

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

API 47-033-05696 County Harrison District Union
Quad West Milford & Big Isaac Pad Name Bowyer Pad Field/Pool Name _____
Farm name Bowyer, Matt E. & Lisa Devought Well Number Ten Mile 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 4,339,273.962m Easting 544,080.190m
Landing Point of Curve Northing 4,339,340.87 Easting 543,844.99
Bottom Hole Northing 4,341,939.584m Easting 542,951.486m

Elevation (ft) 1,278' 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 12/26/2012 Date drilling commenced 03/28/2013 Date drilling ceased 08/06/2013
Date completion activities began 09/17/2013 Date completion activities ceased 03/30/2014
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

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

Freshwater depth(s) ft 102', 204' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1,466'; 1,762' Void(s) encountered (Y/N) depths None
Coal depth(s) ft 391' Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) No

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API 47-033 - 05696 Farm name Bowyer, Matt E. & Lisa Devought Well number Ten Mile 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#; H-40	N/A	Yes
Surface	17 1/2"	13 3/8"	434'	New	48#; J-55	N/A	Yes
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,561'	New	36#; J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	16,557'	New	20#; P-110	N/A	Yes
Tubing		2 3/8"	7,370'		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	75 sx	15.6	1.2	38	0'	8 Hrs.
Surface	Class A	534 sx	15.6	1.18	301	0'	8 Hrs.
Coal							
Intermediate 1	Class A	944 sx	15.6	1.18	802	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1,095 sx (Lead); 1,495 sx (Tail)	14.5 (Lead); 15.2 (Tail)	1.3 (Lead); 1.86 (Tail)	3,321	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 16,558' MD: 7,278' TVD Loggers TD (ft) 16,543'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6,364'

**This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Winnie Unit 2H, API #47-033-05615). Please reference the wireline logs submitted with Form WR-35 for the Winnie 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 _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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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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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>7,074' (top)</u> TVD	<u>7,335' (top)</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3,600 psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas 2,934 mcfpd Oil _____ bpd NGL _____ bpd Water 4,945 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)
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	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 Nine Energy Company (FKA CDK Perforating)
Address 125 Museum Rd. City Washington State PA Zip 15301

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

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

Please insert additional pages as applicable.

Completed by Megan Darling Telephone 303-357-7230
Signature Megan C. Darling Title Permitting Agent Date 08/07/2015

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EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	17-Sep-13	16,219	16,494	60	Marcellus
2	16-Feb-14	15,993	16,184	60	Marcellus
3	17-Feb-14	15,766	15,957	60	Marcellus
4	17-Feb-14	15,539	15,730	60	Marcellus
5	17-Feb-14	15,313	15,504	60	Marcellus
6	18-Feb-14	15,086	15,277	60	Marcellus
7	18-Feb-14	14,859	15,050	60	Marcellus
8	18-Feb-14	14,633	14,824	60	Marcellus
9	18-Feb-14	14,406	14,597	60	Marcellus
10	19-Feb-14	14,179	14,370	60	Marcellus
11	19-Feb-14	13,953	14,143	60	Marcellus
12	19-Feb-14	13,726	13,917	60	Marcellus
13	19-Feb-14	13,499	13,690	60	Marcellus
14	20-Feb-14	13,273	13,463	60	Marcellus
15	20-Feb-14	13,046	13,237	60	Marcellus
16	20-Feb-14	12,819	13,010	60	Marcellus
17	21-Feb-14	12,592	12,783	60	Marcellus
18	21-Feb-14	12,366	12,557	60	Marcellus
19	21-Feb-14	12,139	12,330	60	Marcellus
20	21-Feb-14	11,912	12,103	60	Marcellus
21	22-Feb-14	11,686	11,877	60	Marcellus
22	22-Feb-14	11,459	11,650	60	Marcellus
23	22-Feb-14	11,232	11,423	60	Marcellus
24	22-Feb-14	11,006	11,197	60	Marcellus
25	22-Feb-14	10,779	10,970	60	Marcellus
26	23-Feb-14	10,552	10,743	60	Marcellus
27	23-Feb-14	10,326	10,517	60	Marcellus
28	23-Feb-14	10,099	10,290	60	Marcellus
29	23-Feb-14	9,872	10,063	60	Marcellus
30	24-Feb-13	9,646	9,837	60	Marcellus
31	24-Feb-14	9,419	9,610	60	Marcellus
32	24-Feb-14	9,192	9,383	60	Marcellus
33	24-Feb-14	8,966	9,156	60	Marcellus
34	25-Feb-14	8,739	8,930	60	Marcellus
35	25-Feb-14	8,512	8,703	60	Marcellus
36	25-Feb-14	8,286	8,476	60	Marcellus
37	25-Feb-14	8,059	8,250	60	Marcellus
38	25-Feb-14	7,832	8,023	60	Marcellus
39	26-Feb-14	7,606	7,796	60	Marcellus
40	26-Feb-14	7,379	7,570	60	Marcellus

