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

API 47 - 017 - 06159 County Doddridge District Greenbrier
Quad Big Isaac Pad Name Clarence Pad Field/Pool Name
Farm name Mutschelknaus, Clarence & Mary Well Number Oneacre 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 4,344,028.232m Easting 537,272.593m
Landing Point of Curve Northing 4,343,600.42m Easting 537,129.49m
Bottom Hole Northing 4,342,065.034m Easting 539,023.706m

Elevation (ft) 1050' 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 1/7/2013 Date drilling commenced 10/7/2013 Date drilling ceased 2/12/2014
Date completion activities began 6/21/2014 Date completion activities ceased 12/11/2014
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 107', 260' Open mine(s) (Y/N) depths N
Salt water depth(s) ft None Identified Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1736' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

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API 47- 017 - 06159 Farm name Mutschelknaus, Clarence & Mary Well number Oneacre 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#/H-40	N/A	Y
Surface	17-1/2"	13-3/8"	357'	New	48#/H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2539'	New	40#/J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	15,827'	New	23#/P-110	N/A	Y
Tubing		2-3/8"	7512'		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 ^{3}/sks)	Volume (ft^3)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	150 sx	15.6	1.18	38 Cu. Ft.	0'	8 hrs
Surface	Class A	427 sx	15.6	1.18	248 Cu. Ft.	0'	8 hrs
Coal							
Intermediate 1	Class A	937 sx	15.6	1.18	795 Cu. Ft.	0'	8 hrs
Intermediate 2							
Intermediate 3							
Production	Class H	1012 sx (Lead), 1380 sx (Tail)	13.5 (Lead), 15.2 (Tail)	15.2 (Lead), 1.80 (Tail)	3159 Cu. Ft.	~500' into Intermediate Casing	8 hrs
Tubing							

Drillers TD (ft) 15,827' MD, 7078' TVD (BHL), 7191' TVD (Deepest Point Drilled) Loggers TD (ft) 15,782' MD

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

Plug back procedure N/A

Kick off depth (ft) 6907'

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

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Ruth Unit 1H API# 47-017-06164). Please reference the wireline logs submitted with Form WR-35 for the Ruth Unit 1H. A Cement Bond Log has been included with this submittal.

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 Radioactive & Chemical

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)

*PLEASE SEE ATTACHED EXHIBIT 1

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)

*PLEASE SEE ATTACHED EXHIBIT 2

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Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS			
Marcellus	7123' (Top)	TVD	7565' (Top)	MD

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 7372 mcfpd Oil ---- bpd NGL ---- bpd Water ---- bpd GAS MEASURED BY □ Estimated ■ Orifice □ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H_2S, ETC)
	0		0		

*PLEASE SEE ATTACHED EXHIBIT 3

Please insert additional pages as applicable.

Drilling Contractor Frontier Drilling LLC
Address 562 Spring Run Road City Pennsboro State WV Zip 26415

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

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

Stimulating Company U.S. Well Services
Address 533 Industrial Park Drive City Jane Lew State WV Zip 26378

Please insert additional pages as applicable.

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JUL 27 2015

Completed by Natalie Komp Telephone 303-357-6820
Signature Natalie Komp Title Permitting Agent Date 7/22/2015

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

10/23/2015

API 47-017-06159 Farm Name Mutschelknaus, Clarence & Mary Well Number Oneacre Unit 2H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	21-Jun-14	15,576	15,741	60	Marcellus
2	10-Aug-14	15,380	15,545	60	Marcellus
3	10-Aug-14	15,184	15,349	60	Marcellus
4	24-Sep-14	14,988	15,153	60	Marcellus
5	25-Sep-14	14,792	14,958	60	Marcellus
6	26-Sep-14	14,596	14,762	60	Marcellus
7	26-Sep-14	14,401	14,566	60	Marcellus
8	27-Sep-14	14,205	14,370	60	Marcellus
9	27-Sep-14	14,009	14,174	60	Marcellus
10	27-Sep-14	13,813	13,978	60	Marcellus
11	28-Sep-14	13,617	13,782	60	Marcellus
12	28-Sep-14	13,421	13,586	60	Marcellus
13	28-Sep-14	13,225	13,391	60	Marcellus
14	29-Sep-14	13,029	13,195	60	Marcellus
15	29-Sep-14	12,834	12,999	60	Marcellus
16	29-Sep-14	12,638	12,803	60	Marcellus
17	30-Sep-14	12,442	12,607	60	Marcellus
18	30-Sep-14	12,246	12,411	60	Marcellus
19	30-Sep-14	12,050	12,215	60	Marcellus
20	30-Sep-14	11,854	12,019	60	Marcellus
21	1-Oct-14	11,658	11,824	60	Marcellus
22	1-Oct-14	11,463	11,628	60	Marcellus
23	1-Oct-14	11,267	11,432	60	Marcellus
24	1-Oct-14	11,071	11,236	60	Marcellus
25	2-Oct-14	10,875	11,040	60	Marcellus
26	2-Oct-14	10,679	10,844	60	Marcellus
27	2-Oct-14	10,483	10,648	60	Marcellus
28	31-Oct-14	10,287	10,453	60	Marcellus
29	31-Oct-14	10,091	10,257	60	Marcellus
30	1-Nov-14	9,896	10,061	60	Marcellus
31	1-Nov-14	9,700	9,865	60	Marcellus
32	1-Nov-14	9,504	9,669	60	Marcellus
33	1-Nov-14	9,308	9,473	60	Marcellus
34	2-Nov-14	8,908	9,090	60	Marcellus
35	2-Nov-14	8,691	8,874	60	Marcellus
36	2-Nov-14	8,475	8,657	60	Marcellus
37	2-Nov-14	8,259	8,441	60	Marcellus
38	3-Nov-14	8,043	8,225	60	Marcellus
39	3-Nov-14	7,826	8,009	60	Marcellus
40	5-Nov-14	7,610	7,792	60	Marcellus

