

APPROVED

WR-35
Rev. 8/23/13

Page of

NAME: William

DATE: 6/14/17

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Office of Oil & Gas

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

API 47 - 017 - 06720 County Doddridge District Central
Quad West Union 7.5' Pad Name Rock Run Pad Field/Pool Name ----
Farm name George D. Lambert Well Number Devonian Unit 3H
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 4350635m Easting 515985m
Landing Point of Curve Northing 4350893.384m Easting 516171.155m
Bottom Hole Northing 4353842m Easting 514956m

Elevation (ft) 1171' 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 05/28/2015 Date drilling commenced 05/30/2015 Date drilling ceased 9/30/2015
Date completion activities began 7/26/2016 Date completion activities ceased 10/6/2016
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 112', 147', 295' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 750', 987' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 1580' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by: _____

09/15/2017

API 47-017 - 06720 Farm name George D. Lambert Well number Devonian Unit 3H

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"	26"	40'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	358'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2578'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	16447**	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6822'		4.7#, N-80		
Packer type and depth set		N/A					

Comment Details "Please note this well was drilled to 17757" however casing was only ran to 16447"

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	114 sx	15.6	1.20	38	0'	8 Hrs.
Surface	Class A	410 sx	15.6	1.18	249	0'	8 Hrs.
Coal							
Intermediate 1	Class A	991 sx	15.6	1.18	807	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	584 sx (Lead) 1711 sx (Tail)	14.16 (Lead), 15.19(Tail)	1.44 (Lead), 1.83 (Tail)	3292	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17757' MD, 6710' TVD (BHL) & 6761' TVD (Deepest Point Drilled) Loggers TD (ft) 17709' MD

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

Plug back procedure N/A

Kick off depth (ft) 6378'

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

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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WERE TRACERS USED Yes No TYPE OF TRACER(S) USED N/A

API 47- 017 - 06720 Farm name George D. Lambert Well number Devonian Unit 3H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6700' (TOP)</u>	<u>TVD</u>	<u>7004' (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 3600 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 13416 mcfpd Oil 5 bpd NGL --- bpd Water 332 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	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 Patterson - UTI Drilling Company, LLC
Address 207 Carlton Dr. 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 Nabors Completion & Production Services, Co.
Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

Stimulating Company Cal Frac Well Services
Address 717 17th Street Suite 1448 City Denver State CO Zip 80202

Please insert additional pages as applicable.

Completed by Samantha Klaas Telephone 303-357-6759
Signature *Samantha Klaas* Title Permitting Agent Date 5/5/2017