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EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	16-Feb-14	79.0	7,936	6,261	5,169	271,605	7,080	N/A
2	16-Feb-14	74.0	8,020	6,445	4,500	272,087	7,092	N/A
3	17-Feb-14	76.0	8,134	6,719	4,301	273,121	7,614	N/A
4	17-Feb-14	79.0	8,060	6,840	4,580	274,531	6,920	N/A
5	17-Feb-14	69.0	7,863	6,506	4,728	271,355	7,076	N/A
6	18-Feb-14	66.0	7,475	6,305	5,114	215,705	7,496	N/A
7	18-Feb-14	77.0	8,002	6,608	4,657	272,164	6,961	N/A
8	18-Feb-14	75.0	7,935	6,306	4,540	247,670	7,641	N/A
9	18-Feb-14	76.0	7,775	6,565	4,216	274,573	7,014	N/A
10	19-Feb-14	75.0	7,741	6,666	4,563	272,960	6,893	N/A
11	19-Feb-14	78.0	7,699	5,980	4,803	272,829	6,858	N/A
12	19-Feb-14	74.0	7,962	6,259	5,324	201,193	7,059	N/A
13	19-Feb-14	74.0	7,929	6,319	4,723	270,859	6,810	N/A
14	20-Feb-14	74.0	7,796	5,884	4,667	272,413	6,787	N/A
15	20-Feb-14	76.0	7,965	6,194	4,610	243,112	7,280	N/A
16	20-Feb-14	79.0	7,549	5,986	4,322	275,056	6,910	N/A
17	21-Feb-14	79.0	7,369	5,709	4,603	279,142	7,057	N/A
18	21-Feb-14	78.0	7,143	5,922	5,564	271,400	6,761	N/A
19	21-Feb-14	78.0	7,260	5,736	5,298	271,530	7,151	N/A
20	21-Feb-14	78.0	6,581	5,984	4,896	1,770,254	6,727	N/A
21	22-Feb-14	79.0	6,969	6,080	4,560	273,937	6,775	N/A
22	22-Feb-14	78.0	7,031	5,736	4,419	275,561	6,719	N/A
23	22-Feb-14	79.0	7,355	5,535	4,248	272,748	6,637	N/A
24	22-Feb-14	79.0	7,319	6,086	4,235	272,126	6,699	N/A
25	22-Feb-14	73.0	7,524	6,049	5,373	197,403	6,997	N/A
26	23-Feb-14	73.0	7,524	6,049	5,373	197,403	6,997	N/A
27	23-Feb-14	78.0	7,665	6,121	4,907	269,978	6,617	N/A
28	23-Feb-14	76.0	7,822	5,667	5,944	236,725	7,220	N/A
29	23-Feb-14	76.0	7,171	5,867	5,725	208,613	6,953	N/A
30	24-Feb-13	78.0	7,183	6,587	4,547	273,904	6,663	N/A
31	24-Feb-14	78.0	6,772	6,209	4,692	271,009	6,636	N/A
32	24-Feb-14	78.0	6,976	5,724	5,304	271,906	6,569	N/A
33	24-Feb-14	81.0	6,990	5,940	4,475	274,001	6,571	N/A
34	25-Feb-14	81.0	7,082	6,204	4,515	274,138	6,536	N/A
35	25-Feb-14	74.0	7,180	6,520	4,770	275,140	6,592	N/A
36	25-Feb-14	77.0	6,938	5,899	4,565	271,761	6,464	N/A
37	25-Feb-14	80.0	6,719	5,660	4,782	271,931	6,448	N/A
38	25-Feb-14	81.0	6,737	5,902	5,148	276,649	6,562	N/A
39	26-Feb-14	81.0	6,839	6,367	5,041	277,368	6,555	N/A
40	26-Feb-14	77.0	6,768	6,184	4,510	253,175	6,600	N/A
AVG=		76.8	7,419	6,140	4,808	11,969,035	6,724	TOTAL

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Fresh Water	102'	N/A	102'	N/A
Fresh Water	204'	N/A	204'	N/A
Sandy Siltstone	0	281	0	281
Siltstone	est. 281	326	est. 281	326
Sandstone	est. 326	391	est. 326	391
Coal	est. 391	421	est. 391	421
Sandstone	est. 421	571	est. 421	571
Sandy Shale	est. 571	876	est. 571	876
Sandstone	est. 876	1,026	est. 876	1,026
Shale	est. 1026	1,071	est. 1026	1,071
Sandstone	est. 1071	1,176	est. 1071	1,176
Sandy Shale	est. 1176	1,266	est. 1176	1,266
Sandy Siltstone	est. 1266	1,326	est. 1266	1,326
Shale	est. 1326	1,416	est. 1326	1,416
Sandstone	est. 1416	1,476	est. 1416	1,476
Shale	est. 1476	1,526	est. 1476	1,526
Limey Shale	est. 1526	1,748	est. 1526	1,753
Big Lime	1,748	4,862	1,753	1,868
Big Injun	4,862	2,110	1,868	2,120
Gantz Sand	2,110	2,227	2,120	2,239
Fifty Foot Sandstone	2,227	2,330	2,239	2,343
Gordon	2,330	2,564	2,343	2,578
Fifth Sandstone	2,564	2,632	2,578	2,647
Bayard	2,632	3,049	2,647	3,064
Warren	3,049	3,325	3,064	3,341
Speechley	3,325	3,563	3,341	3,579
Baltown	3,563	4,074	3,579	4,090
Bradford	4,074	4,724	4,090	4,739
Benson	4,724	5,041	4,739	5,057
Alexander	5,041	5,329	5,057	5,345
Elk	5,329	5,627	5,345	5,642
Rhinestreet	5,627	6,870	5,642	7,185
Sycamore	6,418	6,681	6,437	6,749
Middlesex	6,681	6,854	6,749	6,980
Burkett	6,854	6,882	6,980	7,019
Tully	6,882	7,074	7,019	7,335
Marcellus	7,074	NA	7,335	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.

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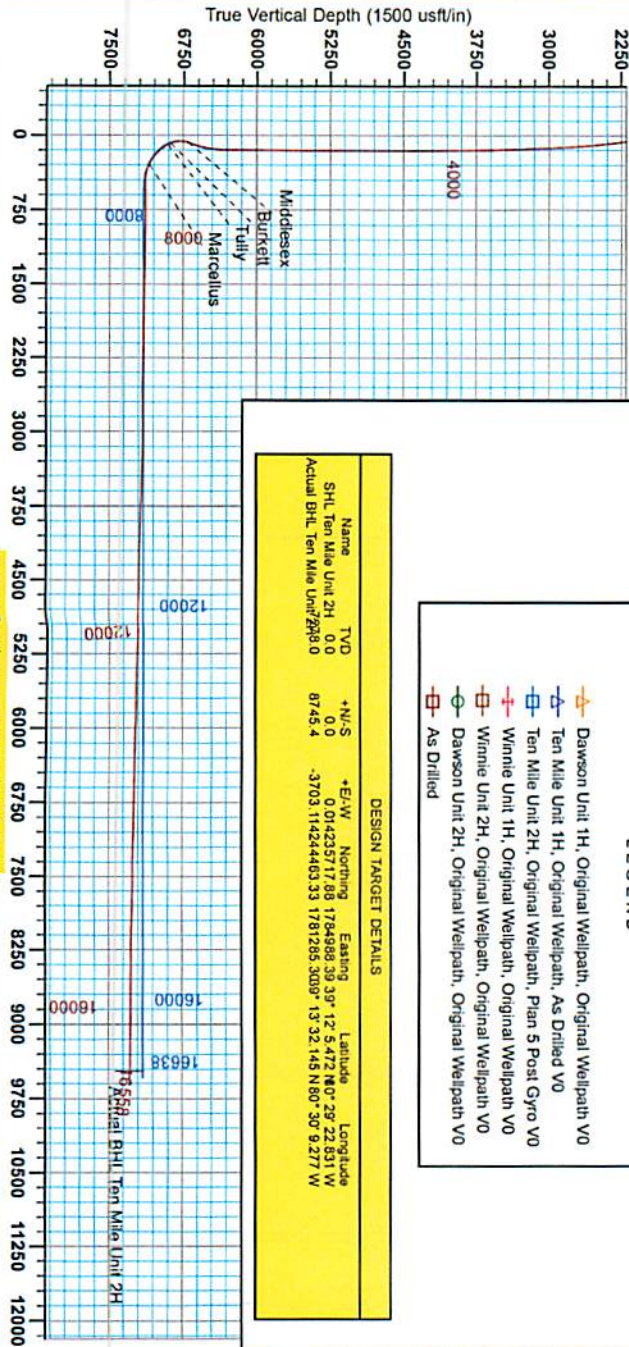
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10/29/2015