API 47-017-06159 Farm Name Mutschelknaus, Clarence & Mary Well Number Oneacre 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	10-Aug-14	69.0	7,791	6,918	4,868	186,700	6,637	N/A
2	10-Aug-14	41.0	7,741	6,829	4,468	49,400	7,398	N/A
3	24-Sep-14	58.0	7,880	6,323	4,644	236,990	7,216	N/A
4	25-Sep-14	60.4	7,441	6,248	5,505	252,215	7,252	N/A
5	26-Sep-14	59.2	7,525	6,131	5,146	237,600	7,260	N/A
6	26-Sep-14	59.8	7,211	6,508	5,387	263,000	7,572	N/A
7	26-Sep-14	62.0	7,306	6,219	5,135	262,050	7,035	N/A
8	27-Sep-14	63.0	7,253	6,636	5,661	263,000	6,994	N/A
9	27-Sep-14	63.0	7,186	6,038	5,116	262,900	6,978	N/A
10	27-Sep-14	63.5	7,456	6,158	5,602	225,555	7,406	N/A
11	28-Sep-14	61.6	7,470	6,304	5,168	260,565	7,022	N/A
12	28-Sep-14	62.1	7,130	6,208	5,121	262,800	6,853	N/A
13	28-Sep-14	64.9	6,958	5,622	4,858	264,050	6,902	N/A
14	29-Sep-14	65.4	6,975	5,878	4,828	257,600	6,700	N/A
15	29-Sep-14	64.6	6,847	5,821	4,629	262,700	6,763	N/A
16	29-Sep-14	65.3	7,065	6,228	4,948	250,250	6,751	N/A
17	30-Sep-14	65.6	7,278	5,855	4,977	263,280	6,745	N/A
18	30-Sep-14	63.6	7,138	6,104	5,040	262,400	6,899	N/A
19	30-Sep-14	63.4	7,197	6,207	5,079	264,300	6,788	N/A
20	30-Sep-14	65.5	7,366	6,312	5,226	248,470	6,488	N/A
21	1-Oct-14	65.9	7,184	6,335	5,445	264,430	6,663	N/A
22	1-Oct-14	64.7	7,012	6,088	5,305	263,500	6,606	N/A
23	1-Oct-14	64.0	6,968	6,199	5,587	261,880	6,600	N/A
24	1-Oct-14	66.0	6,970	5,470	5,224	264,030	6,712	N/A
25	2-Oct-14	64.6	7,202	5,835	5,244	250,400	6,422	N/A
26	2-Oct-14	64.3	71,797	6,210	5,313	262,800	6,540	N/A
27	2-Oct-14	65.6	7,227	6,124	5,668	262,520	6,527	N/A
28	31-Oct-14	64.0	7,007	5,814	4,710	204,490	5,732	N/A
29	31-Oct-14	62.8	7,072	6,219	5,267	191,100	5,515	N/A
30	1-Nov-14	63.5	7,090	6,306	4,802	203,450	5,642	N/A
31	1-Nov-14	65.0	7,208	6,230	4,860	255,030	6,294	N/A
32	1-Nov-14	65.0	7,003	6,450	4,817	253,420	6,240	N/A
33	1-Nov-14	63.8	6,972	5,801	4,988	250,900	6,220	N/A
34	2-Nov-14	64.0	6,750	5,827	4,689	250,400	6,188	N/A
35	2-Nov-14	65.5	6,608	5,067	4,653	252,470	6,207	N/A
36	2-Nov-14	64.8	6,625	5,809	4,521	253,840	6,168	N/A
37	2-Nov-14	64.2	6,789	6,270	4,787	252,800	6,118	N/A
38	3-Nov-14	64.5	6,913	6,020	4,938	252,600	6,088	N/A
39	3-Nov-14	62.8	6,939	6,080	5,374	196,200	4,866	N/A
40	5-Nov-14	64.5	7,493	6,683	5,289	252,620	6,533	N/A
	AVG=	**63.3**	**8,776**	**6,135**	**5,072**	**9,734,705**	**263,540**	TOTAL

API 47-017-06159 Farm Name Mutschelknaus, Clarence & Mary Well Number Oneacre 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	107	N/A	107	N/A
Fresh Water	260	N/A	260	N/A
Shale	0	566	0	566
Shale/Siltstone	est. 566	676	est. 566	676
Shale	est. 676	716	est. 676	716
Shale/Coal	est. 716	836	est. 716	836
Shale/Siltstone	est. 836	1,696	est. 836	1,696
Sandstone	est. 1696	1,736	est. 1696	1,736
Coal	est. 1736	1,766	est. 1736	1,766
Shale	est. 1766	2,017	est. 1766	2,017
Big Lime	2,017	2,114	2,017	2,114
Big Injun	2,114	2,476	2,114	2,476
Gantz Sand	2,476	2,592	2,476	2,592
Fifty Foot Sandstone	2,592	2,677	2,592	2,677
Gordon	2,677	2,847	2,677	2,847
Fifth Sandstone	2,847	2,884	2,847	2,884
Bayard	2,884	3,367	2,884	3,367
Warren	3,367	3,577	3,367	3,579
Speechley	3,577	3,888	3,579	3,892
Baltown	3,888	4,385	3,892	4,392
Bradford	4,385	4,970	4,392	4,985
Benson	4,970	5,283	4,985	5,310
Alexander	5,283	5,441	5,310	5,473
Elk	5,441	6,068	5,473	6,168
Rhinestreet	6,068	6,578	6,168	6,743
Sycamore	6,578	6,798	6,743	7,002
Middlesex	6,798	6,946	7,002	7,212
Burkett	6,946	6,973	7,212	7,256
Tully	6,973	7,123	7,256	7,565
Marcellus	7,123	NA	7,565	NA
Onondaga**	7,145	NA	9,085	NA

*Please note Antero determines shallow 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.

**Antero drilled a small portion of this well less than 5 feet into the Onondaga formation from approximately 9085'-9263' in the lateral but this section was not perforated or completed.

17-06159

Antero Resources

Antero Resources
Oneacre Unit 2H
Doddridge County WV
Northing: 14251315.58
Easting: 1762656.18
As Drilled

WELL DETAILS: Oneacre Unit 2H
Ground Level: 1050.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	14251315.58	1762656.18	39° 14' 40.841 N	80° 34' 5.668 W	

REFERENCE INFORMATION
Coordinate (N/E) Reference: Well Oneacre Unit 2H, Grid North
Vertical (TVD) Reference: Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0usft
Section (VS) Reference: Slot - (0.0N, 0.0E)
Measured Depth Reference: Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0usft
Calculation Method: Minimum Curvature

PROJECT DETAILS: Doddridge County WV
Geodetic System: Universal Transverse Mercator (US Survey Feet)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: Zone 17N (84 W to 78 W)
System Datum: Mean Sea Level

