

WR-35  
Rev. 8/23/13

RECEIVED

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Page \_\_\_ of \_\_\_

State of West Virginia WV GEOLOGICAL SURVEY  
Department of Environmental Protection - Office of Oil and Gas MORGANTOWN, WV  
Well Operator's Report of Well Work

API 47 - 017 - 06372 County Doddridge District Grant  
Quad Smithburg 7.5' Pad Name RJ Smith Field/Pool Name ---  
Farm name Smith, Robert J. Well Number Gibson Unit 2H  
Operator (as registered with the OOG) Antero Resources Corporation  
Address 1615 Wynkoop St. 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 4357402m Easting 523021m  
Landing Point of Curve Northing 4357502.17m Easting 522925.96m  
Bottom Hole Northing 4360043m Easting 521904m

Elevation (ft) 998' 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 11/4/2013 Date drilling commenced 2/22/2015 Date drilling ceased 6/9/2015  
Date completion activities began 11/5/2015 Date completion activities ceased 1/22/2016  
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 181', 237' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 804', 1267', 1350', 1431' 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 by:

API 47-017 - 06372 Farm name Smith, Robert J. Well number Gibson 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	30"	20"	40'	New	94# J-55	N/A	Y
Surface	17- 1/2"	13- 3/8"	484'	New	48# H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2563'	New	36# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" & 8-1/2"	5-1/2"	16190'	New	23# P-110	N/A	Y
Tubing		2-3/8"	6754'		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	193 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	590 sx	15.6	1.18	336	0'	8 Hrs.
Coal							
Intermediate 1	Class A	940 sx	15.6	1.18	803	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1110 sx (Lead) 1457 sx (Tail)	14.2 Lead 14.8 Tail	1.24 Lead 1.81 Tail	3236	-500' into intermediate casing	8 Hrs.
Tubing							

Drillers TD (ft) 16190' MD, 6822' TVD (BHL), 6884' (Deepest Point Drilled) Loggers TD (ft) 16190'  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6286'

\*\* This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Duff Unit 2H API #47-017-06247). Please reference the wireline logs submitted with Form WR-35 for Duff 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 \_\_\_\_\_

WR-35  
Rev. 8/23/13

Page \_\_\_ of \_\_\_

API 47- 017 - 06372

Farm name Smith, Robert J.

Well number Gibson Unit 2H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
<b>*PLEASE SEE ATTACHED EXHIBIT 1</b>					

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
<b>*PLEASE SEE ATTACHED EXHIBIT 2</b>								

Please insert additional pages as applicable.

WR-35  
Rev. 8/23/13

Page \_\_\_ of \_\_\_

API 47- 017 - 06372 Farm name Smith, Robert J. Well number Gibson Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6817' (TOP)</u> TVD	<u>6917' (TOP)</u> MD
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 3550 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 8920 mcfpd Oil 25 bpd NGL --- bpd Water 4 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 <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		

**\*PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling Company LP  
Address 2640 Reach Rd. City Williamsport State PA Zip 17701

Logging Company Rush Wellsite Services  
Address 600 Alpha Drive City Canonsburg State PA Zip 15317

Cementing Company Allied Gas & Oil Services, LLC  
Address 1036 East Main St. City Bridgeport State WV Zip 26330

Stimulating Company Baker Hughes  
Address 837 Philippi Pike City Clarksburg State WV Zip 26301

Please insert additional pages as applicable.

Completed by Kara Quackenbush Telephone 303-357-7233  
Signature *Kara Quackenbush* Title Permit Representative Date 3/17/2016