33-05696



Antero Resources
 Ten Mile Unit 2H
 Harrison County West Virginia
 Northing: 14235717.88
 Easting: 1784988.39
 As Drilled



WELL DETAILS: Ten Mile Unit 2H

API#	4E/W	Northing	Ground Level	1275.0	Longitude	86.1
0.0	0.0	14235717.88	Easting	39° 12' 5.472" (39° 22' 22.831" W)	86.1	86.1

PROJECT DETAILS: Harrison County West Virginia

Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1987 (NAD83 CONUS)
 Ellipsoid: GRS 1980
 Zone: 17N (W 78 W)
 System Datum: Mean Sea Level

REFERENCE INFORMATION:

Coordinate (NAD) Reference: Well Log Unit 2H, Grid North
 Vertical (TVD) Reference: Well Log Unit 2H, 1275.0
 Horizontal (Easting) Reference: Well Log Unit 2H, 39° 12' 5.472" W
 Horizontal (Longitude) Reference: Well Log Unit 2H, 86.1

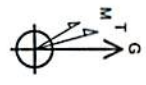
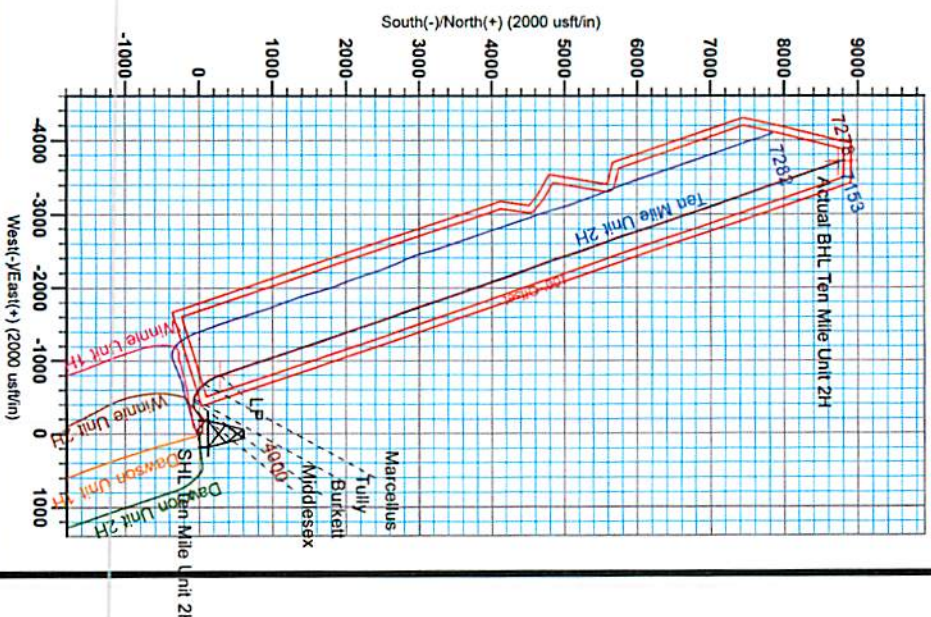


Gene Lightfoot
 11/32, August 22 2013
 Scientific Drilling
 421 South Eagle Lane
 Oklahoma City, OK

- LEGEND**
- ▲ Dawson Unit 1H, Original Wellpath, Original Wellpath V0
 - △ Ten Mile Unit 1H, Original Wellpath, As Drilled V0
 - Ten Mile Unit 2H, Original Wellpath, Plan 5 Post Gyro V0
 - ⊕ Winnie Unit 1H, Original Wellpath, Original Wellpath V0
 - ⊖ Winnie Unit 2H, Original Wellpath, Original Wellpath V0
 - ⊙ Dawson Unit 2H, Original Wellpath, Original Wellpath V0
 - ⊞ As Drilled

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL Ten Mile Unit 2H	0.0	0.0	0.0	014235717.88	1784988.39	39° 12' 5.472" N	86° 22' 22.831" W
Actual BHL Ten Mile Unit 2H	2989.0	8745.4	-3703.1	114244463.33	1781285.300	13° 32' 14.5" N	80° 30' 9.277" W



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To convert Magnetic North to Grid North:
 Magnetic North: 8.93°
 True North: 0.32°
 Magnetic Field
 Through: 52356.440T
 Date: 4/16/2013
 Model: IGRF2010

33-05696



Antero Resources

Harrison County West Virginia
Winnie/Dawson/Tenmile Pad
Ten Mile Unit 2H
Original Wellpath

Design: As Drilled

EOW Completion Report

22 August, 2013



Scientific Drilling

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EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ten Mile Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Site:	Winnie/Dawson/Tenmile Pad	MD Reference:	Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Well:	Ten Mile Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Project	Harrison County West Virginia, Harrison County, USA		
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	Winnie/Dawson/Tenmile Pad				
Site Position:		Northing:	14,235,752.63 usft	Latitude:	39° 12' 5.817 N
From:	Map	Easting:	1,784,952.46 usft	Longitude:	80° 29' 23.285 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.32 °

Well	Ten Mile Unit 2H, Marcellus					
Well Position	+N/-S	0.0 usft	Northing:	14,235,717.88 usft	Latitude:	39° 12' 5.472 N
	+E/-W	0.0 usft	Easting:	1,784,988.39 usft	Longitude:	80° 29' 22.831 W
Position Uncertainty		2.0 usft	Wellhead Elevation:	1,303.0 usft	Ground Level:	1,278.0 usft