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

09/15/2017

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	7/26/2016	16194	16336	60	Marcellus
2	8/22/2016	15995	16163	60	Marcellus
3	8/22/2016	15796	15964	60	Marcellus
4	8/23/2016	15597	15765	60	Marcellus
5	8/23/2016	15399	15566	60	Marcellus
6	8/24/2016	15200	15367	60	Marcellus
7	8/24/2016	15001	15169	60	Marcellus
8	8/25/2016	14802	14970	60	Marcellus
9	8/26/2016	14603	14771	60	Marcellus
10	8/26/2016	14405	14572	60	Marcellus
11	8/27/2016	14206	14373	60	Marcellus
12	8/27/2016	14007	14175	60	Marcellus
13	8/28/2016	13808	13976	60	Marcellus
14	8/29/2016	13609	13777	60	Marcellus
15	8/30/2016	13411	13578	60	Marcellus
16	8/30/2016	13212	13379	60	Marcellus
17	8/31/2016	13013	13181	60	Marcellus
18	8/31/2016	12814	12982	60	Marcellus
19	9/1/2016	12615	12783	60	Marcellus
20	9/1/2016	12417	12584	60	Marcellus
21	9/2/2016	12218	12385	60	Marcellus
22	9/2/2016	12019	12187	60	Marcellus
23	9/3/2016	11820	11988	60	Marcellus
24	9/3/2016	11621	11789	60	Marcellus
25	9/4/2016	11423	11590	60	Marcellus
26	9/4/2016	11224	11391	60	Marcellus
27	9/5/2016	11025	11193	60	Marcellus
28	9/5/2016	10826	10994	60	Marcellus
29	9/5/2016	10627	10795	60	Marcellus
30	9/6/2016	10429	10596	60	Marcellus
31	9/6/2016	10230	10397	60	Marcellus
32	9/7/2016	10031	10199	60	Marcellus
33	9/7/2016	9832	10000	60	Marcellus
34	9/8/2016	9633	9801	60	Marcellus
35	9/8/2016	9435	9602	60	Marcellus
36	9/9/2016	9236	9403	60	Marcellus
37	9/9/2016	9037	9205	60	Marcellus
38	9/9/2016	8838	9006	60	Marcellus
39	9/10/2016	8639	8807	60	Marcellus
40	9/10/2016	8441	8608	60	Marcellus
41	9/10/2016	8242	8409	60	Marcellus
42	9/11/2016	8043	8211	60	Marcellus
43	9/11/2016	7844	8012	60	Marcellus
44	9/12/2016	7645	7813	60	Marcellus
45	9/12/2016	7447	7614	60	Marcellus
46	9/12/2016	7248	7415	60	Marcellus
47	9/13/2016	7049	7217	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	8/21/2016	70.7	7603	0	4666	352250	8989	N/A
2	8/22/2016	59.0	6694	5369	4385	351300	8291	N/A
3	8/22/2016	57.7	6842	5314	5118	350700	8383	N/A
4	8/23/2016	66.7	7064	5274	4634	351050	8458	N/A
5	8/23/2016	67.5	7706	5283	4657	351200	8354	N/A
6	8/24/2016	77.4	7597	5160	5015	351500	8328	N/A
7	8/24/2016	72.2	7070	5283	4545	350650	9195	N/A
8	8/25/2016	78.8	7601	5302	4867	350400	8320	N/A
9	8/26/2016	78.5	7491	5448	4858	351250	8198	N/A
10	8/26/2016	80.3	7602	5310	4264	350450	8241	N/A
11	8/27/2016	77.4	7481	5576	5165	350450	8319	N/A
12	8/27/2016	79.7	7419	5262	3908	351000	8207	N/A
13	8/28/2016	81.5	7366	5329	4989	350650	8161	N/A
14	8/29/2016	78.8	7582	5360	4978	286750	10240	N/A
15	8/30/2016	81.0	7299	5381	5071	351200	8012	N/A
16	8/30/2016	80.1	7164	5275	4919	350300	7918	N/A
17	8/31/2016	78.9	7146	5351	4890	350100	8088	N/A
18	8/31/2016	83.9	7514	5515	4966	350950	8345	N/A
19	9/1/2016	76.9	7554	5715	4672	284850	9574	N/A
20	9/1/2016	81.6	7405	5475	4954	351100	9047	N/A
21	9/2/2016	82.2	7258	5303	5083	350550	8110	N/A
22	9/2/2016	84.7	7075	5254	4978	351300	8240	N/A
23	9/3/2016	85.2	7000	5294	3537	351300	8110	N/A
24	9/3/2016	83.7	7313	5036	4994	351050	8050	N/A
25	9/4/2016	84.6	7209	5765	5060	350850	8105	N/A
26	9/4/2016	84.5	6965	5174	5300	351200	8005	N/A
27	9/5/2016	84.7	7176	5286	5265	351600	8574	N/A
28	9/5/2016	85.6	7016	5081	5063	350750	8039	N/A
29	9/5/2016	83.2	6740	5080	5019	350300	8028	N/A
30	9/6/2016	82.8	7071	5208	5013	324950	9265	N/A
31	9/6/2016	84.4	7054	5269	5109	272800	7949	N/A
32	9/7/2016	80.9	7594	5357	5070	179950	8816	N/A
33	9/7/2016	84.1	6759	5243	5057	351450	8348	N/A
34	9/8/2016	82.8	6848	5217	4951	351150	8192	N/A
35	9/8/2016	84.6	6781	5093	5325	350500	8251	N/A
36	9/9/2016	82.1	6821	5147	5018	351200	8292	N/A
37	9/9/2016	84.1	6937	5464	4244	351250	8079	N/A
38	9/9/2016	84.5	6829	5167	4961	350650	8314	N/A
39	9/10/2016	84.3	6693	5260	5164	350650	8317	N/A
40	9/10/2016	83.9	6528	5277	5277	350910	8266	N/A
41	9/10/2016	85.5	6441	5209	4639	352300	8266	N/A
42	9/11/2016	86.1	6655	5028	5024	350400	8008	N/A
43	9/11/2016	84.9	6502	5321	4913	353200	8149	N/A
44	9/12/2016	84.4	6519	5436	4881	350600	8222	N/A
45	9/12/2016	84.0	6566	5277	4577	350750	8122	N/A
46	9/12/2016	84.8	6424	5255	4674	351650	8236	N/A
47	9/13/2016	83.3	6428	5341	3678	350500	8134	N/A
AVG=		80.4	7,072	5,188	4,838	16,091,860	8,365	TOTAL

