

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

API 47-017-06420 County Doddridge District New Milton
Quad Headwaters Middle Island Creek Pad Name Snake Run Pad Field/Pool Name _____
Farm name Dufflemeyer, Michael B. et al & Hyre, Justine Paula et al Well Number Honey Unit 1H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4,339,586.264m Easting 530,173.530m
Landing Point of Curve Northing 4,339,409.50m Easting 530,333.17m
Bottom Hole Northing 4,337,666.340m Easting 530,871.001m

Elevation (ft) 1,081' 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 12/30/2013 Date drilling commenced 07/04/2014 Date drilling ceased 10/15/2014
Date completion activities began 10/23/2014 Date completion activities ceased 01/01/2015
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Received
Office of Oil & Gas
N/A

JUL 20 2015

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

Freshwater depth(s) ft 107', 132' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 968', 1864' Void(s) encountered (Y/N) depths None
Coal depth(s) ft None Identified Cavem(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) No

Reviewed by:
JL 8/21/15
10/23/2015

API 47-017 - 06420

Farm name Duffemeyer, Michael B. et al & Hyre, Justine Paula et al Well number Honey Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	24"	20"	40'	New	94#; J-55	N/A	Yes
Surface	17 1/2"	13 3/8"	372'	New	48#; H-40	N/A	Yes
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,545'	New	36#; J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	13,591'	New	20#; P-110	N/A	Yes
Tubing		2 3/8"	7,272'		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	196 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	448 sx	15.6	1.18	258	0'	8 Hrs.
Coal							
Intermediate 1	Class A	998 sx	15.6	1.18	797	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	982 sx (Lead); 1,055sx (Tail)	13.5 (Lead); 15.2 (Tail)	1.44 (Lead); 1.78 (Tail)	2,645	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 13,591' MD; 7,091' TVD (BHL); 7,094' (Deepest Point Drilled) Loggers TD (ft) 13,543'

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

Plug back procedure N/A

Kick off depth (ft) 6,508'

**This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Asena Unit 2H, API #47-017-06429). Please reference the wireline logs submitted with Form WR-35 for the Asena 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 _____

Received
Office of Oil & Gas
JUL 20 2015

API 47- 017 - 06420 Farm name Dufflemeyer, Michael B. et al & Hyre, Justine Paula et al Well number Honey Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Marcellus	7,030' (top) TVD	7,311' (top) MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3,950 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 10,413 mcfpd Oil 1 bpd NGL _____ bpd Water 1 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 ₂ S, ETC)
-------------------------	--------------------------------	------------------------------	--------------------------	-----------------------------	--

	0		0		

*** PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.

Drilling Contractor Patterson - UTI Drilling Company, LLC
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company STRC
Address 1560 Good Hope Pike City Clarksburg State WV Zip 26301

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

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

Please insert additional pages as applicable.

Completed by Megan Darling Telephone 303-357-7230
Signature Megan C. Darling Title Permitting Agent Date 07/17/2015

Received
Office of Oil & Gas
JUL 20 2015

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

10/23/2015

API 47-017-06420 Farm Name Dufflemeyer, Michael B. et al Well Number Honey Unit 1H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	23-Oct-14	13,331	13,499	60	Marcellus
2	6-Dec-14	13,132	13,300	60	Marcellus
3	6-Dec-14	12,933	13,101	60	Marcellus
4	6-Dec-14	12,734	12,902	60	Marcellus
5	7-Dec-14	12,535	12,703	60	Marcellus
6	7-Dec-14	12,335	12,503	60	Marcellus
7	7-Dec-14	12,136	12,304	60	Marcellus
8	7-Dec-14	11,937	12,105	60	Marcellus
9	8-Dec-14	11,738	11,906	60	Marcellus
10	8-Dec-14	11,539	11,707	60	Marcellus
11	8-Dec-14	11,340	11,508	60	Marcellus
12	9-Dec-14	11,140	11,308	60	Marcellus
13	9-Dec-14	10,941	11,109	60	Marcellus
14	9-Dec-14	10,742	10,910	60	Marcellus
15	9-Dec-14	10,543	10,711	60	Marcellus
16	10-Dec-14	10,344	10,512	60	Marcellus
17	10-Dec-14	10,145	10,313	60	Marcellus
18	10-Dec-14	9,945	10,113	60	Marcellus
19	11-Dec-14	9,746	9,914	60	Marcellus
20	11-Dec-14	9,547	9,715	60	Marcellus
21	11-Dec-14	9,348	9,516	60	Marcellus
22	11-Dec-14	9,149	9,317	60	Marcellus
23	11-Dec-14	8,950	9,118	60	Marcellus
24	12-Dec-14	8,750	8,918	60	Marcellus
25	12-Dec-14	8,551	8,719	60	Marcellus
26	12-Dec-14	8,352	8,520	60	Marcellus
27	12-Dec-14	8,153	8,321	60	Marcellus
28	13-Dec-14	7,954	8,122	60	Marcellus
29	13-Dec-14	7,755	7,923	60	Marcellus
30	13-Dec-14	7,555	7,723	60	Marcellus
31	14-Dec-14	7,356	7,524	60	Marcellus

Received
Office of Oil & Gas
JUL 20 2015

10/23/2015

API 47-017-06420 Farm Name Dufflemeyer, Michael B. et al Well Number Honey Unit 1H

EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	5-Dec-14	64.6	7,526	N/A	4,674	232,880	7,000	N/A
2	6-Dec-14	64.7	7,569	6,690	5,525	195,080	6,016	N/A
3	6-Dec-14	63.2	7,371	6,508	6,146	195,100	6,017	N/A
4	6-Dec-14	65.0	7,509	6,566	5,771	243,840	6,471	N/A
5	7-Dec-14	63.0	7,377	6,214	5,405	244,255	6,428	N/A
6	7-Dec-14	64.1	7,255	5,933	5,807	216,780	6,274	N/A
7	7-Dec-14	62.4	7,496	6,268	5,146	209,480	7,106	N/A
8	7-Dec-14	68.4	7,533	6,018	5,546	239,400	6,514	N/A
9	8-Dec-14	64.9	7,416	6,136	5,659	234,680	6,796	N/A
10	8-Dec-14	67.5	7,379	6,211	5,718	241,230	6,524	N/A
11	8-Dec-14	67.4	7,292	6,392	5,598	246,420	6,357	N/A
12	9-Dec-14	66.7	7,157	6,238	5,739	237,900	6,439	N/A
13	9-Dec-14	67.2	7,208	6,100	5,658	238,740	6,357	N/A
14	9-Dec-14	68.0	7,161	6,111	5,832	250,825	6,318	N/A
15	9-Dec-14	68.5	7,425	5,845	4,956	241,260	6,253	N/A
16	10-Dec-14	65.8	7,312	6,163	5,738	227,980	6,155	N/A
17	10-Dec-14	66.1	7,406	6,102	5,453	240,020	6,257	N/A
18	10-Dec-14	65.4	7,868	5,990	5,206	114,310	6,513	N/A
19	11-Dec-14	68.9	7,117	6,307	4,999	236,600	6,333	N/A
20	11-Dec-14	66.2	7,267	5,977	5,674	243,260	6,190	N/A
21	11-Dec-14	66.8	7,190	5,969	5,368	237,880	6,103	N/A
22	11-Dec-14	69.5	7,087	5,969	5,235	245,850	6,125	N/A
23	11-Dec-14	68.7	6,937	5,781	5,207	245,500	6,140	N/A
24	12-Dec-14	68.4	6,996	5,817	5,542	217,220	5,909	N/A
25	12-Dec-14	67.2	6,938	5,643	4,920	243,680	6,172	N/A
26	12-Dec-14	67.8	6,997	6,296	5,156	245,590	6,065	N/A
27	12-Dec-14	68.7	6,824	6,262	5,168	246,400	6,075	N/A
28	13-Dec-14	66.2	6,744	5,844	5,382	236,237	6,065	N/A
29	13-Dec-14	68.4	6,543	5,501	4,878	221,520	5,741	N/A
30	13-Dec-14	67.8	6,642	5,906	5,383	244,740	6,052	N/A
31	14-Dec-14	67.9	6,732	6,686	5,163	210,460	5,852	N/A
	AVG=	66.6	7,202	6,115	5,408	7,125,117	194,617	TOTAL