API 47-017-06372 Farm Name Smith, Robert J. Well Number Gibson Unit 2H

**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	5-Nov-15	15,930	16,098	60	Marcellus
2	3-Dec-15	15,730	15,898	60	Marcellus
3	4-Dec-15	15,531	15,699	60	Marcellus
4	4-Dec-15	15,331	15,500	60	Marcellus
5	4-Dec-15	15,132	15,300	60	Marcellus
6	4-Dec-15	14,933	15,101	60	Marcellus
7	5-Dec-15	14,733	14,901	60	Marcellus
8	5-Dec-15	14,534	14,702	60	Marcellus
9	5-Dec-15	14,334	14,502	60	Marcellus
10	5-Dec-15	14,135	14,303	60	Marcellus
11	6-Dec-15	13,935	14,104	60	Marcellus
12	6-Dec-15	13,736	13,904	60	Marcellus
13	6-Dec-15	13,536	13,705	60	Marcellus
14	6-Dec-15	13,337	13,505	60	Marcellus
15	6-Dec-15	13,138	13,306	60	Marcellus
16	7-Dec-15	12,938	13,106	60	Marcellus
17	7-Dec-15	12,739	12,907	60	Marcellus
18	7-Dec-15	12,539	12,707	60	Marcellus
19	7-Dec-15	12,340	12,508	60	Marcellus
20	7-Dec-15	12,140	12,309	60	Marcellus
21	8-Dec-15	11,941	12,109	60	Marcellus
22	21-Dec-15	11,741	11,910	60	Marcellus
23	21-Dec-15	11,542	11,710	60	Marcellus
24	21-Dec-15	11,343	11,511	60	Marcellus
25	21-Dec-15	11,143	11,311	60	Marcellus
26	22-Dec-15	10,944	11,112	60	Marcellus
27	22-Dec-15	10,744	10,912	60	Marcellus
28	22-Dec-15	10,545	10,713	60	Marcellus
29	22-Dec-15	10,345	10,514	60	Marcellus
30	23-Dec-15	10,146	10,314	60	Marcellus
31	23-Dec-15	9,947	10,115	60	Marcellus
32	23-Dec-15	9,747	9,915	60	Marcellus
33	23-Dec-15	9,548	9,716	60	Marcellus
34	23-Dec-15	9,348	9,516	60	Marcellus
35	23-Dec-15	9,149	9,317	60	Marcellus
36	24-Dec-15	8,949	9,118	60	Marcellus
37	26-Dec-15	8,750	8,918	60	Marcellus
38	26-Dec-15	8,550	8,719	60	Marcellus
39	26-Dec-15	8,351	8,519	60	Marcellus
40	27-Dec-15	8,152	8,320	60	Marcellus
41	27-Dec-15	7,952	8,120	60	Marcellus
42	27-Dec-15	7,753	7,921	60	Marcellus
43	27-Dec-15	7,553	7,721	60	Marcellus
44	27-Dec-15	7,354	7,522	60	Marcellus
45	28-Dec-15	7,154	7,323	60	Marcellus
46	28-Dec-15	6,955	7,123	60	Marcellus