Wellbore	Original Wellpath				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/16/2013	-8.61	66.82	52,356

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	341.05

Survey Program	Date 8/22/2013				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
112.0	6,181.0	Survey #3 Def Gyro to KOP (Original Well	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
6,224.0	16,558.0	Survey #4 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	0.20	130.27	112.0	-0.1	0.1	-0.2	0.18		
212.0	0.07	147.40	212.0	-0.3	0.3	-0.4	0.13		
312.0	0.35	143.99	312.0	-0.6	0.5	-0.7	0.28		
412.0	0.23	136.08	412.0	-1.0	0.8		0.13		
512.0	0.34	150.32	512.0	-1.4	1.1		0.13		
612.0	0.31	131.64	612.0	-1.8	1.5	-2.2	0.11		
712.0	0.30	153.94	712.0	-2.2	1.8		0.12		
812.0	0.27	133.04	812.0	-2.6	2.1	-3.2	0.11		
912.0	0.27	152.58	912.0	-3.0	2.4	-3.6	0.09		
1,012.0	0.46	129.61	1,012.0	-3.5	2.8	-4.2	0.24		

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EOW Completion Report



Company: Antero Resources	Local Co-ordinate Reference: Well Ten Mile Unit 2H
Project: Harrison County West Virginia	TVD Reference: Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Site: Winnie/Dawson/Tenmile Pad	MD Reference: Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Well: Ten Mile 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	0.31	137.52	1,112.0	-3.9	3.3	-4.8	0.16
1,212.0	0.34	127.83	1,212.0	-4.3	3.7	-5.3	0.06
1,312.0	0.33	163.20	1,312.0	-4.8	4.0	-5.8	0.20
1,412.0	3.56	216.34	1,411.9	-7.5	2.3	-7.9	3.37
1,512.0	7.20	232.28	1,511.5	-13.9	-4.5	-11.6	3.90
1,612.0	10.39	253.31	1,610.3	-20.3	-18.1	-13.3	4.48
1,712.0	11.70	277.85	1,708.5	-21.5	-36.8	-8.4	4.84
1,812.0	10.24	302.83	1,806.7	-15.3	-54.4	3.2	4.93
1,912.0	11.12	307.29	1,905.0	-4.6	-69.5	18.2	1.21
2,012.0	10.52	309.01	2,003.2	6.9	-84.3	33.9	0.68
2,112.0	9.17	309.58	2,101.7	17.8	-97.5	48.5	1.35
2,212.0	8.65	309.46	2,200.5	27.6	-109.5	61.7	0.52
2,312.0	7.58	310.12	2,299.5	36.7	-120.3	73.7	1.07
2,412.0	6.83	311.43	2,398.7	44.8	-129.8	84.6	0.77
2,512.0	6.23	310.08	2,498.1	52.3	-138.4	94.4	0.62
2,612.0	5.09	317.51	2,597.6	59.0	-145.6	103.1	1.35
2,712.0	4.25	314.97	2,697.3	64.9	-151.2	110.5	0.86
2,812.0	3.21	311.74	2,797.1	69.4	-155.9	116.3	1.06
2,912.0	3.51	319.33	2,896.9	73.6	-160.0	121.6	0.54
3,012.0	3.08	321.58	2,996.7	78.0	-163.6	126.9	0.45
3,112.0	2.46	320.85	3,096.6	81.8	-166.7	131.5	0.62
3,212.0	2.12	320.96	3,196.5	84.9	-169.2	135.2	0.34
3,312.0	1.94	324.37	3,296.5	87.7	-171.3	138.6	0.22
3,412.0	1.62	326.68	3,396.4	90.3	-173.1	141.6	0.33
3,512.0	1.77	325.42	3,496.4	92.7	-174.8	144.4	0.15
3,612.0	1.16	326.10	3,596.3	94.8	-176.2	146.9	0.61
3,712.0	1.35	335.36	3,696.3	96.7	-177.2	149.1	0.28
3,812.0	0.71	335.81	3,796.3	98.4	-178.0	150.8	0.64
3,912.0	0.57	338.15	3,896.3	99.4	-178.4	152.0	0.14
4,012.0	0.45	339.37	3,996.3	100.2	-178.8	152.8	0.12
4,112.0	0.59	332.34	4,096.3	101.1	-179.1	153.7	0.15
4,212.0	0.51	326.11	4,196.3	101.9	-179.6	154.7	0.10
4,312.0	0.57	315.04	4,296.3	102.6	-180.2	155.6	0.12
4,412.0	0.47	321.03	4,396.3	103.3	-180.8	156.4	0.11
4,512.0	0.19	357.05	4,496.3	103.8	-181.1	156.9	0.34
4,612.0	0.37	115.39	4,596.3	103.8	-180.8	156.9	0.49
4,712.0	0.33	109.88	4,696.3	103.5	-180.3	156.5	0.05
4,812.0	0.37	118.53	4,796.3	103.3	-179.7	156.1	0.07
4,912.0	0.50	148.97	4,896.3	102.8	-179.2	155.4	0.26
5,012.0	0.20	68.84	4,996.3	102.5	-178.8	155.0	0.51
5,112.0	0.13	53.09	5,096.3	102.6	-178.5	155.0	0.08
5,212.0	0.48	144.57	5,196.3	102.3	-178.2	154.6	0.50
5,312.0	0.35	121.17	5,296.3	101.8	-177.7	154.0	0.21
5,412.0	0.41	141.72	5,396.2	101.4	-177.2	153.4	0.15