Received
Office of Oil & Gas
JUL 20 2015

10/23/2015

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	132'	N/A	132'	N/A
Shale	0	367	0	367
Siltstone/ Sandstone	est. 367	467	est. 367	467
Shale	est. 467	607	est. 467	607
Siltstone/ Sandstone	est. 607	687	est. 607	687
Shale	est. 687	727	est. 687	727
Siltstone/ Shale	est. 727	1,387	est. 727	1,387
Sandstone/ Siltstone	est. 1387	1,427	est. 1387	1,427
Shale/ Limestone	est. 1427	1,467	est. 1427	1,467
Sanstone	est. 1467	1,527	est. 1467	1,527
Siltstone/ Sandstone	est. 1527	1,947	est. 1527	1,947
Shale	est. 1947	1,967	est. 1947	1,967
Siltstone	est. 1967	2,106	est. 1967	2,108
Big Lime	2,106	2,226	2,108	2,228
Big Injun	2,226	2,440	2,228	2,442
Gantz Sand	2,440	2,612	2,442	2,614
Fifty Foot Sandstone	2,612	2,821	2,614	2,823
Gordon	2,821	3,168	2,823	3,170
Fifth Sandstone	3,168	3,231	3,170	3,233
Bayard	3,231	3,505	3,233	3,507
Warren	3,505	3,796	3,507	3,798
Speechley	3,796	3,973	3,798	3,975
Baltown	3,973	4,602	3,975	4,604
Bradford	4,602	5,076	4,604	5,078
Benson	5,076	5,352	5,078	5,354
Alexander	5,352	5,607	5,354	5,609
Elk	5,607	6,080	5,609	6,082
Rhinestreet	6,080	6,585	6,082	6,589
Sycamore	6,585	6,749	6,589	6,768
Middlesex	6,749	6,883	6,768	7,024
Burkett	6,883	6,924	7,024	7,024
Tully	6,924	7,030	7,024	7,311
Marcellus	7,030	NA	7,311	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.

17-06420

Azimuths to Grid North
 True North: -0.22°
 Magnetic North: -8.77°
 Magnetic Field
 Strength: 52189.6anT
 Dip Angle: 66.78°
 Date: 7/17/2014
 Model: BCGM2014

To convert Magnetic North to Grid, Subtract 8.77°
 To convert True North to Grid, Subtract 0.22°



Honey Unit 1H
 Doddridge County WV
 Northing: 14236743.38
 Easting: 1739363.09
 As Drilled

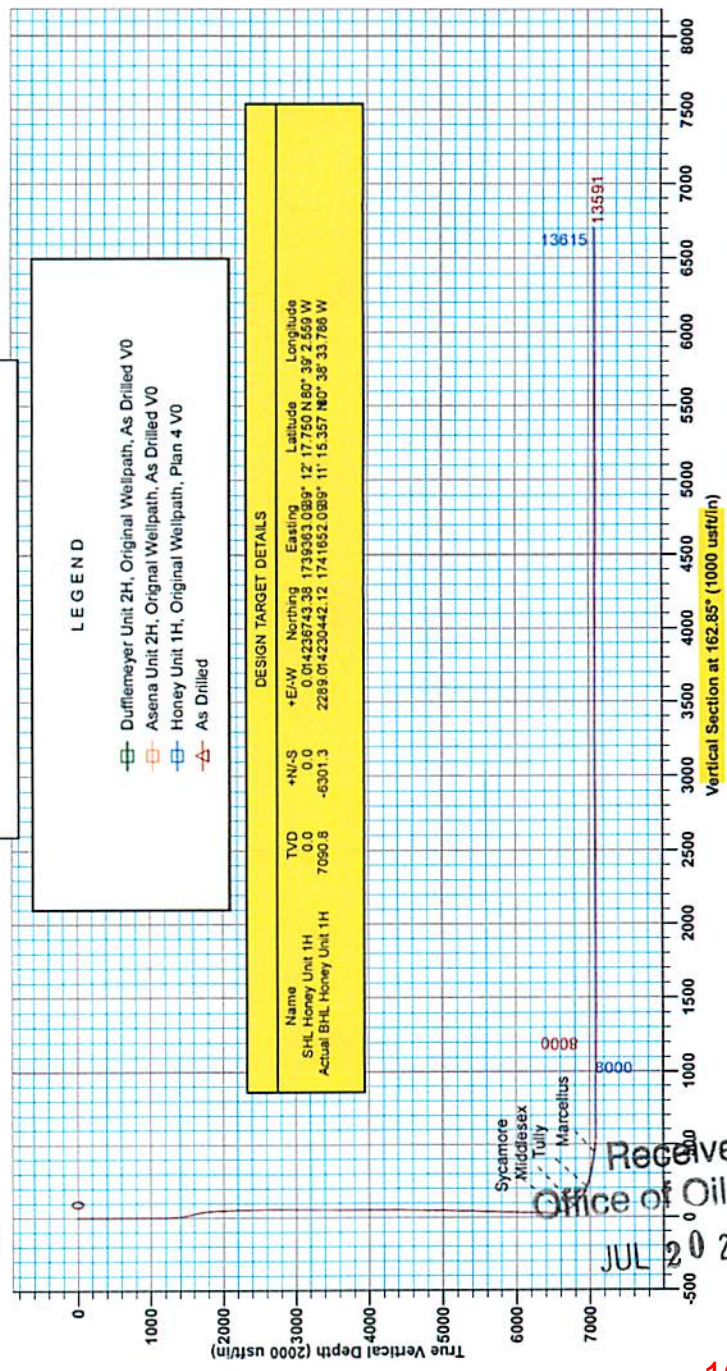
Genia Lightfoot
 9/36, October 14 2014
 Scientific Drilling
 421 South Eagle Lane
 Oklahoma City, OK 73129

WELL DETAILS Honey Unit 1H
 Ground Level: 1081.0
 Easting: 1739363.09 39° 12' 17.750 N 80° 39' 2.559 W
 Northing: 14236743.38
 Longitude: 80° 39' 2.559 W

PROJECT DETAILS: Doddridge County WV
 Geoidetic 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

Part 347: Honey 1H 1081 GL - 25 KB @ 1100 Quart
 1081.0

SITE DETAILS: Dufflemeyer Pad
 Site Center: Dufflemeyer Unit 2H
 Site Centre Northing: 14236747.63
 Easting: 1739372.13
 Positional Uncertainty: 0.0
 Convergence: 0.22
 Local North: Grid



LEGEND

- Dufflemeyer Unit 2H, Original Wellpath, As Drilled V0
- Asena Unit 2H, Original Wellpath, As Drilled V0
- Honey Unit 1H, Original Wellpath, Plan 4 V0
- △ As Drilled

