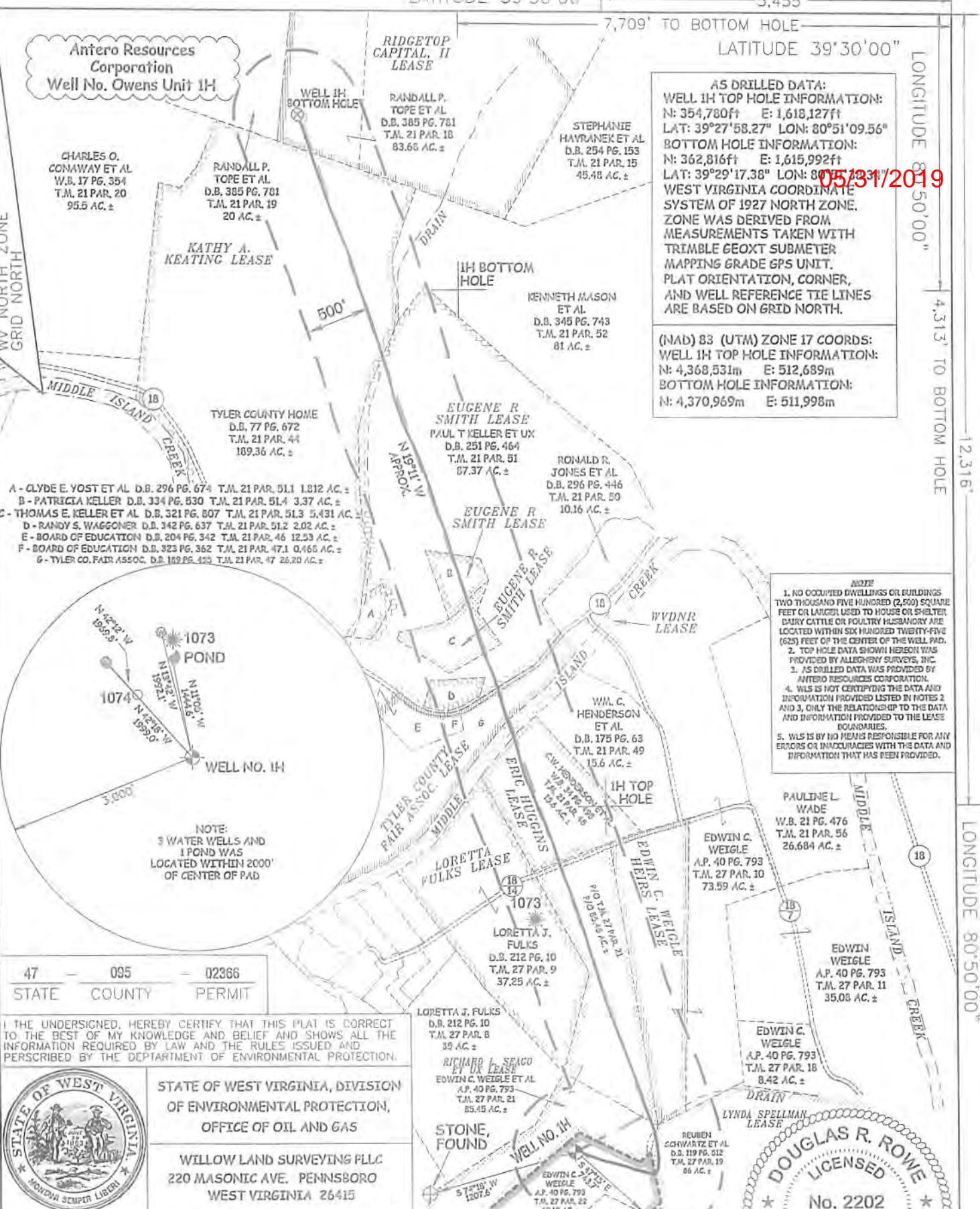
PERMIT

Antero Resources Corporation Well No. Owens Unit 1H

AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
 N: 354,780ft E: 1,618,127ft
 LAT: 39°27'58.27" LON: 80°51'09.56"
BOTTOM HOLE INFORMATION:
 N: 362,816ft E: 1,615,992ft
 LAT: 39°29'17.38" LON: 80°51'13.17"
 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: 4,368,531m E: 512,689m
BOTTOM HOLE INFORMATION:
 N: 4,370,969m E: 511,998m

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 ALLEIGH-SW 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.



