

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

API 47-017-06435 County Doddridge District Greenbrier  
Quad Big Isaac 7.5' Pad Name Wagner Pad Field/Pool Name \_\_\_\_\_  
Farm name Perine, Junior Well Number Lettie 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 4,340,231m Easting 534,187m  
Landing Point of Curve Northing 4,340,351.71m Easting 534,016.43m  
Bottom Hole Northing 4,343,270m Easting 533,085m

Elevation (ft) 1,270' 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 01/22/2014 Date drilling commenced 02/28/2014 Date drilling ceased 06/18/2014  
Date completion activities began 08/18/2014 Date completion activities ceased 11/24/2014  
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 49' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1,692' Void(s) encountered (Y/N) depths None  
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths None  
Is coal being mined in area (Y/N) No

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API 47-017 - 06435 Farm name Perine, Junior Well number Lettie 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"	40'	New	94#; J-55	N/A	Yes
Surface	17 1/2"	13 3/8"	447'	New	48#; H-40	N/A	Yes
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,548'	New	36#; J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	17,792'	New	23#; P-110	N/A	Yes
Tubing		2 3/8"	7,439'		4.7#; N-80	N/A	
Packer type and depth set		N/A					

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	200 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	534 sx	15.6	1.18	310	0'	8 Hrs.
Coal							
Intermediate 1	Class A	992 sx	15.6	1.18	498	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1,082 sx (Load); 1,851 sx (Tail)	14.5 (Load); 15.2 (Tail)	1.3 (Load); 1.86 (Tail)	3,607	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17,792' MD, 7,312' TVD (BHL), 7,325' TVD (Deepest Point Drilled) Loggers TD (ft) 17,742'  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6,506'

\*\*This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Downs Unit 1H, API #47-017-06433). Please reference the wireline logs submitted with Form WR-35 for the Downs Unit 1H. A Cement Bond Log has been included with this submittal.

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

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API 47-017-06435 Farm Name Perine, Junior Well Number Lettie Unit 2H

**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	18-Aug-14	17,533	17,701	60	Marcellus
2	30-Sep-14	17,334	17,502	60	Marcellus
3	30-Sep-14	17,135	17,303	60	Marcellus
4	30-Sep-14	16,936	17,104	60	Marcellus
5	1-Oct-14	16,737	16,905	60	Marcellus
6	1-Oct-14	16,538	16,706	60	Marcellus
7	1-Oct-14	16,339	16,506	60	Marcellus
8	2-Oct-14	16,139	16,307	60	Marcellus
9	2-Oct-14	15,940	16,108	60	Marcellus
10	2-Oct-14	15,741	15,909	60	Marcellus
11	3-Oct-14	15,542	15,710	60	Marcellus
12	3-Oct-14	15,343	15,511	60	Marcellus
13	3-Oct-14	15,144	15,312	60	Marcellus
14	4-Oct-14	14,945	15,113	60	Marcellus
15	4-Oct-14	14,746	14,914	60	Marcellus
16	4-Oct-14	14,547	14,715	60	Marcellus
17	5-Oct-14	14,348	14,516	60	Marcellus
18	5-Oct-14	14,149	14,317	60	Marcellus
19	5-Oct-14	13,950	14,117	60	Marcellus
20	5-Oct-14	13,750	13,918	60	Marcellus
21	6-Oct-14	13,551	13,719	60	Marcellus
22	6-Oct-14	13,352	13,520	60	Marcellus
23	6-Oct-14	13,153	13,321	60	Marcellus
24	7-Oct-14	12,954	13,122	60	Marcellus
25	7-Oct-14	12,755	12,923	60	Marcellus
26	7-Oct-14	12,556	12,724	60	Marcellus
27	7-Oct-14	12,357	12,525	60	Marcellus
28	8-Oct-14	12,158	12,326	60	Marcellus
29	8-Oct-14	11,959	12,127	60	Marcellus
30	8-Oct-14	11,760	11,928	60	Marcellus
31	8-Oct-14	11,561	11,728	60	Marcellus
32	9-Oct-14	11,362	11,529	60	Marcellus
33	9-Oct-14	11,162	11,330	60	Marcellus
34	9-Oct-14	10,963	11,131	60	Marcellus
35	9-Oct-14	10,764	10,932	60	Marcellus
36	10-Oct-14	10,565	10,733	60	Marcellus
37	10-Oct-14	10,366	10,534	60	Marcellus
38	10-Oct-14	10,167	10,335	60	Marcellus
39	10-Oct-14	9,968	10,136	60	Marcellus
40	11-Oct-14	9,769	9,937	60	Marcellus
41	11-Oct-14	9,570	9,738	60	Marcellus
42	11-Oct-14	9,371	9,539	60	Marcellus
43	11-Oct-14	9,172	9,340	60	Marcellus
44	11-Oct-14	8,973	9,140	60	Marcellus
45	12-Oct-14	8,773	8,941	60	Marcellus
46	12-Oct-14	8,574	8,742	60	Marcellus
47	12-Oct-14	8,375	8,543	60	Marcellus
48	12-Oct-14	8,176	8,344	60	Marcellus
49	13-Oct-14	7,977	8,145	60	Marcellus
50	13-Oct-14	7,778	7,946	60	Marcellus
51	13-Oct-14	7,579	7,747	60	Marcellus