DESIGN TARGET DETAILS

Name	+N/-S	TVD	+E/-W	Northing	Easting	Latitude	Longitude
SHL Honey Unit 1H	0.0	0.0	0.0	14236743.38	1739363.09	39° 12' 17.750 N	80° 39' 2.559 W
Actual BHL Honey Unit 1H	-6301.3	7060.8	2289.0	1741652.09	1741652.09	11° 15.357' N	80° 38' 33.786 W

Received
 Office of Oil & Gas
 JUL 20 2015

10/23/2015

17-06420



Antero Resources

**Doddridge County WV
Dufflemeyer Pad
Honey Unit 1H
Original Wellpath**

Design: As Drilled

EOW Completion Report

14 October, 2014

Received
Office of Oil & Gas
JUL 20 2015



10/23/2015

17.06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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	Dufflemeyer Pad				
Site Position:		Northing:	14,236,747.63 usft	Latitude:	39° 12' 17.792 N
From:	Map	Easting:	1,739,372.13 usft	Longitude:	80° 39' 2.444 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.22 °

Well	Honey Unit 1H					
Well Position	+N-S	0.0 usft	Northing:	14,236,743.38 usft	Latitude:	39° 12' 17.750 N
	+E-W	0.0 usft	Easting:	1,739,363.09 usft	Longitude:	80° 39' 2.559 W
Position Uncertainty		2.0 usft	Wellhead Elevation:	1,106.0 usft	Ground Level:	1,081.0 usft

Wellbore	Original Wellpath				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	EGGM2014	7/17/2014	-8.55	66.78	52,190

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	162.85

Survey Program	Date 10/14/2014				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
37.0	6,344.0	Survey #6 Final Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
6,419.0	13,591.0	Survey #7 MWD (Original Wellpath)	MWD SDI	MWD - Standard ver 1.0.1	

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	
37.0	0.05	127.33	37.0	0.0	0.0	0.0	0.14	
62.0	0.09	127.33	62.0	0.0	0.0	0.0	0.16	
87.0	0.14	127.33	87.0	-0.1	0.1	0.1	0.20	
112.0	0.18	127.33	112.0	-0.1	0.1	0.1	0.16	
137.0	0.17	142.60	137.0	-0.2	0.2	0.2	0.19	
162.0	0.22	155.94	162.0	-0.2	0.2	0.3	0.27	
187.0	0.19	146.09	187.0	-0.3	0.3	0.4	0.18	
212.0	0.14	151.31	212.0	-0.4	0.3	0.4	0.21	
237.0	0.15	123.26	237.0	-0.4	0.4	0.5	0.28	
262.0	0.17	149.34	262.0	-0.5	0.4	0.6	0.30	

17-06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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)		
287.0	0.18	144.24	287.0	-0.5	0.4	0.6	0.07		
312.0	0.17	131.51	312.0	-0.6	0.5	0.7	0.16		
337.0	0.18	123.22	337.0	-0.6	0.6	0.8	0.11		
362.0	0.20	103.13	362.0	-0.7	0.6	0.8	0.28		
387.0	0.21	113.21	387.0	-0.7	0.7	0.9	0.15		
412.0	0.18	93.00	412.0	-0.7	0.8	0.9	0.30		
437.0	0.19	93.64	437.0	-0.7	0.9	0.9	0.04		
462.0	0.21	98.32	462.0	-0.7	1.0	1.0	0.10		
487.0	0.18	99.71	487.0	-0.7	1.0	1.0	0.12		
512.0	0.21	96.48	512.0	-0.7	1.1	1.0	0.13		
537.0	0.09	82.75	537.0	-0.7	1.2	1.1	0.50		
562.0	0.23	100.87	562.0	-0.8	1.3	1.1	0.59		
587.0	0.19	95.63	587.0	-0.8	1.4	1.1	0.18		
612.0	0.26	92.00	612.0	-0.8	1.4	1.2	0.29		
637.0	0.18	102.92	637.0	-0.8	1.5	1.2	0.36		
662.0	0.17	110.04	662.0	-0.8	1.6	1.2	0.10		
687.0	0.26	90.20	687.0	-0.8	1.7	1.3	0.46		
712.0	0.24	117.88	712.0	-0.8	1.8	1.3	0.48		
737.0	0.27	125.72	737.0	-0.9	1.9	1.4	0.18		
762.0	0.20	126.22	762.0	-1.0	2.0	1.5	0.28		
787.0	0.16	127.81	787.0	-1.0	2.1	1.6	0.16		
812.0	0.21	128.62	812.0	-1.1	2.1	1.6	0.20		
837.0	0.19	132.63	837.0	-1.1	2.2	1.7	0.10		
862.0	0.12	112.94	862.0	-1.2	2.2	1.8	0.35		
887.0	0.21	111.82	887.0	-1.2	2.3	1.8	0.36		
912.0	0.16	72.43	912.0	-1.2	2.4	1.8	0.53		
937.0	0.17	126.47	937.0	-1.2	2.4	1.9	0.60		
962.0	0.16	131.29	962.0	-1.2	2.5	1.9	0.07		
987.0	0.25	150.11	987.0	-1.3	2.6	2.0	0.45		
1,012.0	0.16	117.19	1,012.0	-1.4	2.6	2.1	0.58		
1,037.0	0.29	127.48	1,037.0	-1.4	2.7	2.2	0.54		
1,062.0	0.30	113.97	1,062.0	-1.5	2.8	2.3	0.28		
1,087.0	0.26	123.07	1,087.0	-1.6	2.9	2.3	0.24		
1,112.0	0.37	169.84	1,112.0	-1.7	3.0	2.5	1.08		
1,137.0	0.26	171.06	1,137.0	-1.8	3.0	2.6	0.44		
1,162.0	0.35	180.86	1,162.0	-1.9	3.0	2.7	0.41		
1,187.0	0.40	181.96	1,187.0	-2.1	3.0	2.9	0.20		
1,212.0	0.49	192.49	1,212.0	-2.3	3.0	3.1	0.48		
1,237.0	0.86	209.22	1,237.0	-2.6	2.9	3.3	1.66		
1,262.0	1.30	215.34	1,262.0	-3.0	2.6	3.6	1.82		
1,287.0	1.61	218.11	1,287.0	-3.5	2.2	4.0	1.27		
1,312.0	2.20	216.50	1,312.0	-4.1	1.7	4.4	2.37		
1,337.0	3.02	212.28	1,336.9	-5.1	1.1	5.2	3.37		
1,362.0	3.61	208.40	1,361.9	-6.3	0.4	6.1	2.52		