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LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Fresh Water	112'	N/A	112'	N/A
Fresh Water	147'	N/A	147'	N/A
Fresh Water	295'	N/A	295'	N/A
Sandstone	0	97	0	97
Shale	est. 97	577	est. 97	577
Sandstone	est. 577	777	est. 577	777
Shale	est. 777	1,017	est. 777	1,017
Sandstone	est. 1017	1097	est. 1017	1097
Shale	est. 1097	1177	est. 1097	1177
Sandstone	est. 1177	1217	est. 1177	1217
Shale	est. 1217	1317	est. 1217	1317
Sandstone/siltstone	est. 1317	1357	est. 1317	1357
Shale	est. 1357	1417	est. 1357	1417
Sandstone	est. 1417	1557	est. 1417	1557
Trace Coal/Sandstone	est. 1557	1597	est. 1557	1597
Sandstone	est. 1597	1737	est. 1597	1737
Shale	est. 1737	1837	est. 1737	1837
Sandstone	est. 1837	1877	est. 1837	1877
Shale	est. 1877	1637	est. 1877	1637
Sandstone	est. 1637	1997	est. 1637	1997
Shale	est. 1997	2092	est. 1997	2094
Big Lime	2092	2605	2094	2607
Gantz Sand	2605	2704	2607	2706
Fifty Foot Sandstone	2704	2817	2706	2819
Gordon	2817	3148	2819	3150
Fifth Sandstone	3148	3811	3150	3813
Speechley	3811	4195	3813	4197
Baltown	4195	4616	4197	4618
Bradford	4616	5092	4618	5098
Benson	5092	5367	5098	5381
Alexander	5367	5500	5381	5522
Elk	5500	6023	5522	6096
Rhinestreet	6023	6336	6096	6445
Sycamore	6336	6508	6445	6658
Middlesex	6508	6634	6658	6838
Burkett	6634	6662	6838	6895
Tully	6662	6700	6895	7004
Marcellus	6700	N/A	7004	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:	8/20/2016
Job End Date:	9/13/2016
State:	West Virginia
County:	Doddridge
API Number:	47-017-06720-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Devonian Unit 3H
Latitude:	39.30487220
Longitude:	-80.81477220
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,759
Total Base Water Volume (gal):	16,934,585
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	89.57881	
DWP-111	CWS	Gel Slurry					
				Listed Below			

Sand (Proppant)	CWS	Propping Agent					
				Listed Below			
DWP-844	CWS	Microbiocide					
				Listed Below			
DWP-975	CWS	Breaker					
				Listed Below			
DAP-902	CWS	Scale Inhibitor					
				Listed Below			
DAP-103	CWS	Iron Control					
				Listed Below			
DWP-641	CWS	Friction Reducer					
				Listed Below			
DWP-901	CWS	Breaker					
				Listed Below			
Acetic Acid	CWS	Acid					
				Listed Below			
DAP-925	CWS	Acid Corrosion Inhibitor					

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				Listed Below			
Other Chemical (s)	Listed Above	See Trade Name (s) List					
				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	10.19812	
			Hydrochloric acid	7647-01-0	37.00000	0.05984	
			Polymer	26100-47-0	45.00000	0.03042	
			Guar gum	9000-30-0	60.00000	0.02306	
			Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.02306	
			Paraffinic hydrocarbon solvent	64742-47-8	30.00000	0.02028	
			Calcite	471-34-1	1.00000	0.01928	
			Ammonium chloride	12125-02-9	11.00000	0.00744	
			2-Propenoic acid, homopolymer, sodium salt	9003-04-7	40.00000	0.00645	
			Polyethylene glycol mixture	25322-68-3	54.50000	0.00600	
			Goethite	1310-14-1	0.10000	0.00380	
			Illite	12173-60-3	1.00000	0.00283	
			Sorbitan monooleate	1338-43-8	4.00000	0.00270	
			2,2-Dibromo-3-Nitrilopropionamide	10222-01-2	20.00000	0.00220	
			Polyethylene glycol monooleate	9004-96-0	3.00000	0.00203	
			Apatite	64476-38-6	0.10000	0.00197	
			Biotite	1302-27-8	0.10000	0.00197	
			Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00192	
			1,2-Propanediol	57-55-6	10.00000	0.00161	