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API 47-017-06435 Farm Name Perine, Junior Well Number Lettie 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	29-Sep-14	63.6	7,896	N/A	5,316	81,640	7,258	N/A
2	30-Sep-14	60.0	7,757	7,475	5,333	157,720	6,671	N/A
3	30-Sep-14	63.0	7,645	7,152	4,845	181,408	6,732	N/A
4	30-Sep-14	65.7	7,368	6,622	5,589	234,685	7,037	N/A
5	1-Oct-14	62.0	7,297	6,473	5,301	195,693	7,133	N/A
6	1-Oct-14	65.0	7,308	6,259	5,336	235,325	6,736	N/A
7	1-Oct-14	65.8	7,285	6,395	6,159	232,885	6,885	N/A
8	2-Oct-14	67.3	7,276	5,971	5,835	230,982	6,745	N/A
9	2-Oct-14	73.0	7,423	6,081	5,591	234,200	6,656	N/A
10	2-Oct-14	71.1	7,484	6,226	5,039	228,330	6,661	N/A
11	3-Oct-14	70.0	7,402	6,541	5,393	233,790	6,623	N/A
12	3-Oct-14	68.0	7,385	6,039	5,988	233,990	6,602	N/A
13	3-Oct-14	68.4	7,074	6,033	6,071	231,025	6,589	N/A
14	4-Oct-14	68.8	7,273	6,379	5,628	219,715	6,476	N/A
15	4-Oct-14	65.0	7,306	6,036	5,653	234,920	6,585	N/A
16	4-Oct-14	67.1	7,024	5,810	5,920	236,980	6,512	N/A
17	5-Oct-14	66.0	7,112	289	5,694	204,095	6,491	N/A
18	5-Oct-14	73.0	7,289	5,811	5,456	224,041	6,405	N/A
19	5-Oct-14	72.0	7,314	6,188	5,411	234,110	6,460	N/A
20	5-Oct-14	65.9	7,210	6,556	5,928	232,835	6,433	N/A
21	6-Oct-14	68.5	7,197	5,980	5,766	234,855	6,415	N/A
22	6-Oct-14	65.0	7,430	6,379	5,464	235,424	6,383	N/A
23	6-Oct-14	76.0	7,400	5,773	5,498	234,800	6,388	N/A
24	7-Oct-14	73.0	7,099	5,550	5,328	232,050	6,406	N/A
25	7-Oct-14	66.0	6,890	5,785	5,598	233,624	6,356	N/A
26	7-Oct-14	68.0	6,903	6,234	5,494	232,595	6,333	N/A
27	7-Oct-14	72.0	7,098	5,871	5,426	232,440	6,296	N/A
28	8-Oct-14	70.0	6,979	5,927	5,467	232,874	6,274	N/A
29	8-Oct-14	65.0	7,014	6,132	5,841	233,370	6,240	N/A
30	8-Oct-14	66.0	6,779	5,677	5,573	232,180	6,233	N/A
31	8-Oct-14	65.0	6,938	6,016	5,526	232,820	6,207	N/A
32	9-Oct-14	66.0	6,777	5,725	5,889	232,460	6,190	N/A
33	9-Oct-14	66.0	6,828	5,592	5,781	232,870	6,192	N/A
34	9-Oct-14	68.0	6,872	5,931	5,582	233,705	6,236	N/A
35	9-Oct-14	65.0	6,671	5,878	5,509	233,380	6,112	N/A
36	10-Oct-14	67.0	6,816	5,610	5,663	236,120	6,095	N/A
37	10-Oct-14	66.0	6,995	5,842	5,682	234,425	6,067	N/A
38	10-Oct-14	67.0	7,000	6,141	5,521	234,970	6,062	N/A
39	10-Oct-14	66.0	6,671	6,063	5,630	234,960	6,026	N/A
40	11-Oct-14	66.0	6,734	6,140	5,607	235,940	6,000	N/A
41	11-Oct-14	67.0	6,800	5,947	5,751	234,275	6,014	N/A
42	11-Oct-14	68.0	6,913	6,148	5,871	221,475	5,801	N/A
43	11-Oct-14	69.0	6,945	6,019	5,329	235,160	5,894	N/A
44	11-Oct-14	68.0	6,730	6,746	5,438	231,800	5,947	N/A
45	12-Oct-14	66.0	6,835	6,329	5,752	233,055	6,425	N/A
46	12-Oct-14	67.0	6,742	7,043	5,539	233,605	5,883	N/A
47	12-Oct-14	65.0	6,608	7,117	5,631	231,620	5,872	N/A
48	12-Oct-14	67.0	6,519	6,541	5,522	232,020	5,967	N/A
49	13-Oct-14	65.9	6,808	6,080	5,455	230,810	5,833	N/A
50	13-Oct-14	67.2	6,690	5,835	5,822	228,365	5,797	N/A
51	13-Oct-14	68.1	6,873	6,165	5,786	230,885	5,783	N/A
AVG=		67.3	7,072	6,051	5,593	11,517,301	323,417	TOTAL