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EOW Completion Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Ten Mile Unit 2H
Project:	Harrison County West Virginia	TVD Reference:	Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Site:	Winnie/Dawson/Tenmile Pad	MD Reference:	Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Well:	Ten Mile 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)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)
5,512.0	0.49	145.09	5,496.2	100.7	-176.8	152.7	0.08
5,612.0	0.62	153.23	5,596.2	99.9	-176.3	151.7	0.15
5,712.0	0.35	117.33	5,696.2	99.3	-175.8	151.0	0.39
5,812.0	0.36	122.94	5,796.2	99.0	-175.2	150.5	0.04
5,912.0	0.57	126.14	5,896.2	98.5	-174.6	149.9	0.21
6,012.0	0.64	101.82	5,996.2	98.1	-173.6	149.2	0.26
6,112.0	0.35	117.79	6,096.2	97.8	-172.8	148.7	0.32
6,181.0	0.54	99.98	6,165.2	97.7	-172.3	148.3	0.34
6,224.0	0.88	137.14	6,208.2	97.4	-171.9	147.9	1.29
6,287.0	0.53	132.57	6,271.2	96.9	-171.3	147.2	0.56
6,319.0	0.79	100.23	6,303.2	96.7	-171.0	147.0	1.39
6,364.0	5.72	209.57	6,348.1	94.7	-171.8	145.4	13.39
6,413.0	13.63	220.03	6,396.4	88.2	-176.7	140.8	16.47
6,460.0	19.26	228.99	6,441.5	78.8	-186.1	135.0	13.10
6,508.0	23.30	229.78	6,486.2	67.5	-199.4	128.6	8.44
6,554.0	25.85	228.90	6,528.0	55.0	-213.9	121.5	5.60
6,601.0	30.51	226.70	6,569.4	40.1	-230.3	112.7	10.16
6,647.0	35.79	224.95	6,607.9	22.6	-248.3	102.0	11.66
6,694.0	40.71	224.51	6,644.8	1.9	-268.8	89.1	10.48
6,740.0	41.06	228.02	6,679.6	-18.9	-290.5	76.5	5.05
6,773.0	40.09	233.95	6,704.7	-32.4	-307.2	69.1	12.05
Middlesex							
6,788.0	39.75	236.72	6,716.2	-37.9	-315.1	66.5	12.05
6,834.0	40.01	245.86	6,751.5	-52.0	-340.9	61.5	12.74
6,884.0	40.80	254.30	6,789.6	-63.0	-371.3	61.0	11.05
6,930.0	42.12	263.88	6,824.1	-68.7	-401.2	65.2	14.07
6,977.0	43.26	273.29	6,858.7	-69.5	-432.9	74.9	13.78
7,004.0	43.75	276.25	6,878.3	-68.0	-451.5	82.3	7.76
Burkett							
7,023.0	44.14	278.30	6,892.0	-66.3	-464.5	88.2	7.76
7,043.0	44.58	282.01	6,906.3	-63.8	-478.3	95.0	13.15
Tully							
7,070.0	45.37	286.91	6,925.4	-59.1	-496.8	105.5	13.15
7,116.0	47.04	293.77	6,957.2	-47.5	-527.8	126.5	11.36
7,164.0	48.54	300.27	6,989.5	-31.3	-559.5	152.0	10.50
7,211.0	51.79	305.45	7,019.6	-11.7	-589.7	180.4	10.93
7,258.0	55.40	311.08	7,047.5	11.7	-619.4	212.2	12.32
7,305.0	59.09	315.12	7,073.0	38.7	-648.2	247.1	10.67
7,352.0	63.66	321.10	7,095.5	69.4	-675.7	285.1	14.80
7,359.0	64.57	321.77	7,098.6	74.4	-679.6	291.0	15.58
Marcellus							
7,399.0	69.82	325.41	7,114.1	104.0	-701.5	326.2	15.58
7,446.0	76.94	327.69	7,127.5	141.6	-726.3	369.8	15.84
7,494.0	84.24	328.48	7,135.3	181.8	-751.3	415.9	15.29
7,537.0	89.52	334.19	7,137.7	219.4	-771.9	458.2	18.97

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EOW Completion Report



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Project: Harrison County West Virginia	TVD Reference: Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Site: Winnie/Dawson/Tenmile Pad	MD Reference: Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Well: Ten Mile 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)
7,590.0	91.71	340.44	7,137.1	268.3	-792.3	511.0	12.49
7,632.0	91.24	341.10	7,136.0	307.9	-806.1	553.0	1.93
7,694.0	89.80	342.05	7,135.5	366.7	-825.7	615.0	2.78
7,788.0	90.37	340.17	7,135.3	455.7	-856.2	709.0	2.09
7,883.0	90.17	340.23	7,134.9	545.0	-888.3	804.0	0.22
7,977.0	89.56	339.76	7,135.1	633.4	-920.5	898.0	0.82
8,070.0	90.00	342.16	7,135.5	721.3	-950.8	991.0	2.62
8,164.0	88.66	340.82	7,136.6	810.4	-980.7	1,084.9	2.02
8,258.0	89.26	342.80	7,138.3	899.7	-1,010.0	1,178.9	2.20
8,352.0	88.45	342.50	7,140.1	989.4	-1,038.0	1,272.9	0.92
8,446.0	88.59	340.49	7,142.6	1,078.5	-1,067.9	1,366.8	2.14
8,540.0	88.72	339.74	7,144.8	1,166.9	-1,099.8	1,460.8	0.81
8,634.0	89.90	339.82	7,145.9	1,255.1	-1,132.3	1,554.8	1.26
8,728.0	88.25	342.06	7,147.4	1,343.9	-1,163.0	1,648.7	2.96
8,822.0	90.03	343.45	7,148.8	1,433.7	-1,190.9	1,742.7	2.40
8,916.0	89.87	342.71	7,148.9	1,523.6	-1,218.2	1,836.6	0.81
9,010.0	89.80	342.48	7,149.2	1,613.3	-1,246.3	1,930.6	0.26
9,104.0	88.25	338.28	7,150.8	1,701.8	-1,277.9	2,024.5	4.76
9,198.0	87.92	339.82	7,153.9	1,789.5	-1,311.5	2,118.4	1.67
9,292.0	89.43	341.82	7,156.1	1,878.3	-1,342.3	2,212.4	2.67
9,386.0	89.03	340.34	7,157.4	1,967.2	-1,372.8	2,306.4	1.63
9,480.0	88.46	338.81	7,159.4	2,055.2	-1,405.6	2,400.3	1.74
9,574.0	88.72	339.43	7,161.7	2,143.0	-1,439.1	2,494.2	0.72
9,668.0	90.20	341.42	7,162.6	2,231.6	-1,470.6	2,588.2	2.64
9,762.0	91.17	341.90	7,161.5	2,320.8	-1,500.2	2,682.2	1.15
9,856.0	90.67	341.38	7,160.0	2,410.0	-1,529.8	2,776.2	0.77
9,950.0	90.70	341.02	7,158.9	2,499.0	-1,560.1	2,870.2	0.38
10,044.0	89.80	340.29	7,158.5	2,587.7	-1,591.2	2,964.2	1.23
10,138.0	89.73	339.35	7,158.8	2,675.9	-1,623.6	3,058.2	1.00
10,232.0	88.89	339.12	7,160.0	2,763.8	-1,657.0	3,152.1	0.93
10,326.0	88.89	341.33	7,161.8	2,852.2	-1,688.7	3,246.1	2.35
10,417.0	88.32	342.11	7,164.0	2,938.6	-1,717.3	3,337.0	0.06
10,508.0	89.53	342.09	7,165.7	3,025.2	-1,745.2	3,428.0	1.33
10,599.0	89.36	341.70	7,166.6	3,111.7	-1,773.5	3,519.0	0.47
10,690.0	87.05	341.78	7,169.4	3,198.1	-1,802.0	3,609.9	2.54
10,782.0	86.51	341.42	7,174.6	3,285.2	-1,831.0	3,701.8	0.71
10,873.0	88.86	341.59	7,178.3	3,371.4	-1,859.9	3,792.7	2.59
10,964.0	88.82	342.56	7,180.1	3,458.0	-1,887.9	3,883.7	0.07
11,054.0	87.88	342.20	7,182.7	3,543.7	-1,915.1	3,975.9	1.12
11,146.0	88.45	341.14	7,185.7	3,631.0	-1,944.0	4,065.5	1.31
11,237.0	88.42	341.43	7,188.2	3,717.2	-1,973.2	4,156.0	1.02
11,330.0	89.36	341.70	7,190.0	3,805.4	-2,002.6	4,249.5	1.05
11,420.0	89.19	341.26	7,191.1	3,890.7	-2,031.2	4,339.5	0.52
11,514.0	88.52	339.33	7,193.0	3,979.2	-2,062.9	4,433.4	2.17