Scientific Drilling

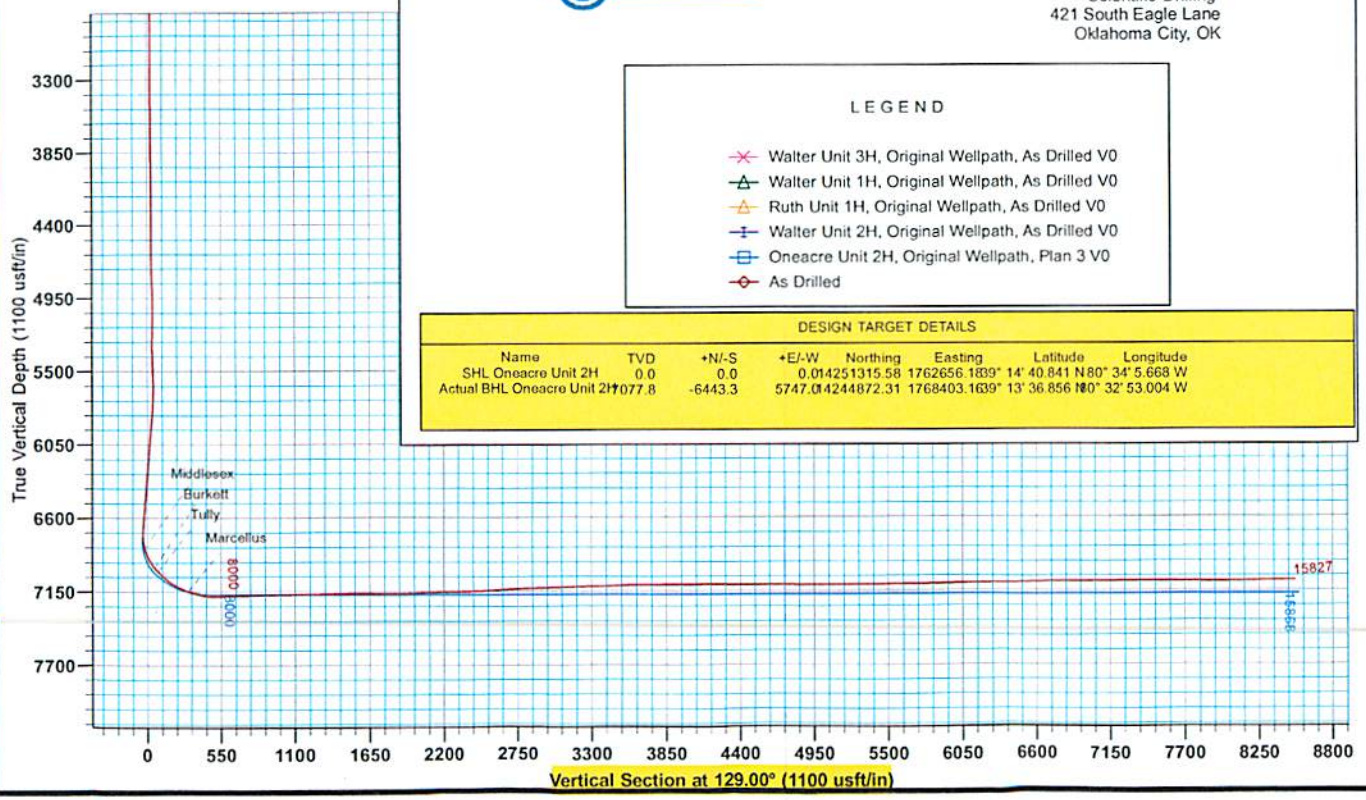
Genie Lightfoot
10:44, February 13 2014

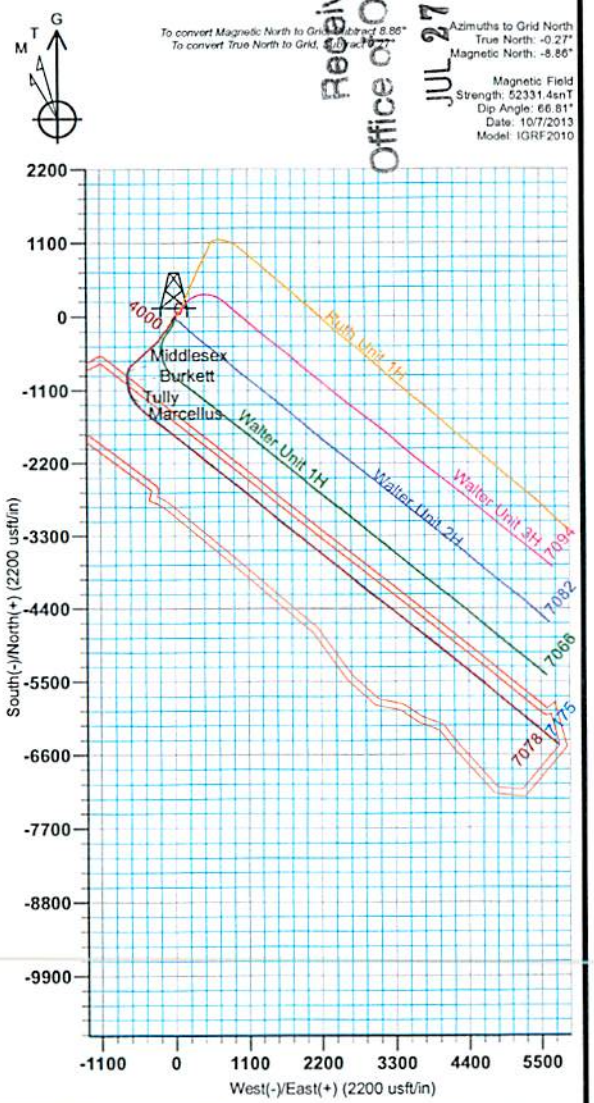
Scientific Drilling
421 South Eagle Lane
Oklahoma City, OK

LEGEND
- Walter Unit 3H, Original Wellpath, As Drilled V0
- Walter Unit 1H, Original Wellpath, As Drilled V0
- Ruth Unit 1H, Original Wellpath, As Drilled V0
- Walter Unit 2H, Original Wellpath, As Drilled V0
- Oneacre Unit 2H, Original Wellpath, Plan 3 V0
- As Drilled

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL Oneacre Unit 2H	0.0	0.0	0.0	14251315.58	1762656.18	39° 14' 40.841 N	80° 34' 5.668 W
Actual BHL Oneacre Unit 2H	7077.8	-6443.3	5747.0	14244872.31	1768403.16	39° 13' 36.856 N	80° 32' 53.004 W





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Antero Resources

Doddridge County WV
Ruth/Walter/Caswell/Arters
Oneacre Unit 2H
Original Wellpath

Design: As Drilled

EOW Completion Report

13 February, 2014

17-06159

Antero Resources

EOW Completion Report

Scientific Drilling

Company:	Antero Resources	**Local Co-ordinate Reference:**	Well Oneacre Unit 2H
Project:	Doddridge County WV	**TVD Reference:**	Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0us
Site:	Ruth/Walter/Caswell/Arters	**MD Reference:**	Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0us
Well:	Oneacre Unit 2H	**North Reference:**	Grid
Wellbore:	Original Wellpath	**Survey Calculation Method:**	Minimum Curvature
Design:	As Drilled	**Database:**	Oklahoma District

Project Doddridge County WV, McClellan District

Map System:	Universal Transverse Mercator (US Survey Fee	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 17N (84 W to 78 W)		