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**EXHIBIT 3**

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD) From
	From Surface	From Surface	From Surface	Surface
Fresh Water	49'	N/A	49'	N/A
Shale	0	29	0	29
Siltstone	29	289	29	289
Siltstone/ Trace Coal	289	449	289	449
Siltstone/ Sandstone	449	649	449	649
Sandy Shale/ Trace Coal	649	669	649	669
Siltstone	669	829	669	829
Limestone/ Coal	829	889	829	889
Siltstone	889	1,269	889	1,269
Sandstone	1,269	1,389	1,269	1,389
Siltstone	1,389	1,469	1,389	1,469
Sandstone	1,469	1,509	1,469	1,509
Limestone/ Siltstone	1,509	1,589	1,509	1,589
Sandstone/ Trace Coal	1,589	1,649	1,589	1,649
Siltstone/ Trace Coal	1,649	1,789	1,649	1,789
Sandstone	1,789	1,909	1,789	1,909
Shale/ Trace Coal	1,909	2,049	1,909	2,049
Siltstone/ Shale	2,049	2,249	2,049	2,249
Big Lime	2,249	2,352	2,249	2,352
Big Injun	2,352	2,581	2,352	2,581
Gantz Sand	2,581	2,676	2,581	2,676
Fifty Foot Sandstone	2,676	2,880	2,676	2,880
Gordon	2,880	3,203	2,880	3,203
Fifth Sandstone	3,203	3,247	3,203	3,247
Bayard	3,247	3,572	3,247	3,572
Warren	3,572	3,857	3,572	3,857
Speechley	3,857	4,060	3,857	4,060
Baltown	4,060	4,676	4,060	4,676
Bradford	4,676	5,178	4,676	5,178
Benson	5,178	5,487	5,178	5,487
Alexander	5,487	5,683	5,487	5,683
Elk	5,683	6,213	5,683	6,213
Rhinestreet	6,213	6,766	6,213	6,788
Sycamore	6,766	6,929	6,788	6,994
Middlesex	6,929	7,080	6,994	7,200
Burkett	7,080	7,110	7,200	7,244
Tully	7,110	7,236	7,244	7,515
Marcellus	7,236	NA	7,515	NA