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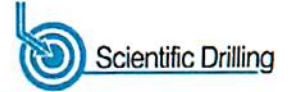
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Project:	Harrison County West Virginia	TVD Reference:	Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Site:	Winnie/Dawson/Tenmile Pad	MD Reference:	Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Well:	Ten Mile Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	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)
11,608.0	90.57	344.41	7,193.7	4,068.5	-2,092.1	4,527.4	5.83
11,702.0	88.49	341.63	7,194.5	4,158.4	-2,119.5	4,621.3	3.69
11,796.0	87.58	339.50	7,197.7	4,247.0	-2,150.8	4,715.3	2.46
11,890.0	89.40	340.87	7,200.2	4,335.4	-2,182.7	4,809.2	2.42
11,985.0	88.79	341.09	7,201.7	4,425.2	-2,213.6	4,904.2	0.68
12,079.0	89.26	339.14	7,203.3	4,513.6	-2,245.6	4,998.2	2.13
12,174.0	88.39	338.11	7,205.2	4,602.0	-2,280.2	5,093.1	1.42
12,267.0	87.65	337.39	7,208.5	4,688.0	-2,315.4	5,185.8	1.11
12,361.0	88.62	339.69	7,211.5	4,775.4	-2,349.8	5,279.7	2.65
12,455.0	87.85	340.82	7,214.4	4,863.9	-2,381.5	5,373.6	1.45
12,549.0	87.32	343.01	7,218.4	4,953.1	-2,410.7	5,467.5	2.40
12,643.0	91.27	347.73	7,219.5	5,044.1	-2,434.4	5,561.2	6.55
12,737.0	88.96	344.71	7,219.3	5,135.3	-2,456.8	5,654.8	4.04
12,831.0	88.55	340.79	7,221.4	5,225.1	-2,484.6	5,748.7	4.19
12,925.0	87.55	339.20	7,224.6	5,313.3	-2,516.8	5,842.7	2.00
13,020.0	88.39	339.03	7,227.9	5,402.0	-2,550.6	5,937.6	0.90
13,114.0	88.96	339.43	7,230.1	5,489.9	-2,583.9	6,031.5	0.74
13,208.0	88.79	339.30	7,232.0	5,577.9	-2,617.1	6,125.4	0.23
13,302.0	88.12	339.11	7,234.5	5,665.7	-2,650.4	6,219.3	0.74
13,396.0	88.49	340.54	7,237.3	5,753.9	-2,682.8	6,313.3	1.57
13,490.0	90.10	343.05	7,238.4	5,843.2	-2,712.2	6,407.2	3.17
13,584.0	89.66	342.86	7,238.6	5,933.0	-2,739.7	6,501.2	0.51
13,678.0	89.53	342.34	7,239.3	6,022.7	-2,767.8	6,595.2	0.57
13,773.0	89.50	342.64	7,240.1	6,113.3	-2,796.4	6,690.1	0.32
13,867.0	89.40	340.20	7,241.0	6,202.4	-2,826.4	6,784.1	2.60
13,961.0	89.30	339.75	7,242.1	6,290.7	-2,858.6	6,878.1	0.49
14,055.0	88.62	339.17	7,243.8	6,378.7	-2,891.5	6,972.0	0.95
14,148.0	88.12	339.26	7,246.4	6,465.7	-2,924.5	7,064.9	0.55
14,242.0	87.45	341.27	7,250.1	6,554.1	-2,956.2	7,158.9	2.25
14,336.0	89.10	341.50	7,252.9	6,643.1	-2,986.2	7,252.8	1.77
14,431.0	89.97	343.65	7,253.7	6,733.7	-3,014.7	7,347.8	2.44
14,524.0	89.53	342.78	7,254.1	6,822.8	-3,041.5	7,440.7	1.05
14,618.0	90.67	343.76	7,253.9	6,912.8	-3,068.6	7,534.6	1.60
14,712.0	87.92	340.80	7,255.1	7,002.3	-3,097.2	7,628.6	4.30
14,807.0	88.49	339.67	7,258.0	7,091.7	-3,129.3	7,723.5	1.33
14,901.0	87.72	338.76	7,261.1	7,179.5	-3,162.6	7,817.4	1.27
14,995.0	88.46	340.37	7,264.3	7,267.5	-3,195.4	7,911.3	1.88
15,089.0	89.29	342.53	7,266.1	7,356.6	-3,225.3	8,005.3	2.46
15,182.0	87.48	341.00	7,268.7	7,444.9	-3,254.4	8,098.3	2.55
15,277.0	88.72	340.38	7,271.9	7,534.5	-3,285.8	8,193.2	1.46
15,371.0	91.01	341.08	7,272.1	7,623.2	-3,316.8	8,287.2	2.55
15,465.0	90.47	340.32	7,270.9	7,711.9	-3,347.9	8,381.2	0.99
15,559.0	89.83	339.38	7,270.6	7,800.2	-3,380.3	8,475.2	1.21
15,653.0	89.46	340.42	7,271.2	7,888.5	-3,412.6	8,569.1	1.17
15,747.0	88.62	340.58	7,272.8	7,977.1	-3,444.0	8,663.1	0.90