Site Ruth/Walter/Caswell/Arters, Center is Ruth Unit 1

Site Position:		**Northing:**	14,251,337.29 usft	**Latitude:**	39° 14' 41.054 N
From:	Map	**Easting:**	1,762,689.77 usft	**Longitude:**	80° 34' 5.240 W
Position Uncertainty:	2.0 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0.27 °

Well Oneacre Unit 2H, Marcellus

Well Position	**+N/-S**	0.0 usft	**Northing:**	14,251,315.58 usft	**Latitude:**	39° 14' 40.841 N
	+E/-W	0.0 usft	**Easting:**	1,762,656.18 usft	**Longitude:**	80° 34' 5.668 W
Position Uncertainty		2.0 usft	**Wellhead Elevation:**	1,075.0 usft	**Ground Level:**	1,050.0 usft

Wellbore Original Wellpath

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/7/2013	-8.59	66.81	52,331

Design As Drilled

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	129.00

Survey Program **Date** 2/13/2014

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
112.0	2,525.0	Survey #4 Final Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper
2,612.0	15,827.0	Survey #3 MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00
112.0	0.35	359.39	112.0	0.3	0.0	-0.2	0.31
212.0	0.20	105.02	212.0	0.6	0.2	-0.3	0.45
312.0	0.38	131.90	312.0	0.3	0.6	0.2	0.22
412.0	0.38	123.02	412.0	-0.1	1.1	0.9	0.06
512.0	0.46	125.09	512.0	-0.5	1.7	1.6	0.08
612.0	0.43	117.10	612.0	-0.9	2.4	2.4	0.07
712.0	0.48	129.69	712.0	-1.3	3.0	3.2	0.11
812.0	0.50	131.29	812.0	-1.9	3.7	4.0	0.02
912.0	0.55	124.82	912.0	-2.4	4.4	5.0	0.08
1,012.0	0.59	121.90	1,012.0	-3.0	5.2	5.9	0.05

17-06159

Antero Resources

EOW Completion Report

Scientific Drilling

Company:	Antero Resources	**Local Co-ordinate Reference:**	Well Oneacre Unit 2H
Project:	Doddridge County WV	**TVD Reference:**	Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0us
Site:	Ruth/Walter/Caswell/Arters	**MD Reference:**	Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0us
Well:	Oneacre Unit 2H	**North Reference:**	Grid
Wellbore:	Original Wellpath	**Survey Calculation Method:**	Minimum Curvature
Design:	As Drilled	**Database:**	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
1,112.0	0.62	123.98	1,112.0	-3.6	6.1	7.0	0.04
1,212.0	0.56	124.53	1,212.0	-4.1	7.0	8.0	0.06
1,312.0	0.58	127.27	1,312.0	-4.7	7.8	9.0	0.03
1,412.0	0.59	133.18	1,412.0	-5.4	8.6	10.0	0.06
1,512.0	0.59	125.59	1,511.9	-6.0	9.3	11.1	0.08
1,612.0	0.61	119.73	1,611.9	-6.6	10.2	12.1	0.06
1,712.0	0.59	117.58	1,711.9	-7.1	11.1	13.1	0.03
1,812.0	0.61	128.69	1,811.9	-7.7	12.0	14.2	0.12
1,912.0	0.64	124.02	1,911.9	-8.3	12.9	15.3	0.06
2,012.0	0.63	115.56	2,011.9	-8.9	13.9	16.3	0.09
2,112.0	0.59	123.36	2,111.9	-9.4	14.8	17.4	0.09
2,212.0	0.49	120.68	2,211.9	-9.9	15.6	18.3	0.10
2,312.0	0.53	135.14	2,311.9	-10.4	16.3	19.2	0.13
2,412.0	0.62	139.03	2,411.9	-11.2	17.0	20.2	0.10
2,512.0	0.52	130.86	2,511.9	-11.9	17.7	21.2	0.13
2,612.0	0.44	126.83	2,611.9	-12.4	18.3	22.0	0.09
2,712.0	0.55	121.49	2,711.9	-12.9	19.0	22.9	0.12
2,812.0	0.49	129.50	2,811.9	-13.4	19.8	23.8	0.09
2,912.0	0.48	124.73	2,911.9	-13.9	20.4	24.6	0.04
3,012.0	2.17	222.59	3,011.9	-15.5	19.5	24.9	2.29
3,112.0	5.11	220.92	3,111.7	-20.3	15.3	24.7	2.94
3,212.0	5.32	217.63	3,211.2	-27.3	9.5	24.6	0.37
3,312.0	5.31	217.83	3,310.8	-34.7	3.9	24.8	0.02
3,412.0	5.64	217.74	3,410.4	-42.2	-2.0	25.0	0.33
3,512.0	5.78	219.55	3,509.9	-50.0	-8.2	25.1	0.23
3,612.0	5.32	218.50	3,609.4	-57.5	-14.3	25.1	0.47
3,712.0	5.27	208.87	3,709.0	-65.1	-19.4	25.9	0.89
3,812.0	5.98	208.21	3,808.5	-73.8	-24.1	27.7	0.71
3,912.0	6.81	217.47	3,907.9	-83.0	-30.1	28.9	1.32
4,012.0	6.66	218.43	4,007.2	-92.3	-37.3	29.1	0.19
4,112.0	6.16	222.39	4,106.5	-100.8	-44.6	28.8	0.67
4,212.0	5.92	221.44	4,206.0	-108.6	-51.6	28.3	0.26
4,312.0	5.49	219.79	4,305.5	-116.2	-58.1	28.0	0.46
4,412.0	5.04	218.42	4,405.1	-123.3	-63.9	28.0	0.47
4,512.0	4.83	217.45	4,504.7	-130.1	-69.1	28.1	0.23
4,612.0	5.52	216.53	4,604.3	-137.3	-74.6	28.4	0.69
4,712.0	8.21	214.65	4,703.6	-147.0	-81.5	29.2	2.70
4,812.0	11.66	206.01	4,802.1	-162.0	-90.0	32.0	3.75
4,912.0	13.82	207.25	4,899.6	-181.7	-99.9	36.7	2.18
5,012.0	15.01	216.97	4,996.5	-202.6	-113.1	39.6	2.69
5,112.0	17.30	221.07	5,092.5	-224.2	-130.7	39.5	2.56
5,212.0	17.21	227.38	5,188.0	-245.4	-151.4	36.8	1.87
5,312.0	12.02	224.65	5,284.7	-262.9	-169.6	33.2	5.23
5,412.0	12.73	205.68	5,382.5	-280.2	-181.7	35.2	4.11