17-06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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)	
1,387.0	3.93	204.22	1,386.8	-7.8	-0.4	7.3	1.69	
1,412.0	4.20	196.18	1,411.8	-9.4	-1.0	8.7	2.52	
1,437.0	4.53	186.02	1,436.7	-11.3	-1.3	10.4	3.36	
1,462.0	4.87	178.40	1,461.6	-13.4	-1.4	12.3	2.84	
1,487.0	5.08	174.21	1,486.5	-15.5	-1.3	14.5	1.68	
1,512.0	5.29	171.50	1,511.4	-17.8	-1.0	16.7	1.29	
1,537.0	5.79	167.85	1,536.3	-20.1	-0.6	19.1	2.45	
1,562.0	6.18	165.39	1,561.2	-22.7	0.1	21.7	1.87	
1,587.0	6.33	164.98	1,586.0	-25.3	0.7	24.4	0.63	
1,612.0	6.35	164.63	1,610.9	-28.0	1.5	27.2	0.17	
1,637.0	6.39	163.58	1,635.7	-30.6	2.2	29.9	0.49	
1,662.0	6.52	162.85	1,660.6	-33.3	3.0	32.7	0.61	
1,687.0	6.53	162.75	1,685.4	-36.0	3.9	35.6	0.06	
1,712.0	5.93	160.65	1,710.2	-38.6	4.7	38.3	2.57	
1,737.0	4.82	155.13	1,735.1	-40.8	5.6	40.6	4.89	
1,762.0	3.77	148.20	1,760.1	-42.4	6.5	42.5	4.68	
1,787.0	2.91	140.66	1,785.0	-43.6	7.3	43.8	3.86	
1,812.0	2.25	130.90	1,810.0	-44.4	8.1	44.8	3.16	
1,837.0	1.96	125.41	1,835.0	-45.0	8.8	45.6	1.41	
1,862.0	1.86	123.78	1,860.0	-45.5	9.5	46.3	0.46	
1,887.0	1.80	121.15	1,885.0	-45.9	10.2	46.9	0.41	
1,912.0	1.75	121.53	1,909.9	-46.3	10.8	47.4	0.21	
1,937.0	1.66	123.73	1,934.9	-46.7	11.5	48.0	0.45	
1,962.0	1.52	122.07	1,959.9	-47.1	12.0	48.5	0.59	
1,987.0	1.43	122.31	1,984.9	-47.4	12.6	49.0	0.36	
2,012.0	1.38	126.03	2,009.9	-47.8	13.1	49.5	0.42	
2,037.0	1.30	124.20	2,034.9	-48.1	13.6	50.0	0.36	
2,062.0	1.20	122.82	2,059.9	-48.4	14.0	50.4	0.42	
2,087.0	1.10	124.20	2,084.9	-48.7	14.4	50.8	0.42	
2,112.0	1.03	124.46	2,109.9	-48.9	14.8	51.1	0.28	
2,137.0	0.96	127.44	2,134.9	-49.2	15.2	51.5	0.35	
2,162.0	0.92	130.73	2,159.9	-49.5	15.5	51.8	0.27	
2,187.0	0.91	130.41	2,184.9	-49.7	15.8	52.2	0.04	
2,212.0	0.88	132.01	2,209.9	-50.0	16.1	52.5	0.16	
2,237.0	0.85	134.16	2,234.9	-50.2	16.4	52.8	0.18	
2,262.0	0.81	135.79	2,259.9	-50.5	16.6	53.1	0.19	
2,287.0	0.76	140.03	2,284.9	-50.7	16.9	53.5	0.31	
2,312.0	0.74	138.85	2,309.9	-51.0	17.1	53.8	0.10	
2,337.0	0.71	137.18	2,334.9	-51.2	17.3	54.0	0.15	
2,362.0	0.65	139.50	2,359.9	-51.5	17.5	54.3	0.26	
2,387.0	0.63	142.49	2,384.9	-51.7	17.6	54.6	0.16	
2,412.0	0.71	146.12	2,409.9	-51.9	17.8	54.9	0.36	
2,437.0	0.64	144.19	2,434.9	-52.1	18.0	55.1	0.29	
2,462.0	0.52	142.18	2,459.9	-52.4	18.1	55.4	0.49	
2,487.0	0.44	146.16	2,484.9	-52.5	18.3	55.6	0.35	

17.06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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)
2,512.0	0.41	149.29	2,509.9	-52.7	18.4	55.7	0.15
2,537.0	0.40	149.03	2,534.9	-52.8	18.5	55.9	0.04
2,562.0	0.31	148.52	2,559.9	-53.0	18.5	56.1	0.36
2,587.0	0.28	145.54	2,584.8	-53.1	18.6	56.2	0.13
2,612.0	0.29	145.71	2,609.8	-53.2	18.7	56.3	0.04
2,637.0	0.25	142.68	2,634.8	-53.3	18.7	56.4	0.17
2,662.0	0.19	136.11	2,659.8	-53.3	18.8	56.5	0.26
2,687.0	0.15	117.98	2,684.8	-53.4	18.9	56.6	0.27
2,712.0	0.10	72.73	2,709.8	-53.4	18.9	56.6	0.43
2,737.0	0.07	37.86	2,734.8	-53.4	18.9	56.6	0.23
2,762.0	0.08	337.36	2,759.8	-53.3	18.9	56.6	0.30
2,787.0	0.15	311.08	2,784.8	-53.3	18.9	56.5	0.34
2,812.0	0.12	309.98	2,809.8	-53.3	18.9	56.5	0.12
2,837.0	0.07	324.69	2,834.8	-53.2	18.8	56.4	0.22
2,862.0	0.07	335.39	2,859.8	-53.2	18.8	56.4	0.05
2,887.0	0.11	348.27	2,884.8	-53.2	18.8	56.4	0.18
2,912.0	0.14	343.67	2,909.8	-53.1	18.8	56.3	0.13
2,937.0	0.17	341.72	2,934.8	-53.1	18.8	56.2	0.12
2,962.0	0.19	348.60	2,959.8	-53.0	18.8	56.2	0.12
2,987.0	0.18	349.47	2,984.8	-52.9	18.7	56.1	0.04
3,012.0	0.18	348.05	3,009.8	-52.8	18.7	56.0	0.02
3,037.0	0.20	350.13	3,034.8	-52.7	18.7	55.9	0.08
3,062.0	0.21	344.66	3,059.8	-52.7	18.7	55.8	0.09
3,087.0	0.23	327.41	3,084.8	-52.6	18.7	55.7	0.28
3,112.0	0.22	313.84	3,109.8	-52.5	18.6	55.6	0.22
3,137.0	0.15	311.28	3,134.8	-52.4	18.5	55.6	0.28
3,162.0	0.16	314.20	3,159.8	-52.4	18.5	55.5	0.05
3,187.0	0.15	326.39	3,184.8	-52.3	18.4	55.5	0.14
3,212.0	0.13	347.47	3,209.8	-52.3	18.4	55.4	0.22
3,237.0	0.15	353.72	3,234.8	-52.2	18.4	55.3	0.10
3,262.0	0.17	1.12	3,259.8	-52.2	18.4	55.3	0.11
3,287.0	0.18	356.23	3,284.8	-52.1	18.4	55.2	0.07
3,312.0	0.20	342.58	3,309.8	-52.0	18.4	55.1	0.20
3,337.0	0.22	338.61	3,334.8	-51.9	18.4	55.0	0.10
3,362.0	0.20	341.09	3,359.8	-51.8	18.3	54.9	0.09
3,387.0	0.19	344.10	3,384.8	-51.8	18.3	54.8	0.06
3,412.0	0.18	344.62	3,409.8	-51.7	18.3	54.8	0.04
3,437.0	0.17	339.37	3,434.8	-51.6	18.3	54.7	0.08
3,462.0	0.18	338.65	3,459.8	-51.5	18.2	54.6	0.04
3,487.0	0.11	339.66	3,484.8	-51.5	18.2	54.6	0.28
3,512.0	0.09	351.85	3,509.8	-51.4	18.2	54.5	0.12
3,537.0	0.11	10.84	3,534.8	-51.4	18.2	54.5	0.15
3,562.0	0.11	32.50	3,559.8	-51.3	18.2	54.4	0.17
3,587.0	0.13	23.17	3,584.8	-51.3	18.2	54.4	0.11