47 - 095 - 02366
 STATE COUNTY PERMIT

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.



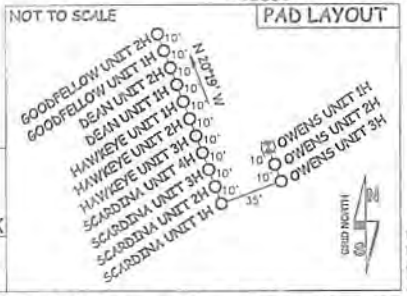
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

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

JOB # 15-052WA
 DRAWING # OWENS1HAD
 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 12/27/13
 OPERATOR'S WELL# OWENS UNIT 1H



WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 812' AS-BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
 QUADRANGLE SHIRLEY 7.5' DISTRICT ELLSWORTH COUNTY TYLER
 SURFACE OWNER EDWIN C. WEIGLE ACREAGE 60.19 ACRES +/-
 OIL & GAS ROYALTY OWNER KATHY ANN SEAGO; LYNDIA SPELLMAN; RICHARD L. SEAGO ET UX; ERIC HUGGINS; WVDNR; TYLER COUNTY FAIR ASSOC.; EUGENE R. SMITH; EUGENE R. SMITH; EUGENE R. SMITH; KATHY A. KEATING; RIDGETOP CAPITAL II
 LEASE ACREAGE 129.2 AC±; 88 AC±; 74.2 AC±; 17.2 AC±; 34 AC±; 26.665 AC±; 87.37 AC±; 5.431 AC±; 3.37 AC±; 190.07 AC±; 83.68 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 6,297' TVD 14,830' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
 ADDRESS 1615 WYANKOOP STREET ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313
 FORM WW-6 DENVER, CO 80202

LATITUDE 39°30'00"

5,455'

LATITUDE 39°30'00"