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Site:	Ruth/Walter/Caswell/Arters	**MD Reference:**	Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0us
Well:	Oneacre Unit 2H	**North Reference:**	Grid
Wellbore:	Original Wellpath	**Survey Calculation Method:**	Minimum Curvature
Design:	As Drilled	**Database:**	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
5,512.0	18.52	213.29	5,478.7	-303.4	-195.2	39.3	6.13
5,612.0	24.44	214.10	5,571.7	-333.9	-215.5	42.6	5.93
5,712.0	26.16	217.69	5,662.2	-368.5	-240.6	44.9	2.30
5,812.0	27.17	228.84	5,751.6	-401.0	-271.3	41.5	5.10
5,912.0	27.58	229.42	5,840.4	-431.0	-306.0	33.4	0.49
6,012.0	27.07	226.11	5,929.2	-461.9	-340.0	26.4	1.60
6,063.0	27.39	227.83	5,974.6	-477.8	-357.1	23.2	1.67
6,156.0	27.02	228.83	6,057.3	-506.1	-388.8	16.3	0.63
6,250.0	26.23	227.49	6,141.3	-534.2	-420.2	9.6	1.06
6,344.0	25.44	227.46	6,225.9	-561.8	-450.4	3.5	0.84
6,439.0	25.48	227.70	6,311.7	-589.4	-480.6	-2.6	0.12
6,533.0	28.10	228.38	6,395.6	-617.7	-512.1	-9.2	2.81
6,627.0	28.08	228.62	6,478.5	-647.0	-545.2	-16.5	0.12
6,722.0	27.29	227.66	6,562.6	-676.5	-578.1	-23.5	0.95
6,816.0	27.44	227.91	6,646.1	-705.5	-610.1	-30.1	0.20
6,844.0	26.98	229.07	6,671.0	-714.0	-619.7	-32.3	2.51
6,875.0	28.12	226.32	6,698.5	-723.7	-630.3	-34.4	5.51
6,907.0	31.42	221.04	6,726.3	-735.2	-641.2	-35.7	13.16
6,938.0	35.10	214.33	6,752.2	-748.6	-651.6	-35.2	16.77
6,970.0	37.29	208.82	6,778.0	-764.7	-661.4	-32.8	12.25
7,001.0	39.16	204.23	6,802.4	-781.9	-670.0	-28.6	10.97
7,027.0	40.62	200.91	6,822.4	-797.3	-676.4	-23.9	9.92
Middlesex							
7,032.0	40.91	200.30	6,826.1	-800.3	-677.5	-22.9	9.92
7,064.0	41.71	196.34	6,850.2	-820.4	-684.1	-15.4	8.54
7,095.0	42.83	192.32	6,873.1	-840.6	-689.3	-6.7	9.44
7,127.0	44.49	188.85	6,896.3	-862.3	-693.3	3.8	9.11
7,158.0	45.74	185.81	6,918.2	-884.1	-696.1	15.4	8.03
7,189.0	47.75	182.52	6,939.4	-906.6	-697.8	28.3	10.09
7,221.0	49.55	178.56	6,960.5	-930.6	-698.0	43.2	10.86
7,237.0	50.45	176.92	6,970.8	-942.8	-697.5	51.3	9.65
Burketty							
7,252.0	51.32	175.43	6,980.3	-954.4	-696.7	59.2	9.65
7,281.0	52.31	173.19	6,998.2	-977.1	-694.5	75.2	6.98
Tully							
7,284.0	52.42	172.96	7,000.1	-979.5	-694.2	76.9	6.98
7,315.0	53.67	170.11	7,018.7	-1,004.0	-690.5	95.2	8.38
7,347.0	55.11	167.81	7,037.3	-1,029.5	-685.5	115.1	7.37
7,378.0	56.73	166.86	7,054.7	-1,054.6	-679.9	135.3	5.81
7,409.0	58.19	165.61	7,071.4	-1,079.9	-673.7	156.1	5.81
7,441.0	60.93	162.47	7,087.6	-1,106.4	-666.1	178.7	12.04
7,472.0	63.65	158.43	7,102.0	-1,132.3	-656.9	202.1	14.49
7,504.0	65.45	155.30	7,115.8	-1,158.9	-645.5	227.6	10.47
7,535.0	66.53	153.33	7,128.4	-1,184.4	-633.3	253.2	6.77
7,566.0	68.69	150.86	7,140.2	-1,209.7	-619.8	279.6	10.14

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Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
7,590.0	70.61	148.75	7,148.5	-1,229.1	-608.5	300.6	11.49
Marcellus							
7,598.0	71.26	148.06	7,151.1	-1,235.6	-604.6	307.7	11.49
7,629.0	72.91	145.39	7,160.7	-1,260.2	-588.4	335.8	9.77
7,661.0	74.19	144.22	7,169.7	-1,285.3	-570.7	365.4	5.32
7,692.0	75.76	142.19	7,177.8	-1,309.3	-552.8	394.4	8.10
7,723.0	80.04	141.03	7,184.3	-1,333.0	-533.9	424.0	14.28
7,755.0	84.76	140.30	7,188.5	-1,357.6	-513.8	455.0	14.92
7,786.0	88.66	137.54	7,190.3	-1,380.9	-493.5	485.5	15.40
7,817.0	89.87	132.77	7,190.7	-1,402.9	-471.7	516.3	15.87
7,892.0	91.81	132.61	7,189.6	-1,453.7	-416.5	591.1	2.60
7,987.0	92.51	129.31	7,186.0	-1,515.9	-344.9	686.0	3.55
8,081.0	92.29	126.71	7,182.1	-1,573.8	-270.9	779.9	2.77
8,175.0	89.60	127.51	7,180.5	-1,630.5	-195.9	873.8	2.99
8,270.0	90.20	128.01	7,180.7	-1,688.6	-120.8	968.8	0.82
8,364.0	92.18	129.49	7,178.7	-1,747.5	-47.5	1,062.8	2.63
8,459.0	92.08	129.32	7,175.2	-1,807.7	25.8	1,157.7	0.21
8,553.0	91.35	127.55	7,172.4	-1,866.1	99.4	1,251.7	2.04
8,647.0	90.74	126.95	7,170.7	-1,923.0	174.2	1,345.6	0.91
8,742.0	91.10	127.81	7,169.1	-1,980.7	249.7	1,440.5	0.98
8,836.0	90.47	131.35	7,167.9	-2,040.6	322.1	1,534.5	3.82
8,930.0	89.63	131.43	7,167.8	-2,102.7	392.7	1,628.4	0.90
9,024.0	89.08	131.59	7,168.8	-2,165.0	463.0	1,722.3	0.61
9,119.0	89.46	128.74	7,170.0	-2,226.3	535.6	1,817.3	3.03
9,213.0	91.81	127.80	7,169.0	-2,284.5	609.4	1,911.3	2.69
9,307.0	93.76	127.50	7,164.4	-2,341.8	683.8	2,005.1	2.10
9,401.0	91.68	127.25	7,160.0	-2,398.8	758.4	2,099.0	2.23
9,496.0	91.34	126.91	7,157.5	-2,456.1	834.1	2,193.9	0.51
9,588.0	91.31	128.25	7,155.3	-2,512.2	907.0	2,285.8	1.46
9,681.0	90.91	128.03	7,153.5	-2,569.6	980.1	2,378.8	0.49
9,774.0	93.50	130.89	7,150.0	-2,628.6	1,051.9	2,471.7	4.15
9,867.0	93.80	131.14	7,144.0	-2,689.5	1,121.9	2,564.5	0.42
9,959.0	92.89	129.90	7,138.7	-2,749.2	1,191.7	2,656.3	1.67
10,052.0	92.22	129.10	7,134.5	-2,808.3	1,263.4	2,749.2	1.12
10,145.0	92.39	128.75	7,130.8	-2,866.7	1,335.7	2,842.1	0.42
10,237.0	91.24	128.35	7,127.9	-2,924.0	1,407.6	2,934.1	1.32
10,330.0	90.71	131.23	7,126.3	-2,983.5	1,479.1	3,027.0	3.15
10,423.0	92.65	132.32	7,123.6	-3,045.4	1,548.4	3,119.9	2.39
10,516.0	92.45	128.99	7,119.4	-3,105.9	1,618.9	3,212.7	3.58
10,608.0	90.97	127.45	7,116.7	-3,162.8	1,691.1	3,304.7	2.32
10,703.0	90.64	126.93	7,115.3	-3,220.3	1,766.8	3,399.6	0.65
10,797.0	93.03	128.29	7,112.3	-3,277.6	1,841.2	3,493.5	2.92
10,891.0	91.99	127.25	7,108.2	-3,335.1	1,915.4	3,587.4	1.56
10,986.0	90.34	129.10	7,106.3	-3,393.8	1,990.1	3,682.4	2.61