Received
Office of Oil & Gas
JUL 20 2015

17-06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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)	
3,612.0	0.13	19.24	3,609.8	-51.2	18.3	54.3	0.04	
3,637.0	0.13	20.07	3,634.8	-51.2	18.3	54.3	0.01	
3,662.0	0.14	12.26	3,659.8	-51.1	18.3	54.3	0.08	
3,687.0	0.15	17.16	3,684.8	-51.1	18.3	54.2	0.06	
3,712.0	0.14	14.60	3,709.8	-51.0	18.3	54.1	0.05	
3,737.0	0.12	359.56	3,734.8	-51.0	18.3	54.1	0.16	
3,762.0	0.12	344.19	3,759.8	-50.9	18.3	54.0	0.13	
3,787.0	0.10	346.17	3,784.8	-50.9	18.3	54.0	0.08	
3,812.0	0.05	356.56	3,809.8	-50.8	18.3	54.0	0.21	
3,837.0	0.04	359.32	3,834.8	-50.8	18.3	53.9	0.04	
3,862.0	0.05	16.31	3,859.8	-50.8	18.3	53.9	0.07	
3,887.0	0.04	25.24	3,884.8	-50.8	18.3	53.9	0.05	
3,912.0	0.03	78.06	3,909.8	-50.8	18.3	53.9	0.13	
3,937.0	0.03	70.36	3,934.8	-50.8	18.3	53.9	0.02	
3,962.0	0.05	21.09	3,959.8	-50.7	18.3	53.9	0.15	
3,987.0	0.08	4.37	3,984.8	-50.7	18.4	53.9	0.14	
4,012.0	0.09	25.12	4,009.8	-50.7	18.4	53.8	0.13	
4,037.0	0.13	38.47	4,034.8	-50.6	18.4	53.8	0.19	
4,062.0	0.15	8.47	4,059.8	-50.6	18.4	53.8	0.30	
4,087.0	0.16	352.88	4,084.8	-50.5	18.4	53.7	0.17	
4,112.0	0.13	349.83	4,109.8	-50.5	18.4	53.6	0.12	
4,137.0	0.07	344.81	4,134.8	-50.4	18.4	53.6	0.24	
4,162.0	0.04	359.58	4,159.8	-50.4	18.4	53.6	0.13	
4,187.0	0.08	33.19	4,184.8	-50.4	18.4	53.6	0.21	
4,212.0	0.11	52.93	4,209.8	-50.3	18.4	53.5	0.18	
4,237.0	0.14	37.12	4,234.8	-50.3	18.5	53.5	0.18	
4,262.0	0.18	12.56	4,259.8	-50.2	18.5	53.5	0.31	
4,287.0	0.21	358.68	4,284.8	-50.2	18.5	53.4	0.22	
4,312.0	0.22	1.49	4,309.8	-50.1	18.5	53.3	0.06	
4,337.0	0.27	24.70	4,334.8	-50.0	18.5	53.2	0.44	
4,362.0	0.37	18.23	4,359.8	-49.8	18.6	53.1	0.42	
4,387.0	0.43	7.26	4,384.8	-49.7	18.6	52.9	0.39	
4,412.0	0.40	7.23	4,409.8	-49.5	18.6	52.8	0.12	
4,437.0	0.41	0.13	4,434.8	-49.3	18.6	52.6	0.20	
4,462.0	0.38	5.11	4,459.8	-49.1	18.7	52.4	0.18	
4,487.0	0.31	26.08	4,484.8	-49.0	18.7	52.3	0.57	
4,512.0	0.34	10.27	4,509.8	-48.9	18.7	52.2	0.38	
4,537.0	0.38	359.12	4,534.8	-48.7	18.7	52.1	0.32	
4,562.0	0.32	1.20	4,559.8	-48.5	18.7	51.9	0.25	
4,587.0	0.36	351.71	4,584.8	-48.4	18.7	51.8	0.28	
4,612.0	0.39	348.52	4,609.8	-48.2	18.7	51.6	0.15	
4,637.0	0.41	352.83	4,634.8	-48.1	18.7	51.4	0.14	
4,662.0	0.42	357.37	4,659.8	-47.9	18.7	51.3	0.14	
4,687.0	0.44	354.00	4,684.8	-47.7	18.6	51.1	0.13	



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)		
4,712.0	0.49	349.79	4,709.8	-47.5	18.6	50.9	0.24		
4,737.0	0.53	348.00	4,734.8	-47.3	18.6	50.7	0.17		
4,762.0	0.54	345.74	4,759.8	-47.0	18.5	50.4	0.09		
4,787.0	0.53	346.76	4,784.8	-46.8	18.5	50.2	0.06		
4,812.0	0.52	353.59	4,809.8	-46.6	18.4	50.0	0.25		
4,837.0	0.54	0.92	4,834.8	-46.4	18.4	49.7	0.28		
4,862.0	0.55	5.64	4,859.8	-46.1	18.4	49.5	0.18		
4,887.0	0.59	7.17	4,884.8	-45.9	18.5	49.3	0.17		
4,912.0	0.65	2.75	4,909.8	-45.6	18.5	49.0	0.31		
4,937.0	0.65	0.43	4,934.8	-45.3	18.5	48.8	0.11		
4,962.0	0.61	359.20	4,959.8	-45.1	18.5	48.5	0.17		
4,987.0	0.62	357.01	4,984.8	-44.8	18.5	48.2	0.10		
5,012.0	0.60	1.66	5,009.8	-44.5	18.5	48.0	0.21		
5,037.0	0.60	1.53	5,034.8	-44.3	18.5	47.7	0.01		
5,062.0	0.64	0.92	5,059.8	-44.0	18.5	47.5	0.16		
5,087.0	0.68	6.54	5,084.8	-43.7	18.5	47.2	0.30		
5,112.0	0.71	5.34	5,109.8	-43.4	18.5	46.9	0.13		
5,137.0	0.72	2.34	5,134.8	-43.1	18.6	46.6	0.15		
5,162.0	0.72	1.71	5,159.8	-42.8	18.6	46.3	0.03		
5,187.0	0.70	0.93	5,184.8	-42.5	18.6	46.1	0.09		
5,212.0	0.70	357.89	5,209.8	-42.2	18.6	45.8	0.15		
5,237.0	0.69	0.55	5,234.8	-41.9	18.6	45.5	0.14		
5,262.0	0.73	3.81	5,259.8	-41.5	18.6	45.2	0.23		
5,287.0	0.78	4.78	5,284.8	-41.2	18.6	44.9	0.21		
5,312.0	0.76	8.76	5,309.8	-40.9	18.6	44.6	0.23		
5,337.0	0.81	7.15	5,334.8	-40.5	18.7	44.3	0.22		
5,362.0	0.86	3.64	5,359.8	-40.2	18.7	43.9	0.29		
5,387.0	0.85	2.28	5,384.8	-39.8	18.7	43.6	0.09		
5,412.0	0.86	1.64	5,409.8	-39.4	18.8	43.2	0.06		
5,437.0	0.89	0.89	5,434.8	-39.1	18.8	42.9	0.13		
5,462.0	0.87	2.48	5,459.8	-38.7	18.8	42.5	0.13		
5,487.0	0.86	1.59	5,484.8	-38.3	18.8	42.1	0.07		
5,512.0	0.87	356.71	5,509.8	-37.9	18.8	41.8	0.30		
5,537.0	0.87	357.13	5,534.8	-37.5	18.8	41.4	0.03		
5,562.0	0.84	0.80	5,559.8	-37.2	18.8	41.0	0.25		
5,587.0	0.88	1.50	5,584.8	-36.8	18.8	40.7	0.17		
5,612.0	0.90	5.32	5,609.8	-36.4	18.8	40.3	0.25		
5,637.0	0.94	5.97	5,634.8	-36.0	18.8	40.0	0.17		
5,662.0	0.98	3.08	5,659.8	-35.6	18.9	39.6	0.25		
5,687.0	0.97	4.65	5,684.8	-35.2	18.9	39.2	0.11		
5,712.0	1.01	1.80	5,709.8	-34.7	18.9	38.8	0.25		
5,737.0	1.03	359.97	5,734.7	-34.3	18.9	38.3	0.15		
5,762.0	1.00	0.02	5,759.7	-33.8	18.9	37.9	0.12		
5,787.0	1.02	357.98	5,784.7	-33.4	18.9	37.5	0.16		