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33.05696



EOW Completion Report



Company: Antero Resources	Local Co-ordinate Reference: Well Ten Mile Unit 2H
Project: Harrison County West Virginia	TVD Reference: Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Site: Winnie/Dawson/Tenmile Pad	MD Reference: Ten Mile 2H 1278 GL + 25 KB @ 1303.0usft
Well: Ten Mile Unit 2H	North Reference: Grid
Wellbore: Original Wellpath	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Oklahoma District

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
15,841.0	90.13	340.45	7,273.8	8,065.7	-3,475.3	8,757.1	1.61
15,935.0	90.64	342.29	7,273.2	8,154.7	-3,505.3	8,851.1	2.03
16,029.0	90.17	342.06	7,272.5	8,244.2	-3,534.1	8,945.1	0.56
16,122.0	88.39	340.47	7,273.7	8,332.3	-3,564.0	9,038.1	2.57
16,217.0	90.10	341.52	7,275.0	8,422.1	-3,594.9	9,133.0	2.11
16,311.0	88.59	340.97	7,276.0	8,511.1	-3,625.1	9,227.0	1.71
16,405.0	89.80	341.75	7,277.4	8,600.1	-3,655.2	9,321.0	1.53
16,500.0	89.77	341.75	7,277.7	8,690.4	-3,684.9	9,416.0	0.03
16,538.0	89.66	341.75	7,277.9	8,726.5	-3,696.8	9,454.0	0.29
16,558.0	89.66	341.75	7,278.0	8,745.4	-3,703.1	9,474.0	0.00

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,773.0	6,704.7	-32.4	-307.2	Middlesex
7,004.0	6,878.3	-68.0	-451.5	Burkett
7,043.0	6,906.3	-63.8	-478.3	Tully
7,359.0	7,098.6	74.4	-679.6	Marcellus

Checked By: _____ Approved By: _____ Date: _____

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	2/16/2014
Job End Date:	2/26/2014
State:	West Virginia
County:	Harrison
API Number:	47-033-05696-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Tenmile Unit 2H
Longitude:	-80.48967500
Latitude:	39.20151900
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	7,278
Total Base Water Volume (gal):	12,199,698
Total Base Non Water Volume:	0



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Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier	Water	7732-18-5	100.00000	90.19479	
Sand, White, 40/70	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00000	5.53474	
Sand, White, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00000	3.07666	
Sand, White, 100 mesh	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00000	0.73620	
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Water	7732-18-5	85.00000	0.17123	SmartCare Product
			Hydrochloric Acid	7647-01-0	15.00000	0.03022	SmartCare Product
GW-3LDF	Baker Hughes	Gelling Agent	Guar Gum	9000-30-0	60.00000	0.05418	SmartCare Product
			Paraffinic Petroleum Distillate	64742-55-8	30.00000	0.02709	SmartCare Product
			Petroleum Distillates	64742-47-8	30.00000	0.02709	SmartCare Product
			Isotridecanol, ethoxylated	9043-30-5	5.00000	0.00452	SmartCare Product
			Crystalline Silica: Quartz	14808-60-7	5.00000	0.00452	SmartCare Product
			1-butoxy-2-propanol	5131-66-8	5.00000	0.00452	SmartCare Product
FRW-18	Baker Hughes	Friction Reducer					

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			Petroleum Distillates	64742-47-8	30.00000	0.01836	SmartCare Product
Enzyme G-NE	Baker Hughes	Breaker					
			No hazardous ingredients	NA	100.00000	0.01332	SmartCare Product
Alpha 1427	Baker Hughes	Biocide					
			Glutaraldehyde	111-30-8	30.00000	0.00415	SmartCare Product
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	10.00000	0.00138	SmartCare Product
			Quaternary Ammonium Compound	68424-85-1	5.00000	0.00069	SmartCare Product
			Ethanol	64-17-5	5.00000	0.00069	SmartCare Product
Scaletrol 720	Baker Hughes	Scale Inhibitor					
			Ethylene Glycol	107-21-1	30.00000	0.00448	SmartCare Product
			Calcium Chloride	10043-52-4	5.00000	0.00075	SmartCare Product
Ferrotrol 300L	Baker Hughes	Iron Control					
			Citric Acid	77-92-9	60.00000	0.00079	SmartCare Product
CI-14	Baker Hughes	Corrosion Inhibitor					
			Methanol	67-56-1	100.00000	0.00031	SmartCare Product
			Polyoxyalkylenes	Trade Secret	30.00000	0.00009	SmartCare Product
			Fatty Acids	Trade Secret	10.00000	0.00003	SmartCare Product
			Propargyl Alcohol	107-19-7	5.00000	0.00002	SmartCare Product
			Olefin	Trade Secret	5.00000	0.00002	SmartCare Product
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					
			Water	7732-18-5		0.05969	
			Poly (acrylamide-co-acrylic acid)	Trade Secret		0.01836	
			Sorbitan Monooleate	Trade Secret		0.00306	
			Salt	Trade Secret		0.00306	
			Polyacrylate	Trade Secret		0.00298	
			Ethoxylated Alcohol	Trade Secret		0.00122	
			Hemicellulase Enzyme Concentrate	9025-56-3		0.00067	
			2-butoxy-1-propanol	15821-83-7		0.00009	
			Modified Thiorea Polymer	68527-49-1		0.00002	
			Potassium Chloride	7447-40-7		0.00001	
			Sodium Chloride	7647-14-5		0.00000	
			Formaldehyde	50-00-0		0.00000	
			Hydrochloric Acid	7647-01-0		0.00000	

* 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)

FIP Product Line of Oil and Gas
AUG 1 2 15

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

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

LOCATION: ELEVATION: Existing Grade 1278' WATERSHED: Middle West Fork River QUADRANGLE: & Big Issac West Milford

DISTRICT: Union

SURFACE OWNER: Matt E. & Lisa Devought Bowyer
 SURFACE OWNER: James L. Coffindaffer, et al; Robert L. Bennett, et al; David L. Hall
 SURFACE OWNER: Winnie L. Waggoner, et ux; Ira C. Bennett, et ux (2); Jacob Myers, et ux