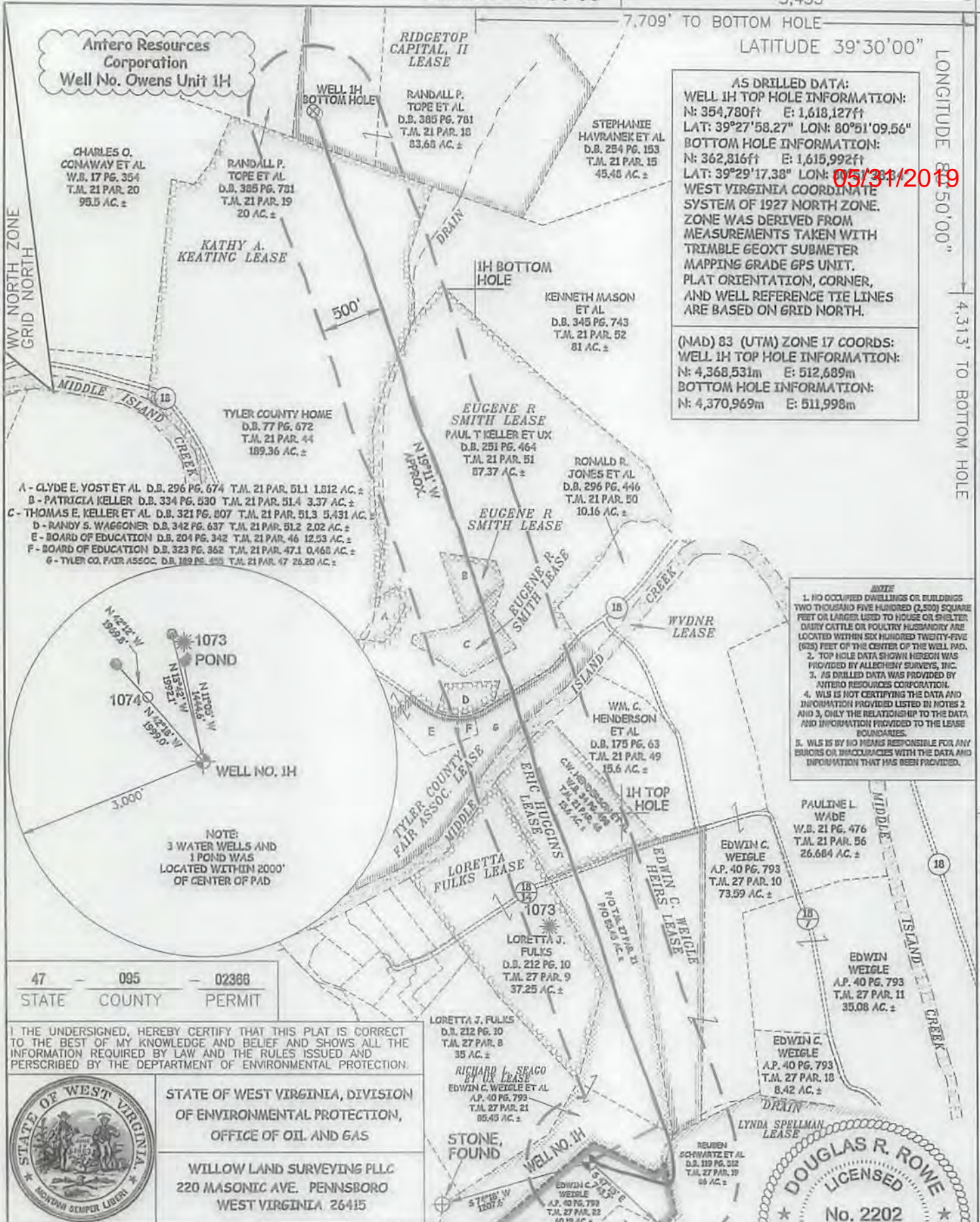
LONGITUDE 80°50'00"

12,316'

LONGITUDE 80°50'00"

COUNTY NAME

PERMIT



47 - 095 - 02388
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 # 15-052WA
DRAWING # OWENS1HAD
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

DATE 12/27/18
OPERATOR'S WELL# OWENS UNIT #1H

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION 812' AS-BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' DISTRICT ELLSWORTH COUNTY TYLER
SURFACE OWNER EDWIN C. WEIGLE ACREAGE 60.19 ACRES +/-
OIL & GAS ROYALTY OWNER KATHY ANN SEAGO; LYNDY SPELLMAN; RICHARD L. SEAGO ET UX; ERIC HUGGINS; WYDNR; TYLER COUNTY FAIR ASSOC.; EUGENE R. SMITH; EUGENE R. SMITH; EUGENE R. SMITH; KATHY A. KEATING; RIDGETOP CAPITAL II
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 6,297' TVD 14,830' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313



05/31/2019



AS DRILLED DATA:
 WELL 1H TOP HOLE INFORMATION:
 N: 384.780ft E: 1.618.127ft
 LAT: 39°27'.882" LON: 80°21'.0958"
 BOTTOM HOLE INFORMATION:
 N: 362.816ft E: 1.618.922ft
 LAT: 39°29'.1738" LON: 80°21'.3834"
 WEST VIRGINIA COORDINATE
 SYSTEM OF 1927 NORTH ZONE
 ZONE WAS DERIVED FROM
 MEASUREMENTS TAKEN WITH
 TRIMBLE GEOXT SUBMETER
 MAPPING GRADE EPS UNIT.
 PLAT ORIENTATION, CORNER,
 AND WELL REFERENCE THE LINES
 ARE BASED ON GRID NORTH.