17-06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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)
5,812.0	1.05	355.35	5,809.7	-33.0	18.9	37.1	0.22
5,837.0	1.00	359.42	5,834.7	-32.5	18.9	36.6	0.35
5,862.0	0.94	4.94	5,859.7	-32.1	18.9	36.2	0.44
5,887.0	0.97	5.68	5,884.7	-31.7	18.9	35.8	0.13
5,912.0	0.97	7.05	5,909.7	-31.2	19.0	35.5	0.09
5,937.0	0.93	6.48	5,934.7	-30.8	19.0	35.1	0.16
5,962.0	0.93	5.43	5,959.7	-30.4	19.1	34.7	0.07
5,987.0	0.91	7.21	5,984.7	-30.0	19.1	34.3	0.14
6,012.0	0.91	7.97	6,009.7	-29.6	19.2	34.0	0.05
6,037.0	0.91	7.71	6,034.7	-29.2	19.2	33.6	0.02
6,062.0	0.86	10.44	6,059.7	-28.9	19.3	33.3	0.26
6,087.0	0.77	13.44	6,084.7	-28.5	19.3	33.0	0.40
6,112.0	0.75	8.70	6,109.7	-28.2	19.4	32.7	0.26
6,137.0	0.72	2.99	6,134.7	-27.9	19.4	32.4	0.32
6,162.0	0.63	8.34	6,159.7	-27.6	19.5	32.1	0.44
6,187.0	0.68	19.09	6,184.7	-27.3	19.5	31.9	0.53
6,212.0	0.65	23.92	6,209.7	-27.0	19.6	31.6	0.25
6,237.0	0.63	27.24	6,234.7	-26.8	19.8	31.4	0.17
6,262.0	0.61	19.48	6,259.7	-26.5	19.9	31.2	0.34
6,287.0	0.59	16.52	6,284.7	-26.3	20.0	31.0	0.15
6,312.0	0.67	18.89	6,309.7	-26.0	20.0	30.8	0.34
6,337.0	0.71	16.72	6,334.7	-25.7	20.1	30.5	0.19
6,344.0	0.71	17.68	6,341.7	-25.7	20.2	30.5	0.17
6,419.0	0.62	35.81	6,416.7	-24.9	20.5	29.8	0.30
6,449.0	0.50	40.88	6,446.7	-24.7	20.7	29.7	0.43
6,479.0	0.65	53.23	6,476.7	-24.5	20.9	29.5	0.65
6,508.0	2.24	96.73	6,505.7	-24.4	21.6	29.7	6.29
6,539.0	6.00	106.11	6,536.6	-24.9	23.8	30.8	12.28
6,569.0	9.70	105.32	6,566.3	-26.0	27.7	33.1	12.34
6,599.0	12.73	104.66	6,595.7	-27.5	33.4	36.2	10.11
6,614.0	14.06	106.25	6,610.3	-28.5	36.7	38.0	9.17
Sycamore							
6,629.0	15.39	107.57	6,624.8	-29.6	40.4	40.2	9.17
6,659.0	18.48	109.65	6,653.5	-32.4	48.6	45.3	10.49
6,689.0	21.42	111.48	6,681.7	-36.0	58.2	51.6	10.02
6,719.0	23.67	111.98	6,709.4	-40.3	68.9	58.8	7.53
6,749.0	27.23	113.82	6,736.5	-45.3	80.8	67.1	12.15
6,779.0	30.11	115.66	6,762.8	-51.3	93.8	76.7	10.04
6,793.0	31.39	115.90	6,774.8	-54.4	100.3	81.6	9.21
Middlesex							
6,809.0	32.86	116.15	6,788.4	-58.2	107.9	87.4	9.21
6,839.0	36.18	116.57	6,813.1	-65.7	123.2	99.1	11.10
6,869.0	39.57	116.41	6,836.8	-73.9	139.6	111.8	11.30
6,899.0	43.75	116.87	6,859.2	-82.9	157.5	125.6	13.97
6,929.0	47.31	116.79	6,880.2	-92.5	176.6	140.5	11.87

17-06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	
6,959.0	51.30	116.98	6,899.8	-102.8	196.8	156.3	13.31	
6,989.0	55.23	117.81	6,917.7	-113.9	218.2	173.1	13.29	
7,019.0	59.28	119.73	6,933.9	-126.0	240.3	191.3	14.53	
7,049.0	62.68	120.24	6,948.5	-139.1	263.0	210.5	11.43	
Tully								
7,079.0	64.50	122.99	6,961.8	-153.2	285.9	230.7	10.21	
7,109.0	65.74	126.99	6,974.5	-168.8	308.2	252.2	12.78	
7,139.0	67.57	131.03	6,986.3	-186.2	329.6	275.1	13.79	
7,169.0	68.40	134.51	6,997.6	-205.0	350.0	299.1	11.10	
7,199.0	69.33	137.73	7,008.4	-225.2	369.4	324.1	10.48	
7,229.0	69.87	142.33	7,018.9	-246.8	387.4	350.0	14.48	
7,259.0	69.55	146.71	7,029.3	-269.7	403.7	376.7	13.74	
7,289.0	69.32	150.56	7,039.8	-293.6	418.4	404.0	12.04	
7,319.0	71.21	152.84	7,050.0	-318.5	431.7	431.7	9.53	
7,336.0	72.41	154.62	7,055.3	-333.0	438.9	447.6	12.21	
Marcellus								
7,349.0	73.34	155.97	7,059.1	-344.3	444.1	459.9	12.21	
7,379.0	76.38	158.24	7,066.9	-370.9	455.3	488.7	12.49	
7,409.0	80.05	160.26	7,073.1	-398.4	465.7	518.0	13.90	
7,483.0	88.96	162.30	7,080.1	-468.1	489.3	591.6	12.35	
7,600.0	90.60	163.32	7,080.6	-579.9	523.9	708.6	1.65	
7,695.0	89.66	162.94	7,080.4	-670.8	551.5	803.6	1.07	
7,785.0	89.03	162.48	7,081.4	-756.7	578.2	893.6	0.87	
7,875.0	89.13	161.88	7,082.8	-842.4	605.8	983.5	0.68	
7,967.0	89.03	162.55	7,084.3	-930.0	633.9	1,075.5	0.74	
8,060.0	88.56	162.38	7,086.3	-1,018.6	661.9	1,168.5	0.54	
8,152.0	88.12	162.58	7,088.9	-1,106.3	689.6	1,260.5	0.53	
8,245.0	87.95	161.96	7,092.1	-1,194.8	717.9	1,353.4	0.69	
8,337.0	89.66	165.22	7,094.0	-1,283.1	743.9	1,445.4	4.00	
8,430.0	90.47	166.10	7,093.9	-1,373.2	766.9	1,538.2	1.29	
8,522.0	91.58	166.43	7,092.3	-1,462.5	788.7	1,630.1	1.26	
8,614.0	90.17	162.63	7,090.9	-1,551.2	813.3	1,722.0	4.41	
8,706.0	90.13	161.98	7,090.6	-1,638.8	841.2	1,814.0	0.71	
8,797.0	90.23	160.90	7,090.4	-1,725.1	870.2	1,905.0	1.19	
8,891.0	90.03	159.06	7,090.1	-1,813.4	902.4	1,998.8	1.97	
8,985.0	89.36	160.25	7,090.7	-1,901.5	935.0	2,092.7	1.45	
9,079.0	89.30	162.45	7,091.7	-1,990.6	965.1	2,186.6	2.34	
9,173.0	90.57	164.62	7,091.9	-2,080.7	991.7	2,280.6	2.67	
9,268.0	90.44	164.52	7,091.0	-2,172.3	1,017.0	2,375.6	0.17	
9,362.0	91.38	162.89	7,089.5	-2,262.5	1,043.4	2,469.6	2.00	
9,456.0	91.68	161.38	7,087.0	-2,351.9	1,072.2	2,563.5	1.64	
9,551.0	89.66	161.68	7,085.9	-2,442.0	1,102.3	2,658.5	2.15	
9,645.0	89.70	163.63	7,086.4	-2,531.7	1,130.3	2,752.5	2.07	
9,739.0	90.34	166.39	7,086.4	-2,622.5	1,154.6	2,846.4	3.01	
9,833.0	92.28	164.45	7,084.2	-2,713.5	1,178.3	2,940.3	2.92	