API 47-017-06372 Farm Name Smith, Robert J. Well Number Gibson 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 (bbbls)	Amount of Nitrogen/ other (units)
1	3-Dec-15	67.9	7,222	5,651	5,335	249,982	6,650	N/A
2	3-Dec-15	69.4	6,959	5,198	5,202	258,021	6,573	N/A
3	4-Dec-15	70.4	7,214	5,836	4,931	254,469	6,590	N/A
4	4-Dec-15	74.0	7,448	6,018	5,296	252,612	6,483	N/A
5	4-Dec-15	74.0	7,331	6,289	5,327	215,119	7,079	N/A
6	4-Dec-15	71.3	7,167	6,036	5,323	256,328	6,497	N/A
7	5-Dec-15	72.3	7,241	5,747	5,258	253,289	6,438	N/A
8	5-Dec-15	78.0	6,794	5,894	5,330	247,215	6,383	N/A
9	5-Dec-15	73.7	7,455	5,827	5,364	197,986	7,002	N/A
10	5-Dec-15	75.2	7,255	5,602	5,495	252,643	6,308	N/A
11	6-Dec-15	73.1	7,263	5,598	5,313	253,429	6,320	N/A
12	6-Dec-15	76.0	7,722	5,520	5,373	251,076	6,405	N/A
13	6-Dec-15	74.3	7,743	5,564	5,143	147,622	7,011	N/A
14	6-Dec-15	72.8	7,306	6,594	5,390	250,715	6,438	N/A
15	6-Dec-15	72.8	7,099	5,542	4,766	252,644	6,312	N/A
16	7-Dec-15	72.7	6,950	5,523	5,349	251,461	6,248	N/A
17	7-Dec-15	73.2	7,132	5,702	5,388	250,902	6,252	N/A
18	7-Dec-15	74.3	7,013	5,795	5,452	251,990	6,284	N/A
19	7-Dec-15	73.7	6,924	5,592	5,160	251,875	6,261	N/A
20	7-Dec-15	72.0	6,883	5,489	4,442	249,361	6,210	N/A
21	8-Dec-15	75.0	7,114	5,573	5,241	250,582	6,212	N/A
22	21-Dec-15	68.4	6,686	5,597	5,251	250,840	6,343	N/A
23	21-Dec-15	71.2	6,727	5,408	5,464	251,471	6,311	N/A
24	21-Dec-15	70.6	6,945	5,512	5,057	222,107	6,174	N/A
25	21-Dec-15	69.0	6,803	5,479	5,122	250,385	6,411	N/A
26	22-Dec-15	69.5	6,755	5,326	5,709	252,230	6,282	N/A
27	22-Dec-15	69.8	6,607	5,230	4,788	252,045	6,255	N/A
28	22-Dec-15	70.5	6,714	15	4,847	251,449	6,203	N/A
29	22-Dec-15	69.2	6,963	5,581	5,225	209,072	5,868	N/A
30	23-Dec-15	69.7	6,783	5,526	4,506	250,562	6,315	N/A
31	23-Dec-15	69.1	6,718	6,140	5,040	254,270	6,255	N/A
32	23-Dec-15	70.6	6,472	5,494	5,576	250,830	6,146	N/A
33	23-Dec-15	70.2	6,608	5,421	5,890	251,992	6,112	N/A
34	23-Dec-15	70.8	6,311	5,705	5,050	251,281	6,164	N/A
35	23-Dec-15	69.8	6,462	5,956	5,323	256,720	6,271	N/A
36	24-Dec-15	69.6	6,653	5,954	4,843	253,233	6,163	N/A
37	26-Dec-15	70.4	6,734	5,692	5,123	199,316	6,610	N/A
38	26-Dec-15	69.7	6,638	5,836	5,318	253,185	6,199	N/A
39	26-Dec-15	68.1	6,652	6,701	5,287	252,681	6,068	N/A
40	27-Dec-15	69.9	6,774	6,134	4,802	177,921	5,725	N/A
41	27-Dec-15	70.2	6,912	5,881	5,279	252,239	6,262	N/A
42	27-Dec-15	69.9	6,606	6,430	5,122	251,974	6,114	N/A
43	27-Dec-15	70.2	6,672	6,871	5,069	252,482	6,199	N/A
44	27-Dec-15	73.4	7,000	5,579	5,175	226,292	6,450	N/A
45	28-Dec-15	69.9	6,671	5,898	5,507	153,724	6,315	N/A
46	28-Dec-15	71.0	6,220	7,036	5,149	253,299	5,984	N/A
<b>AVG=</b>		<b>71.5</b>	<b>6,920</b>	<b>5,674</b>	<b>5,204</b>	<b>11,080,921</b>	<b>291,155</b>	<b>TOTAL</b>

API 47-017-06372 Farm Name Smith, Robert J. Well Number Gibson Unit 2H

**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	181'	N/A	181'	N/A
Fresh Water	237'	N/A	237'	N/A
Siltstone	0	427	0	427
Sandstone	est. 427	597	est. 427	597
Dolostone/Sandstone/Siltstone	est. 597	637	est. 597	637
Sandstone and Siltstone w/trace coal	est. 637	697	est. 637	697
Siltstone	est. 697	877	est. 697	877
Shale	est. 877	1027	est. 877	1027
Sandstone	est. 1027	1107	est. 1027	1107
Sandstone w/trace coal	est. 1107	1197	est. 1107	1197
Sandstone	est. 1197	1527	est. 1197	1527
Siltstone	est. 1527	1587	est. 1527	1587
Sandstone	est. 1587	1647	est. 1587	1647
Shale	est. 1647	1707	est. 1647	1707
Sandstone	est. 1707	1737	est. 1707	1737
Shale	est. 1737	1867	est. 1737	1867
Siltstone	est. 1867	2007	est. 1867	2009
Big Lime	2007	2112	2009	2114
Big Injun	2112	2570	2114	2572
Gantz Sand	2570	2706	2572	2708
Fifty Foot Sandstone	2706	2781	2708	2783
Gordon	2781	3142	2783	3144
Fifth Sandstone	3142	3154	3144	3156
Bayard	3154	3502	3156	3504
Warren	3502	3889	3504	3891
Speechley	3889	4605	3891	4607
Bradford	4605	5084	4607	5086
Benson	5084	5351	5086	5353
Alexander	5351	5549	5353	5551
Elk	5549	6054	5551	6056
Rhinestreet	6054	6416	6056	6422
Sycamore	6416	6601	6422	6619
Middlesex	6601	6735	6619	6784
Burkett	6735	6764	6784	6824
Tully	6764	6817	6824	6917
Marcellus	6817	NA	6917	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:	12/2/2015
Job End Date:	12/28/2015
State:	West Virginia
County:	Doddridge
API Number:	47-017-06372-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Gibson Unit 2H
Longitude:	-80.74622000
Latitude:	39.38952000
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,882
Total Base Water Volume (gal):	12,884,130
Total Base Non Water Volume:	0



## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Service Abstract Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier	Water	7732-18-5	100.00000	90.24972	
Sand, White	Baker Hughes	Proppant	Listed with Other Chemicals	NA		9.30926	
HCl, 20.1 - 28%	Baker Hughes	Acidizing	Listed with Other Chemicals	NA		0.22002	
GW-3LDF	Baker Hughes	Gelling Agent	Listed with Other Chemicals	NA		0.12112	
FRW-18	Baker Hughes	Friction Reducer	Listed with Other Chemicals	NA		0.01900	
Alpha 1427	Baker Hughes	Biocide	Listed with Other Chemicals	NA		0.00431	
Enzyme G-NE	Baker Hughes	Breaker	Listed with Other Chemicals	NA		0.00068	
Calcium Chloride	Baker Hughes	Salts	Listed with Other Chemicals	NA		0.00017	
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.							
		Other Chemicals	Crystalline Silica (Quartz)	14808-60-7		9.31375	





LATITUDE 39°22'30"

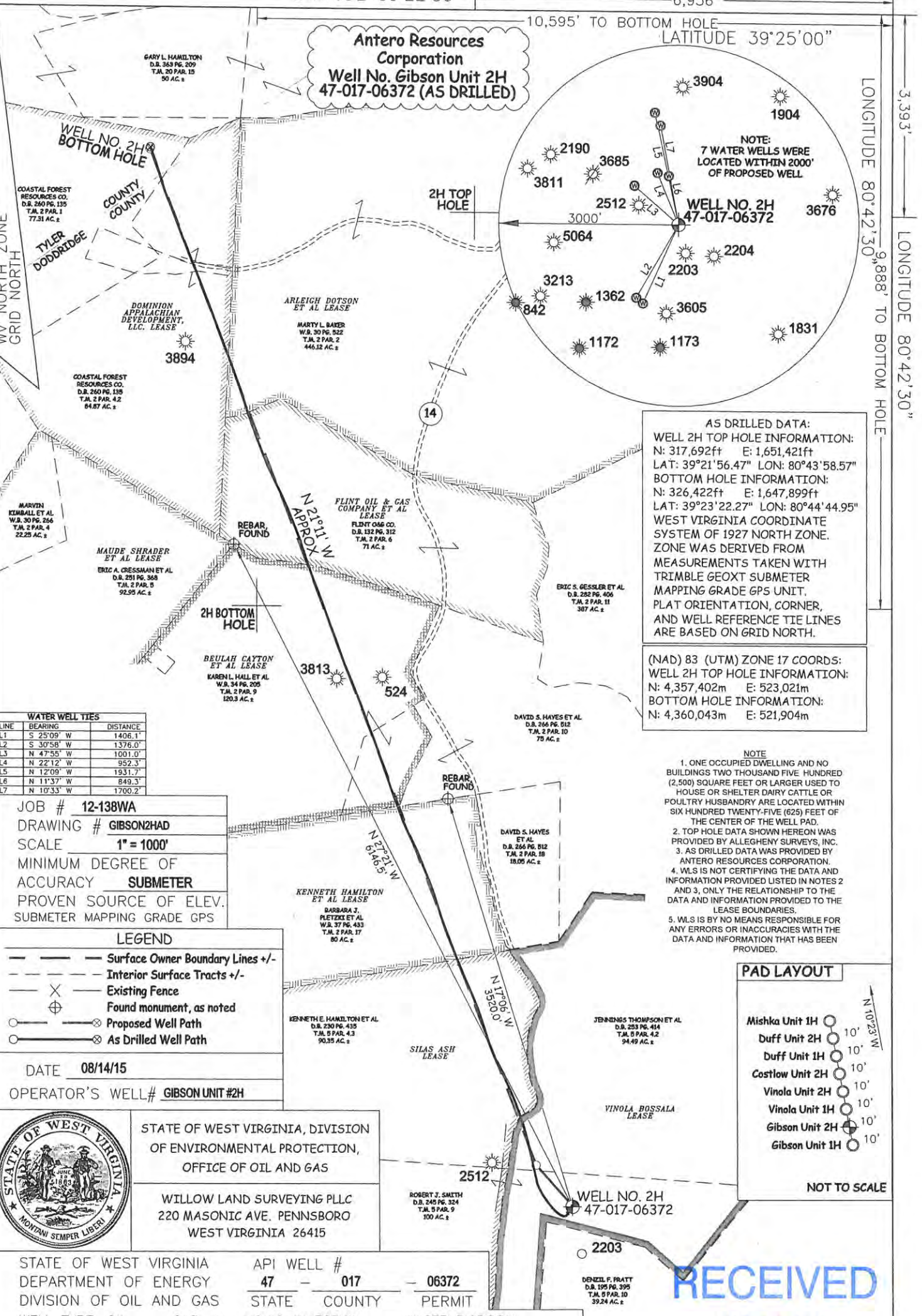
6,956'