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			Sorbitol tetraoleate	61723-83-9	2.00000	0.00135
			Ilmenite	98072-94-7	0.10000	0.00105
			Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00068
			Ammonium Persulfate	7727-54-0	100.00000	0.00058
			Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00058
			Citric acid	77-92-9	60.00000	0.00056
			Sodium bromide	7647-15-6	4.00000	0.00044
			Alcohols, C12-14, ethoxylated	84133-50-6	0.50000	0.00034
			Dibromoacetonitrile	3252-43-5	3.00000	0.00033
			Vinylidene chloride-methyl acrylate copolymer	25038-72-6	30.00000	0.00009
			Acrylamide	79-06-1	0.10000	0.00007
			Methanol	67-56-1	60.00000	0.00004
			Hydrated magnesium silicate	14807-96-6	1.00000	0.00002
			Fatty acids, tall-oil	61790-12-3	30.00000	0.00002
			Modified thiourea polymer	68527-49-1	30.00000	0.00002
			Alcohols, C14-15, ethoxylated	68951-67-7	30.00000	0.00002
			Alkenes, C>10 a-	64743-02-8	5.00000	0.00001
			Poly(tetrafluoroethylene)	9002-84-0	1.00000	0.00001
			Formaldehyde	50-00-0	0.10000	0.00001
			Sodium chloride	7647-14-5	1.00000	0.00001
			Propargyl Alcohol	107-19-7	10.00000	0.00001

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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)

LATITUDE 39°20'00"

6,539'

9,892' TO BOTTOM HOLE

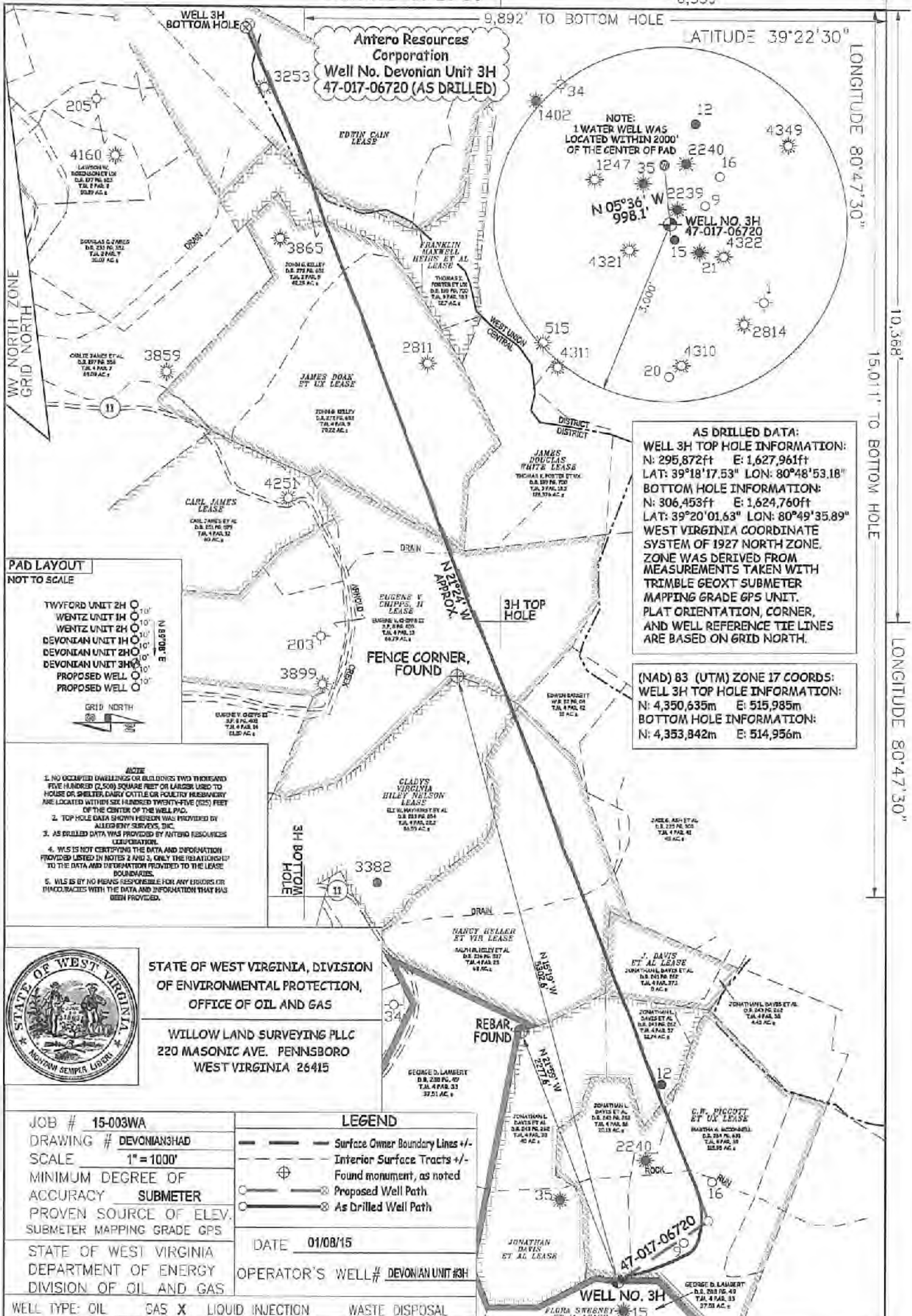
LATITUDE 39°22'30"