17-06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	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)	
9,927.0	90.81	161.76	7,081.7	-2,803.4	1,205.6	3,034.2	3.26	
10,022.0	90.94	161.54	7,080.3	-2,893.5	1,235.5	3,129.2	0.27	
10,115.0	89.36	161.54	7,080.0	-2,981.7	1,265.0	3,222.2	1.70	
10,210.0	89.33	163.43	7,081.1	-3,072.3	1,293.5	3,317.1	1.99	
10,304.0	90.74	164.21	7,081.0	-3,162.6	1,319.7	3,411.1	1.71	
10,398.0	90.97	163.27	7,079.6	-3,252.8	1,346.0	3,505.1	1.03	
10,492.0	91.58	160.78	7,077.6	-3,342.2	1,375.0	3,599.1	2.73	
10,586.0	88.96	159.81	7,077.1	-3,430.7	1,406.7	3,693.0	2.97	
10,680.0	87.99	158.51	7,079.6	-3,518.5	1,440.2	3,786.7	1.73	
10,774.0	89.06	160.25	7,082.0	-3,606.5	1,473.3	3,880.5	2.17	
10,868.0	89.46	161.69	7,083.2	-3,695.3	1,503.9	3,974.5	1.59	
10,962.0	89.40	162.33	7,084.2	-3,784.7	1,532.9	4,068.4	0.68	
11,056.0	90.03	163.49	7,084.6	-3,874.6	1,560.6	4,162.4	1.40	
11,150.0	90.37	163.44	7,084.3	-3,964.7	1,587.3	4,256.4	0.37	
11,244.0	89.36	163.81	7,084.5	-4,054.9	1,613.8	4,350.4	1.14	
11,339.0	88.76	163.20	7,086.1	-4,145.9	1,640.8	4,445.4	0.90	
11,432.0	88.69	164.86	7,088.2	-4,235.3	1,666.4	4,538.4	1.79	
11,527.0	89.56	163.28	7,089.6	-4,326.7	1,692.4	4,633.3	1.90	
11,621.0	89.77	162.52	7,090.2	-4,416.5	1,720.1	4,727.3	0.84	
11,715.0	88.99	164.14	7,091.2	-4,506.5	1,747.0	4,821.3	1.91	
11,809.0	89.23	164.21	7,092.6	-4,597.0	1,772.7	4,915.3	0.27	
11,904.0	89.93	164.71	7,093.3	-4,688.5	1,798.1	5,010.2	0.91	
11,998.0	90.34	168.84	7,093.1	-4,780.0	1,819.6	5,104.0	4.42	
12,092.0	91.54	167.10	7,091.6	-4,871.9	1,839.2	5,197.6	2.25	
12,186.0	92.08	163.10	7,088.6	-4,962.7	1,863.4	5,291.5	4.29	
12,281.0	90.37	161.55	7,086.6	-5,053.2	1,892.2	5,386.4	2.43	
12,374.0	90.60	160.50	7,085.8	-5,141.1	1,922.4	5,479.4	1.16	
12,468.0	89.36	160.74	7,085.8	-5,229.8	1,953.6	5,573.3	1.34	
12,562.0	89.36	160.60	7,086.9	-5,318.5	1,984.7	5,667.2	0.15	
12,656.0	89.36	162.45	7,087.9	-5,407.6	2,014.5	5,761.2	1.97	
12,750.0	89.56	162.26	7,088.8	-5,497.2	2,043.0	5,855.2	0.29	
12,844.0	89.26	161.94	7,089.8	-5,586.6	2,071.9	5,949.2	0.47	
12,938.0	89.13	161.86	7,091.1	-5,676.0	2,101.1	6,043.2	0.16	
13,032.0	89.46	163.33	7,092.3	-5,765.7	2,129.2	6,137.1	1.60	
13,127.0	89.19	162.09	7,093.4	-5,856.4	2,157.4	6,232.1	1.34	
13,221.0	90.07	164.57	7,094.0	-5,946.4	2,184.4	6,326.1	2.80	
13,315.0	90.64	164.24	7,093.4	-6,036.9	2,209.7	6,420.1	0.70	
13,409.0	90.64	163.71	7,092.3	-6,127.3	2,235.6	6,514.1	0.56	
13,503.0	90.40	162.81	7,091.5	-6,217.3	2,262.7	6,608.1	0.99	
13,533.0	90.48	162.56	7,091.3	-6,245.9	2,271.6	6,638.1	0.87	
13,591.0	90.48	162.56	7,090.8	-6,301.3	2,289.0	6,696.0	0.00	

17.06420



EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Honey Unit 1H
Project:	Doddridge County WV	TVD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Site:	Dufflemeyer Pad	MD Reference:	Patt 347: Honey 1H 1081 GL + 25 KB @ 1106.0u:
Well:	Honey Unit 1H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,614.0	6,610.3	-28.5	36.7	Sycamore
6,793.0	6,774.8	-54.4	100.3	Middlesex
7,049.0	6,948.5	-139.1	263.0	Tully
7,336.0	7,055.3	-333.0	438.9	Marcellus

Checked By: _____ Approved By: _____ Date: _____

Received
Office of Oil & Gas
JUL 20 2015

17-06420

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/5/2014
Job End Date:	12/14/2014
State:	West Virginia
County:	Doddridge
API Number:	47-017-06420-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Honey Unit 1H
Longitude:	-80.65053300
Latitude:	39.20501900
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,094
Total Base Water Volume (gal):	8,173,914
Total Base Non Water Volume:	366,788



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	90.16135	
Sand	J.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	9.42359	
GC-15	J.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00000	0.07963	
			Petroleum Distillates	64742-47-8	60.00000	0.07542	
			Suspending agent (solid)	14808-60-7	3.00000	0.01218	
			Surfactant	68439-51-0	3.00000	0.00478	
HCL Acid (12.6%-18.0%)	J.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.50000	0.09160	
			Hydrogen Chloride	7647-01-1	18.00000	0.02188	
WFRA-405	J.S. Well Services, LLC	Friction Reducer	Water	7732-18-5	40.00000	0.03101	
			Anionic Polyacrylamide	Proprietary	40.00000	0.03101	
			Petroleum Distillates	64742-47-8	40.00000	0.02497	
			Crystalline Salt	12125-02-9	5.00000	0.00388	