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11,080.0	90.61	128.63	7,105.5	-3,452.8	2,063.3	3,776.4	0.58
11,174.0	90.50	128.84	7,104.6	-3,511.6	2,136.6	3,870.4	0.25
11,268.0	89.26	129.44	7,104.8	-3,570.9	2,209.5	3,964.4	1.47
11,362.0	90.17	128.16	7,105.3	-3,629.8	2,282.8	4,058.4	1.67
11,456.0	91.54	130.69	7,103.9	-3,689.5	2,355.4	4,152.3	3.06
11,550.0	89.22	128.16	7,103.2	-3,749.2	2,428.0	4,246.3	3.65
11,645.0	89.16	128.01	7,104.6	-3,807.8	2,502.7	4,341.3	0.17
11,739.0	90.23	128.80	7,105.1	-3,866.2	2,576.4	4,435.3	1.41
11,833.0	90.24	132.53	7,104.7	-3,927.4	2,647.7	4,529.2	3.97
11,927.0	89.60	133.73	7,104.8	-3,991.7	2,716.3	4,623.0	1.45
12,021.0	89.63	130.58	7,105.5	-4,054.8	2,785.9	4,716.8	3.35
12,116.0	88.76	130.84	7,106.8	-4,116.7	2,857.9	4,811.8	0.96
12,210.0	88.96	125.61	7,108.7	-4,174.9	2,931.8	4,905.7	5.57
12,304.0	90.20	126.88	7,109.3	-4,230.4	3,007.6	4,999.6	1.89
12,399.0	91.35	127.46	7,108.1	-4,287.8	3,083.3	5,094.5	1.36
12,493.0	89.66	126.11	7,107.2	-4,344.1	3,158.5	5,188.5	2.30
12,587.0	89.76	126.86	7,107.7	-4,400.0	3,234.1	5,282.4	0.80
12,682.0	90.64	128.59	7,107.4	-4,458.1	3,309.2	5,377.3	2.04
12,777.0	89.63	127.93	7,107.2	-4,516.9	3,383.8	5,472.3	1.27
12,871.0	91.68	133.57	7,106.1	-4,578.3	3,455.0	5,566.2	6.38
12,965.0	90.00	129.15	7,104.7	-4,640.4	3,525.5	5,660.1	5.03
13,059.0	89.46	126.04	7,105.1	-4,697.7	3,600.0	5,754.1	3.36
13,154.0	92.25	127.15	7,103.7	-4,754.3	3,676.3	5,849.0	3.16
13,248.0	91.64	127.47	7,100.5	-4,811.3	3,751.0	5,942.9	0.73
13,342.0	90.67	128.41	7,098.6	-4,869.0	3,825.1	6,036.8	1.44
13,436.0	90.64	130.26	7,097.6	-4,928.6	3,897.8	6,130.8	1.97
13,531.0	91.68	129.95	7,095.6	-4,989.8	3,970.4	6,225.8	1.14
13,625.0	91.04	129.44	7,093.4	-5,049.8	4,042.7	6,319.8	0.87
13,719.0	91.24	129.53	7,091.5	-5,109.6	4,115.3	6,413.7	0.23
13,813.0	90.94	128.96	7,089.8	-5,169.0	4,188.1	6,507.7	0.69
13,907.0	91.61	128.92	7,087.7	-5,228.1	4,261.2	6,601.7	0.71
14,002.0	90.97	128.09	7,085.5	-5,287.2	4,335.5	6,696.7	1.10
14,096.0	89.83	129.92	7,084.9	-5,346.4	4,408.5	6,790.7	2.29
14,190.0	88.89	127.92	7,085.9	-5,405.4	4,481.6	6,884.6	2.35
14,284.0	90.34	127.73	7,086.5	-5,463.1	4,555.9	6,978.6	1.56
14,378.0	91.58	130.39	7,085.0	-5,522.3	4,628.9	7,072.6	3.12
14,472.0	91.24	131.88	7,082.7	-5,584.1	4,699.6	7,166.5	1.63
14,567.0	89.56	129.65	7,082.0	-5,646.1	4,771.6	7,261.4	2.94
14,661.0	89.73	128.94	7,082.6	-5,705.7	4,844.3	7,355.4	0.78
14,755.0	89.80	128.62	7,083.0	-5,764.5	4,917.6	7,449.4	0.35
14,849.0	89.29	127.74	7,083.7	-5,822.6	4,991.5	7,543.4	1.08
14,943.0	90.31	127.72	7,084.0	-5,880.2	5,065.8	7,637.4	1.09
15,037.0	88.89	128.13	7,084.7	-5,937.9	5,140.0	7,731.4	1.57
15,131.0	89.26	128.63	7,086.2	-5,996.3	5,213.7	7,825.4	0.66
15,226.0	91.04	129.86	7,086.0	-6,056.4	5,287.2	7,920.4	2.28