10,595' TO BOTTOM HOLE

LATITUDE 39°25'00"

LONGITUDE 80°42'30" 9,888' TO BOTTOM HOLE  
LONGITUDE 80°42'30"

**Antero Resources Corporation**  
**Well No. Gibson Unit 2H**  
**47-017-06372 (AS DRILLED)**



**AS DRILLED DATA:**  
**WELL 2H TOP HOLE INFORMATION:**  
 N: 317,692ft E: 1,651,421ft  
 LAT: 39°21'56.47" LON: 80°43'58.57"  
**BOTTOM HOLE INFORMATION:**  
 N: 326,422ft E: 1,647,899ft  
 LAT: 39°23'22.27" LON: 80°44'44.95"  
 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: 4,357,402m E: 523,021m  
**BOTTOM HOLE INFORMATION:**  
 N: 4,360,043m E: 521,904m

- NOTE**
- ONE OCCUPIED DWELLING AND NO 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.
  - TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY 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 INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

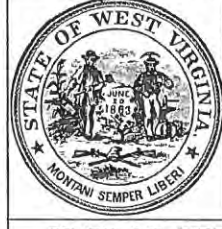
LINE	BEARING	DISTANCE
L1	S 25°09' W	1406.1'
L2	S 30°58' W	1376.0'
L3	N 47°55' W	1001.0'
L4	N 22°12' W	952.3'
L5	N 12°09' W	1931.7'
L6	N 11°37' W	849.3'
L7	N 10°33' W	1700.2'

JOB # **12-138WA**  
 DRAWING # **GIBSON2HAD**  
 SCALE **1" = 1000'**  
 MINIMUM DEGREE OF ACCURACY **SUBMETER**  
 PROVEN SOURCE OF ELEV. **SUBMETER MAPPING GRADE GPS**

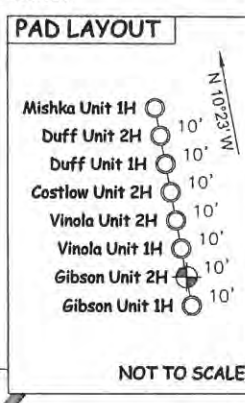
**LEGEND**

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

DATE **08/14/15**  
 OPERATOR'S WELL# **GIBSON UNIT #2H**



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 DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

API WELL # 47 - 017 - 06372

STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1,004' ORIGINAL - 998' AS DRILLED WATERSHED MCELROY CREEK  
 QUADRANGLE SMITHBURG 7.5 (TH) CENTERPOINT 7.5 (BH) DISTRICT GRANT COUNTY DODDRIDGE

SURFACE OWNER ROBERT J. SMITH ACREAGE 100 ACRES +/-

OIL & GAS ROYALTY OWNER VINOLA BOSSALA; SILAS ASH; KENNETH HAMILTON ET AL; BEULAH CAYTON ET AL; FLINT OIL & GAS COMPANY ET AL; ARLEIGH DOTSON ET AL; DOMINION APPALACHIAN DEV. LLC.

LEASE ACREAGE 120 ACRES±; 120 ACRES±; 80 ACRES±; 123.5 ACRES±; 70 ACRES±; 446.5 ACRES±; 167.29 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 6,822' TVD 16,190' 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**

MAR 23 2016

WV GEOLOGICAL SURVEY  
 MORGANTOWN, WV

COUNTY NAME DODDRIDGE PERMIT 47-017-06372