ROYALTY OWNER: James L. Coffindaffer, et al; Robert L. Bennett, et al; David L. Hall
 ROYALTY OWNER: Winnie L. Waggoner, et ux; Ira C. Bennett, et ux (2); Jacob Myers, et ux

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: 16,558' TVD

FILE NO: 164-36-U-12
 DRAWING NO: 164-12 Tennile 2H As-Drilled
 SCALE: 1" = 1500'
 MINIMUM DEGREE OF ACCURACY: Submeter
 PROVEN SOURCE OF ELEVATION: WVDOT, BRIDGEPORT, WV

STATE 47 COUNTY 033 PERMIT 05696

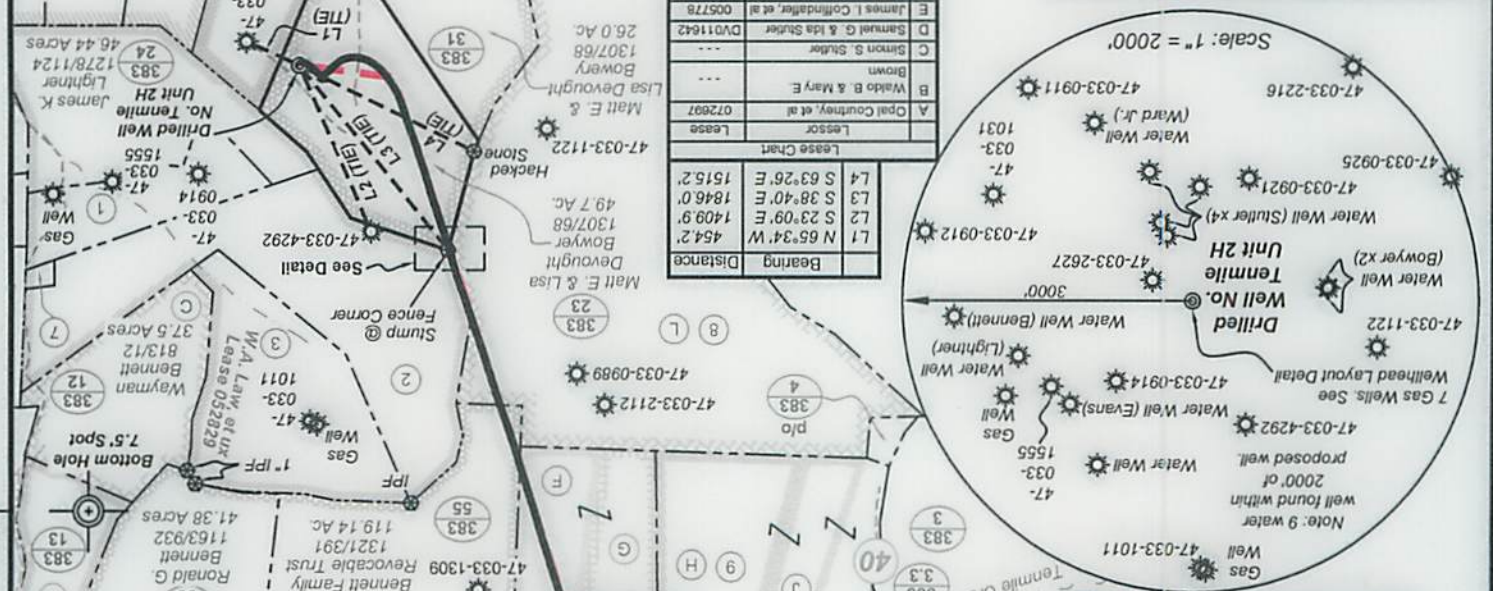
DATE: July 27 2015
 OPERATORS WELL NO. Tennile Unit 2H
 API WELL NO.

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

West Virginia Coordinate System of 1927, North Zone
 based upon Differential GPS Measurements.
 Well No. Tennile Unit 2H Top Hole coordinates are
 N: 257,052.64' Longitude: 80°29'22.83"
 E: 1,719,534.43' Longitude: 80°29'22.83"
 Bottom Hole coordinates are
 N: 265,861.63' Longitude: 80°30'09.28"
 E: 1,715,976.35' Longitude: 80°30'09.28"
 UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,339,273.962m E: 544,080.190m
 N: 4,341,939.584m E: 542,951.486m

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

Parcel	Owner	Acres
1	Tommy Lewis & Linda Dayle Hall	1231 / 180
2	Benny Noel Bennett, Jr.	161 / 1199
3	Benny Noel Bennett, Jr.	161 / 1199
4	David W. & Bancha Kay Stuber	1339 / 72
5	David W. & Bancha Kay Stuber	1339 / 72
6	Consolidation Coal Co.	---
7	Ronald R. Lynch	1022 / 59
8	Freddie R. Daugherty	1200 / 1103
9	Donna L. & Nolan R. Jarvis	1304 / 494
10	Donna L. & Nolan R. Jarvis	1304 / 494
11	Tommy Lewis & Linda Dayle Hall	1231 / 180
12	William Burnside	1032 / 609
13	Bernard Eden Davis	89 / 172
14	Bernard Eden Davis	99 / 172
15	Lynn Edward Coffindaffer & Sheila M. Coffindaffer (Part)	1212 / 682
16	Lynn Edward Coffindaffer & Sheila M. Coffindaffer (Part)	1212 / 682
17	James Martin & Norma Jean Williams	8 / 187
18	James Martin & Norma Jean Williams	8 / 187
19	Michael S. Day	1324 / 556
20	Michael S. Day	1324 / 556



Antero Resources
 As-Drilled Plat
 Well No. Tennile Unit 2H
 Scale Not to Scale

Legend:
 (+) Denotes Location of Well on United States Topographic Maps
 --- Interior surface tracts (approx.)
 - - - Surface boundary (approx.)
 --- Existing Road
 --- Creek or Drain
 --- County Route
 * Found corner, as noted
 * Proposed gas well

8,908' to Top Hole
 Bottom Hole Longitude : 80 - 30 - 00
 Top Hole Longitude : 80 - 27 - 30

8,880' to Bottom Hole
 Bottom Hole Latitude : 39 - 12 - 30
 Top Hole Latitude : 39 - 15 - 00

Top Hole coordinates verified by survey grade GPS. Antero Resources Corporation. 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.

10/23/2015