17-06420

SI-1100	J.S. Well Services	Scale Inhibitor	Ethoxylated alcohol blend	Proprietary	5.00000	0.00388
		DI Water		7732-18-5	80.00000	0.01065
		Ethylene Glycol		107-21-1	40.00000	0.00602
		Potassium salt of diethylene triamine penta (methylene phosphonic acid)		15827-60-8	10.00000	0.00180
		2-Phosphonobutane 1,2,4 tricarboxylic salt		37971-36-1	10.00000	0.00172
		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) tramine penta (methylene phosphonic acid) - phosphate acid		40623-75-4	10.00000	0.00153
		Acrylic polymer		52255-49-9	5.00000	0.00067
K-BAC 1020	J.S. Well Services, LLC	Anti-Bacterial Agent				
		2,2-dibromo-3-nitropropionamide		10222-01-2	20.00000	0.00430
		Deionized Water		7732-18-5	28.00000	0.00246
AP One	J.S. Well Services, LLC	Gel Breakers				
		Ammonium Persulfate		7727-54-0	100.00000	0.00209
AI-301	J.S. Well Services, LLC	Acid Corrosion Inhibitors				
		Diethylene Glycol		111-46-6	30.00000	0.00014
		Methenamine		100-97-0	20.00000	0.00011
		Hydrogen Chloride		7647-01-0	10.00000	0.00005
		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.

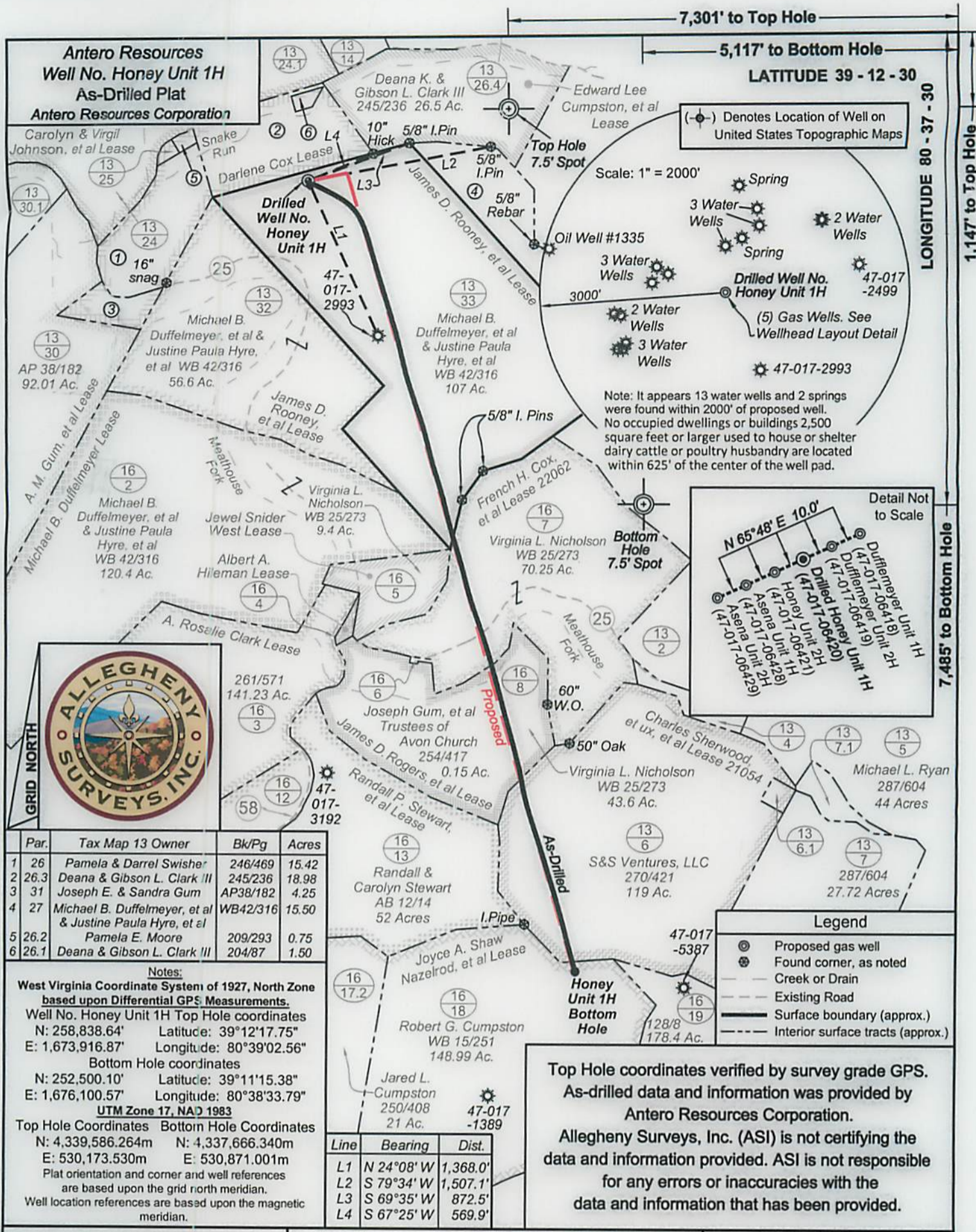
* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** 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)

Received
Office of Oil & Gas
JUL 20 2015

10/23/2015



Notes:
West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
Well No. Honey Unit 1H Top Hole coordinates
N: 258,838.64' Latitude: 39°12'17.75"
E: 1,673,916.87' Longitude: 80°39'02.56"
Bottom Hole coordinates
N: 252,500.10' Latitude: 39°11'15.38"
E: 1,676,100.57' Longitude: 80°38'33.79"
UTM Zone 17, NAD 1983
Top Hole Coordinates Bottom Hole Coordinates
N: 4,339,586.264m N: 4,337,666.340m
E: 530,173.530m E: 530,871.001m
Plat orientation and corner and well references are based upon the grid north meridian.
Well location references are based upon the magnetic meridian.

Line	Bearing	Dist.
L1	N 24°08' W	1,368.0'
L2	S 79°34' W	1,507.1'
L3	S 69°35' W	872.5'
L4	S 67°25' W	569.9'

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.

FILE NO: 69-30-NM-13
DRAWING NO: Honey Unit 1H Well Plat As-Drill
SCALE: 1" = 1000'
MINIMUM DEGREE OF ACCURACY: Submeter
PROVEN SOURCE OF ELEVATION: WVDOT, Bridgeport, WV

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

DATE: March 30 2015
OPERATOR'S WELL NO. Honey Unit 1H
API WELL NO
47 - 017 - 06420
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
Existing Grade - 1081'
Original Grade - 1112' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: New Milton
DISTRICT: New Milton COUNTY: Doddridge 10/23/2015
SURFACE OWNER: Michael B. Duffelmeyer, et al & Justine Paula Hyre, et al James D. Rogers, et al Charles Sherwood, et ux, et al
ROYALTY OWNER: Joyce A. Shaw Nazelrod, et al; James D. Rooney, et al; French H. Cox, et al LEASE NO: 21054 22062 ACREAGE: 107 163.85
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 DEPTH: 7,091' TVD 13,591' MD

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