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Antero Resources

EOW Completion Report

Scientific Drilling

Company:	Antero Resources	**Local Co-ordinate Reference:**	Well Oneacre Unit 2H
Project:	Doddridge County WV	**TVD Reference:**	Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0us
Site:	Ruth/Walter/Caswell/Arters	**MD Reference:**	Oneacre Unit 2H 1050' GL + 25' RKB @ 1075.0us
Well:	Oneacre Unit 2H	**North Reference:**	Grid
Wellbore:	Original Wellpath	**Survey Calculation Method:**	Minimum Curvature
Design:	As Drilled	**Database:**	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
15,320.0	90.30	129.09	7,084.9	-6,116.1	5,359.8	8,014.3	1.14
15,415.0	89.80	130.00	7,084.8	-6,176.6	5,433.0	8,109.3	1.09
15,509.0	92.25	130.92	7,083.1	-6,237.6	5,504.5	8,203.3	2.78
15,603.0	91.75	130.55	7,079.8	-6,298.9	5,575.7	8,297.2	0.66
15,697.0	90.34	129.77	7,078.1	-6,359.5	5,647.5	8,391.1	1.71
15,776.0	90.07	130.25	7,077.8	-6,410.3	5,708.1	8,470.1	0.70
15,827.0	90.07	130.25	7,077.8	-6,443.3	5,747.0	8,521.1	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
7,027.0	6,822.4	-797.3	-676.4	Middlesex
7,237.0	6,970.8	-942.8	-697.5	Burketty
7,281.0	6,998.2	-977.1	-694.5	Tully
7,590.0	7,148.5	-1,229.1	-608.5	Marcellus

Checked By: _____ Approved By: _____ Date: _____

Received
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JUL 27 2015

10/23/2015

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/10/2014
Job End Date:	11/5/2014
State:	West Virginia
County:	Doddridge
API Number:	47-017-06159-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Oneacre Unit 2H
Longitude:	-80.56806100
Latitude:	39.24476700
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,191
Total Base Water Volume (gal):	11,068,680
Total Base Non Water Volume:	507,483

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	90.03803	
Sand	U.S. Well Services, LLC	Proppant					
			Crystalline Silica, quartz	14808-60-7	100.00000	9.49482	
LGC-15	U.S. Well Services, LLC	Gelling Agents					
			Guar Gum	9000-30-0	50.00000	0.10941	
			Petroleum Distillates	64742-47-8	60.00000	0.10362	
			Suspending agent (solid)	14808-60-7	3.00000	0.01673	
			Surfactant	68439-51-0	3.00000	0.00656	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid					
			Water	7732-18-5	87.50000	0.08533	
			Hydrogen Chloride	7647-01-0	18.00000	0.02038	
WFRA-405	U.S. Well Services, LLC	Friction Reducer					
			Water	7732-18-5	40.00000	0.02912	
			Anionic Polyacrylamide	Proprietary		0.02912	
			Petroleum Distillates	64742-47-8	22.00000	0.02344	
			Ethoxylated alcohol blend	Proprietary	5.00000	0.00364	

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			Crystalline Salt	12125-02-9	5.00000	0.00364	
SI-1100	U.S. Well Services	Scale Inhibitor					
			Di Water	7732-18-5	80.00000	0.01082	
			Ethylene Glycol	107-21-1	40.00000	0.00611	
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	10.00000	0.00183	
			2-Phosphonobutane 1,2,4 tricarboxylic salt	37971-36-1	10.00000	0.00174	
			hexamethylenediamine tetra (methylene phosphonic acid)	38820-59-6	10.00000	0.00169	
			Copolymer of Maleic and Acrylic acid	26677-99-6	10.00000	0.00160	
			bis (hexamethylene) tramine penta (methylene phosphonic acid) - phosphate acid	40623-75-4	10.00000	0.00155	
			Acrylic polymer	52255-49-9	5.00000	0.00068	
K-BAC 1020	U.S. Well Services, LLC	Anti-Bacterial Agent					
			2,2-dibromo-3-nitrilopropionamide	10222-01-2	20.00000	0.00467	
			Deionized Water	7732-18-5	28.00000	0.00267	
AP One	U.S. Well Services, LLC	Gel Breakers					
			Ammonium Persulfate	7727-54-0	100.00000	0.00244	
AI-301	U.S. Well Services, LLC	Acid Corrosion Inhibitors					
			Diethylene Glycol	111-46-6	30.00000	0.00011	
			Methenamine	100-97-0	20.00000	0.00009	
			Hydrogen Chloride	7647-01-0	10.00000	0.00004	
			Polyethylene polyamine	68603-67-8	10.00000	0.00003	
			Coco amine	61791-14-8	5.00000	0.00002	
AI-300	U.S. Well Services, LLC	Acid Corrosion Inhibitors					
			Ethylene Glycol	107-21-1	31.00000	0.00003	
			Cinnamaldehyde	104-55-2	5.00000	0.00001	
			N,N-Dimethylformamide	68-12-2	15.00000	0.00001	
			2-Butoxyethanol	111-76-2	7.00000	0.00001	
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	13.00000	0.00001	
			Triethyl Phosphate	78-40-0	3.00000		
			Ethoxylated Nonylphenol	68412-54-4	5.00000		
			Water	7732-18-5	20.00000		
			Isopropyl Alcohol	67-63-0	3.00000		

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)

17-06159

Antero Resources
Well No. Oneacre Unit 2H
As-Drilled Plat
Antero Resources Corporation

7,551' to Top Hole

1,912' to Bottom Hole

LATITUDE 39 - 15 - 00

LONGITUDE 80 - 32 - 30

1,849' to Top Hole

8,387' to Bottom Hole

Line	Bearing	Distance
L1	N 86°50' E	896.1'
L2	N 83°35' W	1227.2'
L3	N 63°18' W	1501.7'
L4	N 19°27' E	1885.3'

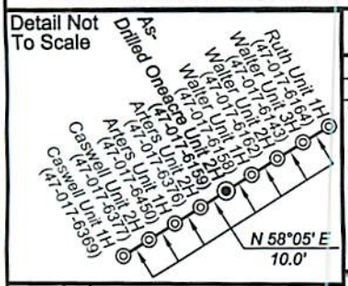
(⊕) Denotes location of well on United States topographic maps

Top Hole 7.5' Spot

Bottom Hole 7.5' Spot

GRID NORTH

Detail Not To Scale



Tax Map 8 Parcels	Par	Owner	DB/Pg	Acres
1	13	Lucille Devericks Billy J. Devericks	WB42/159	23.0
2	4.3	Robert & Holly Davis	247/672	0.79
3	4.5	Dave & Beatrice Kearns	263/40	2.0
4	3.1	Darrell R. Richards	281/289	9.35
5	4.2	Charles D. Ball	241/504	5.0
6	24.2	Wm. & Leslie Westfall	244/355	0.91
7	2.1	Don & Charlotte Henrey	294/81	69.57
8	2	Mikasa T. Ash	263/294	4.88

Notes:

West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.