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/29/2014
Job End Date:	10/13/2014
State:	West Virginia
County:	Doddridge
API Number:	47-017-06435-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Lettie Unit 2H
Longitude:	-80.604017700
Latitude:	39.21068100
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,325
Total Base Water Volume (gal):	13,583,514
Total Base Non Water Volume:	586,731

## 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	Antero Resources	Base Fluid	Water	7732-18-5	100.00000	90.43961	
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	9.19457	
GC-15	U.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00000	0.06589	
			Petroleum Distillates	64742-47-8	60.00000	0.06240	
			Suspending agent (solid)	14808-60-7	3.00000	0.01008	
			Surfactant	68439-51-0	3.00000	0.00395	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.50000	0.08439	
			Hydrogen Chloride	7647-01-1	18.00000	0.02016	
WFRA-405	U.S. Well Services, LLC	Friction Reducer	Anionic Polyacrylamide	Proprietary	40.00000	0.02754	
			Water	7732-18-5	40.00000	0.02754	
			Petroleum Distillates	64742-47-8	40.00000	0.02217	
			Crystalline Salt	12125-02-9	5.00000	0.00344	



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SI-11100	U.S. Well Services	Scale Inhibitor	Ethoxylated alcohol blend	Proprietary	5.00000	0.00344
			DI Water	7732-18-5	80.00000	0.01061
			Ethylene Glycol	107-21-1	40.00000	0.00599
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	10.00000	0.00179
			2-Phosphonobutane 1,2,4 dicarboxylic salt	37971-36-1	10.00000	0.00171
			hexamethylenediamine tetra (methylene phosphonic acid)	38820-59-6	10.00000	0.00166
			Copolymer of Maleic and Acrylic acid	26677-99-6	10.00000	0.00157
			bis (hexamethylene) triamine penta (methylene phosphonic acid) - phosphate acid	40623-75-4	10.00000	0.00153
			Acrylic polymer	52255-49-9	5.00000	0.00066
K-BAC 1020	U.S. Well Services, LLC	Anti-Bacterial Agent	2,2-dibromo-3-nitropropionamide	10222-01-2	20.00000	0.00462
			Deionized Water	7732-18-5	28.00000	0.00264
AP One	U.S. Well Services, LLC	Gel Breakers	Ammonium Persulfate	7727-54-0	100.00000	0.00171
AI-301	U.S. Well Services, LLC	Acid Corrosion Inhibitors	Diethylene Glycol	111-46-6	30.00000	0.00013
			Methenamine	100-97-0	20.00000	0.00010
			Hydrogen Chloride	7647-01-0	10.00000	0.00004
			Polyethylene polyamine	68603-67-8	10.00000	0.00004
			Coco amine	61791-14-8	5.00000	0.00002

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

\* Total Water Volume sources may include fresh water, produced water, and/or recycled water  
 \*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

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"

5,913'

9,483' TO BOTTOM HOLE

LATITUDE 39°15'00"