(NAD 83 UTM) ZONE 17 COORDS:
 WELL 1H TOP HOLE INFORMATION:
 N: 4368.831m E: 212.689m
 BOTTOM HOLE INFORMATION:
 N: 4370.989m E: 211.988m

1. NO OCCUPIED DWELLINGS OR BUILDINGS
 TWO THOUSAND FIVE HUNDRED (2000) FEET
 FEET OR LARGER BASED TO HOUSE OR OTHER
 DWELLING OR BUILDING ARE SHOWN
 ONLY CATTLE OR HORSE LEASING ARE
 LOCATED WITHIN SIX HUNDRED TWENTY-FIVE
 (625) FEET OF THE CENTER OF THE WELL AND
 2. THE DATA WHICH WERE PROVIDED
 PROVIDED BY ANOTHER PARTY. THE
 3. AS DRILLED DATA WAS PROVIDED BY
 ANTERO RESOURCES CORPORATION.
 4. THIS IS NOT CERTIFYING THE DATA AND
 INFORMATION PROVIDED LISTED IN NOTES 1
 AND 2 ONLY THE RESPONSIBILITY TO THE DATA
 AND INFORMATION PROVIDED TO THE
 5. THIS IS BY NO MEANS RESPONSIBLE FOR ANY
 ERRORS OR MISCONDUCT WITH THE DATA AND
 INFORMATION THAT HAS BEEN PROVIDED.



NOT TO SCALE

OWNER UNIT 1H
 OWNER UNIT 2H
 OWNER UNIT 3H
 OWNER UNIT 4H
 OWNER UNIT 5H
 OWNER UNIT 6H
 OWNER UNIT 7H
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 OWNER UNIT 47H
 OWNER UNIT 48H
 OWNER UNIT 49H
 OWNER UNIT 50H

FORM WW-8

DENVER, CO 80202
 1815 WYNKOP STREET
 ANTERO RESOURCES CORP.
 MARCELLUS

WELL OPERATOR
 TARGET FORMATION
 (SPECIFY) AS DRILLED

PLUG & ABANDON
 ESTIMATED DEPTH
 6,207 TVD 14,830 MD

CLEAN OUT & REPLUG
 OTHER PHYSICAL CHANGE IN WELL
 FRACTURE OR STIMULATE

PROPOSED WORK: DRILL
 CONVERT
 DRILL DEEPER
 REDRILL

OIL & GAS ROYALTY OWNER
 EDWIN C. WEIGLE
 ACREAGE 80.19 ACRES +/-

QUADRANGLE SHIRLEY 7.5
 DISTRICT ELI SWORTH
 COUNTY TYLER
 WATERSHED OUTLET MIDDLE ISLAND CREEK

(IF "GAS") PRODUCTION X STORAGE X
 WASTE DISPOSAL

WELL TYPE: OIL GAS X
 LIQUID INJECTION
 WASTE DISPOSAL

DIVISION OF OIL AND GAS
 DEPARTMENT OF ENERGY
 STATE OF WEST VIRGINIA

SUBMETER MAPPING GRADE GPS
 PROVEN SOURCE OF ELEV.
 ACCURACY
 SUBMETER

MINIMUM DEGREE OF
 SCALE 1" = 1000'
 DRAWING # OWENSHAD
 JOB # 15-0255WA

WEST VIRGINIA 2018
 550 WASHINGTON AVE. PENNSBORO
 WILLOW LAND SURVEYING PLLC
 OFFICE OF OIL AND GAS
 OF ENVIRONMENTAL PROTECTION,
 STATE OF WEST VIRGINIA, DIVISION

PERFORMED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION
 INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND
 TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOW ALL THE
 I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT

STATE COUNTY PERMIT
 47 - 082 - 0388

LEGEND

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