Well No. Oneacre Unit 2H Top Hole coordinates are
N: 273,026.41 Latitude: 39°14'40.85"
E: 1,697,455.47 Longitude: 80°34'05.70"
Bottom Hole coordinates are
N: 266,488.27 Latitude: 39°13'36.89"
E: 1,703,094.31 Longitude: 80°32'53.06"

UTM Zone 17, NAD 1983

Top Hole Coordinates:	Bottom Hole Coordinates:
N: 4,344,028.232m	N: 4,342,065.034m
E: 537,272.593m	E: 539,023.706m

Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Top Hole coordinates verified by survey grade GPS. As-drilled data and information was provided by Antero Resources Corporation. Allegheny Surveys, Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

Legend
- Proposed gas well
- Found corner, as noted
- (15) County Route
- Surface boundary (approx.)
- Existing Road
- Interior surface tracts (approx.)
- Creek or Drain

Tillman Lee Williams 1322/1054 55.5 Acres
Valma L. Arters, et vir Lease
Robert Nimorwicz & Donna N. DaCunha 1141/1122 101.34 Ac.
HARRISON DODDRIDGE
D.L. Louchery Lease DV021531
208/113 19.56 Ac.
208/113 27.77 Ac.
47-017-3067
47-017-2892
Ronald E. & Julie C. Clevenger 208/58 33.82 Ac.
Well No. Oneacre Unit 2H
47-017-3843
47-017-2518
47-017-2879
Ricky & Carla Watson 186/339 30.99 Acres
Fence Cor.
Plugged Well (No #)
Justin Henderson, et al Lease
Ruth Norris, et al Lease 091606
Clarence & Mary Mutschelknaus 267/726 99.03 Acres
2.5" Pipe
1" I. Pipe
Water Wells (Mutschelknaus)
47-017-2516
47-017-3549
Walter W. Sadler Lease 088186
2" Pipe
5/8" Pin
3/4" Rebar
Stone pile
Lease DAD34959
Buckeye Creek
The Butterfly Evolution Trust 263/40 135.89 Acres
Robert W. & Holly M. Davis 247/672 8.69 Acres
5/8" Rebar
Ricky L. Bowen 1366/364 61.62 Acres
47-017-3694
Brohard Lease
Fence Cor.
David A. Davis 230/337 35 Acres
47-017-3645
47-017-2799
Robert Oneacre, et ux Lease 21224
Fen Cor
Clarence & Mary Mutschelknaus 267/726 22.86 Acres
47-017-2941
1" Rebar
1" I. Rod
As-Drilled
Proposed
1-3/8" Pipe
47-017-2996
Lucille Devericks 87/217 48 Acres
47-017-3633
Fen Cor
Orphia Stephens Lease DV019225
Robert Nimorwicz & Donna N. DaCunha 1141/1122 132.98 Ac
Robert Nimorwicz & Donna DaCunha 1141/1122 42.97 Ac.
Barbara Ann Templeton 206/575 12.672 Ac.
David M. McConnell 285/19 9.31 Ac.
The Butterfly Evolution Trust 250/468 18.05 Acres
Trough Fork
20" Locust Snag
Stone
47-017-3632
Tree w/ 2 Hacks
Diana Rupert Livingston Lease
Billy Devericks, et ux Lease 119569
Robert Bruce Watson 226/680 74.1 Acres
Cody Meier 262/150 32.59 Ac.
Lucille Devericks WB42/159 19 Acres
W.S. Sadler, et al Lease DV19215
5/8" I. Rod
Billy J. Devericks, et ux Lease
Louis W. Curkendall 187/785 34.74 Acres
36" White Oak
Elmer D. Selby, et ux 1465/495 87.1 Acres
Wm & Bertha Bland 229/665 63.13 Acres
3/4" Rebar
Wm & Bertha Bland 257/389 0.46 Ac.
47-033-3171
Mary Katherine Jones 1331/54 100 Acres
Lucille Devericks WB 167/23 59.107 Ac.
Steve C. Kovar, Jr. 1140/1150 77.87 Ac.
Fence Cor.
30" Sassafras
Oneacre Unit 2H Bottom Hole
Water Wells
Howard D. Nicholson, et al Lease
Howard D. Nicholson, et al Lease
Arnold Krafft, et al Leases DV005329 & DV019188
Eva Arnold, et ux, et al Lease
47-017-3068
47-033-3240
47-017-2647
Note: It appears 6 water wells were found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.
47-033-2655
Water Well
47-017-2892
47-017-3067
Plugged (No #)
Well No. Oneacre Unit 2H
47-017-3843
47-017-2518
47-017-2879
(8) Gas Wells. See Wellhead Layout Detail Above
3000'
47-017-2516
Water Wells
47-017-3645
47-017-2799
Scale: 1" = 2000'

Received
Office of Oil & Gas
JUL 27 2015

FILE NO: 132-30-G-12
DRAWING NO: Oneacre 2H As-Drilled Plat
SCALE: 1" = 1200'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: WVDOT, Bridgeport, WV

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

DATE: March 27 20 15
OPERATOR'S WELL NO. Oneacre Unit 2H

API WELL NO:
47 - 017 - 06159
STATE COUNTY PERMIT

WELL TYPE: ☐ OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL
(IF GAS) PRODUCTION : ☐ STORAGE ☐ DEEP ☒ SHALLOW
LOCATION: ELEVATION: Existing Grade - 1045' Proposed Grade - 1050' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: Big Isaac
DISTRICT: Greenbrier COUNTY: Doddridge
SURFACE OWNER: Clarence & Mary Mutschelknaus; W. S. Sadler, et al; Orphia Stephens; Diana Rupert Livingston; Arnold Krafft, et al ACREAGE: 99.03
ROYALTY OWNER: D. L. Louchery; Walter W. Sadler; Billy Devericks, et ux LEASE NO: DV021531; 088186; 119569; DV019225; DV019215; DV005329 & DV019188 ACREAGE: 35.5; 79; 130; 172; 85.25; 48; 54
PROPOSED WORK: ☐ DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION
☐ PERFORATE NEW FORMATION ☒ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled
☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale TVD 7,078' DEPTH: MD 15,827'

WELL OPERATOR: Antero Resources Corporation
ADDRESS: 1615 Wynkoop Street, Denver, CO 80202
DESIGNATED AGENT: Dianna Stamper - CT Corporation System
ADDRESS: 5400 D Big Tyler Road, Charleston, WV 25313

10/23/2015