LONGITUDE 80°35'00"

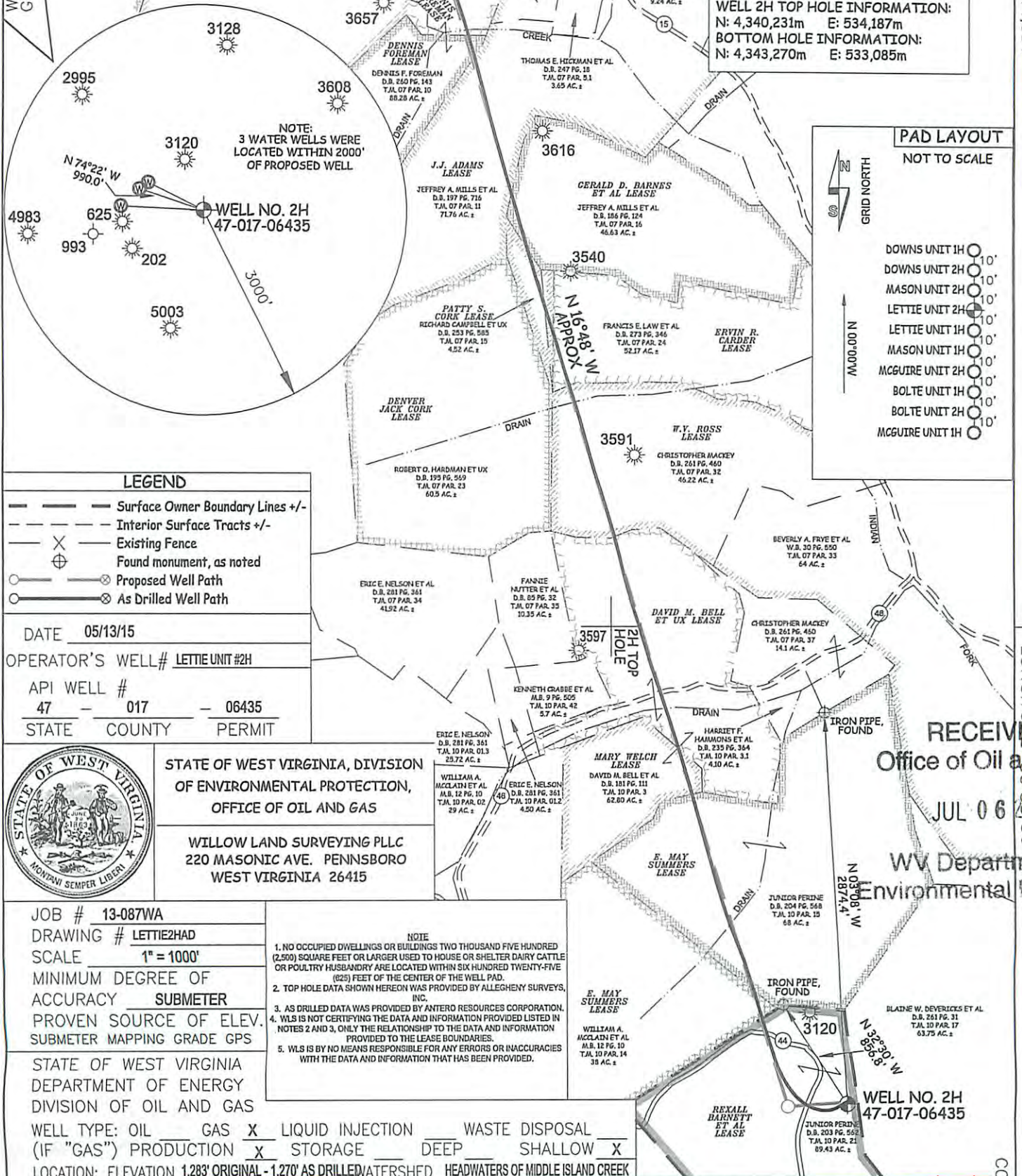
Antero Resources Corporation  
Well No. Lettie Unit 2H  
47-017-06435 (AS DRILLED)