LONGITUDE 80°47'30"

10,368'

15,011' TO BOTTOM HOLE

LONGITUDE 80°47'30"



AS DRILLED DATA:
WELL 3H TOP HOLE INFORMATION:
 N: 295,872ft E: 1,627,961ft
 LAT: 39°18'17.53" LON: 80°48'53.18"
BOTTOM HOLE INFORMATION:
 N: 306,453ft E: 1,624,760ft
 LAT: 39°20'01.63" LON: 80°49'35.89"
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 3H TOP HOLE INFORMATION:
 N: 4,350,635m E: 515,985m
BOTTOM HOLE INFORMATION:
 N: 4,353,842m E: 514,956m

PAD LAYOUT
 NOT TO SCALE

TWYFORD UNIT 2H
 WENTZ UNIT 3H
 WENTZ UNIT 2H
 DEVONIAN UNIT 1H
 DEVONIAN UNIT 2H
 DEVONIAN UNIT 3H
 PROPOSED WELL
 PROPOSED WELL

GRID NORTH

NOTE

- NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POLICITY MEMBERSHIP ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
- TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGANY SURVEYS, INC.
- AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
- 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.
- WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR DISCREPANCIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.



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 # 15-003WA
 DRAWING # DEVONIAN3HAD
 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 +/-
- Found monument, as noted
- Proposed Well Path
- As Drilled Well Path

DATE 01/08/15

OPERATOR'S WELL # DEVONIAN UNIT #3H

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL

(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1,181' ORIGINAL - 1,171' AS-DRILLED WATERSHED HEADWATERS MIDDLE ISLAND CREEK

QUADRANGLE WEST UNION 7.5' DISTRICT CENTRAL COUNTY DODDRIDGE STATE COUNTY PERMIT

SURFACE OWNER GEORGE D. LAMBERT ACREAGE 37.51 ACRES +/-

OIL & GAS ROYALTY OWNER FLORA SWEENEY ET AL; G.W. PIGGOTT ET UX; JONATHAN DAVIS ET AL; LEASE ACREAGE 103 ACRES +/-; 124.5 ACRES +/-; 52 ACRES +/-; J. DAVIS ET AL; NANCY HELLER ET VIR; CLADY'S VIRGINIA HILEY NELSON; EUGENIE V. CHIPPS, II; JAMES DOAK ET UX; FRANKLIN MAXWELL HERS ET AL; EDWIN CAIN 12.6 ACRES +/-; 69 ACRES +/-; 60.55 ACRES +/-; 120 ACRES +/-; 80 ACRES +/-; 115 ACRES +/-; 121 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

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,710' TVD 17,757' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM

ADDRESS 1815 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD

DENVER, CO 80202 CHARLESTON, WV 25313

09/15/2017

ADDRESS
1616 WYNKOOP STREET
ANTERO RESOURCES CORP.
WELL OPERATOR

MARCELLUS
TARGET FORMATION
(SPECIFY) (X) AS DRILLED
PLUG OFF OLD FORMATION
PROPOSED WORK: DRILL
CONVERT DRILL DEEPER
CONVERT DRILL DEEPER
REDRILL FRACTURE OR STIMULATE
OTHER PHYSICAL CHANGE IN WELL

DESIGNATED AGENT
DIANNA STAMER - CT CORPORATION SYSTEM
ADDRESS
6400 D BIG TYLER ROAD
CHARLESTON, WV 25313

ESTIMATED DEPTH
6,710' TVD 17,757' MD
CLEAN OUT & REPLUG

PERMIT
COUNTY NAME
STATE
COUNTY
PERMIT

ACREAGE
37.51 ACRES +/-
LEASE ACREAGE 103 ACRES; 124.5 ACRES; 52 ACRES;
L. DAVIS ET AL. NANCY HELLER ET VIR. GLADYS VIRGINIA HILEY NELSON, EUGENE V. CHIRPS, JR. JAMES DOWK ET UK. RAYMOND M. WELLS HERS ET AL. EDWIN CAIN
12.5 ACRES; 69 ACRES; 90 ACRES; 90.55 ACRES; 120 ACRES; 80 ACRES; 105 ACRES; 121 ACRES;
SURFACE OWNER
GEORGE D. LAMBERT
OIL & GAS ROYALTY OWNER
FLORA SWEENEY ET AL. G.W. PIGGOTT ET UK. JONATHAN DAVIS ET AL.
LEASE ACREAGE 103 ACRES; 124.5 ACRES; 52 ACRES;
QUADRANGLE
WEST UNION 7.5 DISTRICT
CENTRAL
COUNTY
DODDRIDGE

LOCATION: ELEVATION 1,181 ORIGINAL - 1,171 AS-DRILLED
WATERSHED HEADWATERS MIDDLE ISLAND CREEK
API WELL #
47-017-06720

WELL TYPE: OIL
GAS X LIQUID INJECTION
WASTE DISPOSAL
DIVISION OF OIL AND GAS
DEPARTMENT OF ENERGY
STATE OF WEST VIRGINIA

DATE
01/08/15

OPERATOR'S WELL #
DEVONIAN UNIT #3H

JOB #
15-03WA
DRAWING #
DEVONIAN#3H
SCALE
1" = 1000'
MINIMUM DEGREE OF
ACCURACY
SUBMETER
PROVEN SOURCE OF ELEV.
SUBMETER MAPPING GRADE GPS

LEGEND
Surface Owner Boundary Lines +/-
Interior Surface Tracts +/-
Found monument, as noted
Proposed Well Path
As Drilled Well Path

STATE OF WEST VIRGINIA
OFFICE OF ENVIRONMENTAL PROTECTION,
DIVISION OF OIL AND GAS
220 WASHINGTON AVE. PENNSBORO
WEST VIRGINIA 26415



1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THIRDS
HAVE HAD A 250' SQUARE FEET OR LARGER RESIDENTIAL
HOUSE OR BARN OR OTHER BUILDING OR POLYMER RESIDENTIAL
HOUSE ON THE PROPERTY WITHIN 100 FEET OF THE WELL PAD.
2. TOP HOLE CUMULATIVE DEPTH WAS PROVIDED BY
COMPANION
3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES
CORPORATION
4. THIS IS NOT CERTIFYING THE DATA AND INFORMATION
PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELIABILITY
OF THE DATA AND INFORMATION PROVIDED TO THE LESSEE
IS BEING PROVIDED.
5. THIS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR
DISCREPANCIES WITH THE DATA AND INFORMATION THAT HAS
BEEN PROVIDED.

NOT TO SCALE
GRID NORTH
N
E
WENTZ UNIT 2H
WENTZ UNIT 1H
DEVONIAN UNIT 1H
DEVONIAN UNIT 2H
DEVONIAN UNIT 3H
PROPOSED WELL
PROPOSED WELL

WV NORTH ZONE
GRID NORTH

ANTERO RESOURCES
CORPORATION
WELL NO. DEVONIAN UNIT 3H
(AS DRILLED)
47-017-06720

WELL 3H
BOTTOM HOLE

LONGITUDE 80°47'30"

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