AS DRILLED DATA:  
WELL 2H TOP HOLE INFORMATION:  
N: 260,734ft E: 1,687,121ft  
LAT: 39°12'38.13" LON: 80°36'15.13"  
BOTTOM HOLE INFORMATION:  
N: 270,767ft E: 1,683,672ft  
LAT: 39°14'16.86" LON: 80°37'00.52"  
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: 4,340,231m E: 534,187m  
BOTTOM HOLE INFORMATION:  
N: 4,343,270m E: 533,085m

WV NORTH ZONE GRID NORTH

14,354'



PAD LAYOUT  
NOT TO SCALE

- ↓ 10' DOWNS UNIT 1H
- ↓ 10' DOWNS UNIT 2H
- ↓ 10' MASON UNIT 2H
- ↓ 10' LETTIE UNIT 2H
- ↓ 10' LETTIE UNIT 1H
- ↓ 10' MASON UNIT 1H
- ↓ 10' MCGUIRE UNIT 2H
- ↓ 10' BOLTE UNIT 1H
- ↓ 10' BOLTE UNIT 2H
- ↓ 10' MCGUIRE UNIT 1H

LEGEND

- Surface Owner Boundary Lines +/-
- - - Interior Surface Tracts +/-
- X Existing Fence
- ⊕ Found monument, as noted
- Proposed Well Path
- ⊗ As Drilled Well Path

DATE 05/13/15  
 OPERATOR'S WELL# LETTIE UNIT #2H  
 API WELL #  
47 - 017 - 06435  
 STATE COUNTY PERMIT



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 # 13-087WA  
 DRAWING # LETTIE2HAD  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY SUBMETER  
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

- 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 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.

STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 DIVISION OF OIL AND GAS  
 WELL TYPE: OIL    GAS X LIQUID INJECTION    WASTE DISPOSAL     
 (IF "GAS") PRODUCTION X STORAGE    DEEP    SHALLOW X  
 LOCATION: ELEVATION 1,283' ORIGINAL - 1,270' AS DRILLED WATERSHED    HEADWATERS OF MIDDLE ISLAND CREEK

QUADRANGLE BIG ISSAC 7.5' DISTRICT GREENBRIER COUNTY DODDGE

SURFACE OWNER JUNIOR PERINE ACREAGE 89.43 ACRES +/-

OIL & GAS ROYALTY OWNER REXALL BARNETT ET AL; E. MAY SUMMERS; E. MAY SUMMERS; MARY WELCH; DAVID M. BELL ET UX; W.V. ROSS; ERVIN R. CORDER; PATTY S. CORK; GERALD D. BARNES ET AL; J.J. ADAMS; DENNIS FOREMAN; DENNIS FOREMAN; HARRY H. MEEK JR. ET AL; HARRY H. MEEK JR. ET AL LEASE ACREAGE 81.4 AC±; 38 AC±; 68 AC±; 15.6 AC±; 47.2 AC±; 132 AC±; 52.2 AC±; 4.52 AC±; 48.5 AC±; 136.3 AC±; 46 AC±; 5.4179 AC±; 96 AC±; 60 AC±

PROPOSED WORK: DRILL    CONVERT    DRILL DEEPER    REDRILL    FRACTURE OR STIMULATE     
 PLUG OFF OLD FORMATION    PERFORATE NEW FORMATION    OTHER PHYSICAL CHANGE IN WELL (SPECIFY) (X) AS DRILLED PLUG & ABANDON    CLEAN OUT & REPLUG     
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,312' TVD 17,792' MD

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

RECEIVED  
 Office of Oil and Gas  
 JUL 06 2015  
 WV Department of Environmental Protection

06/24/2015