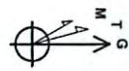




**Asema Unit 2H**  
**Doddridge County WV**  
**Northing: 14236730.64**  
**Easting: 1739335.94**  
**As Drilled**



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

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**WELL DETAILS** Asema Unit 2H  
 Ground Level: 1081.0  
 Northing: 14236730.64  
 Easting: 1739335.94  
 Latitude: 39° 12' 17.825 N  
 Longitude: 80° 39' 2.905 W

Pattern 347: GL 1081' + MB 25 @ 1105.0  
 1081.0

**SITE DETAILS:** Duffenmeyer Pad  
 Site Center: Duffenmeyer Unit 2H  
 Site Centre Northing: 14236747.63  
 Easting: 1739372.13

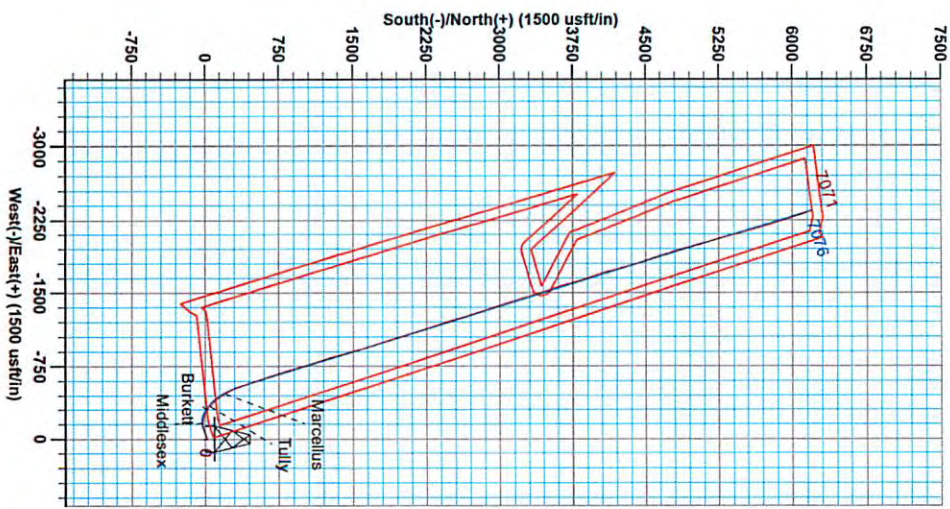
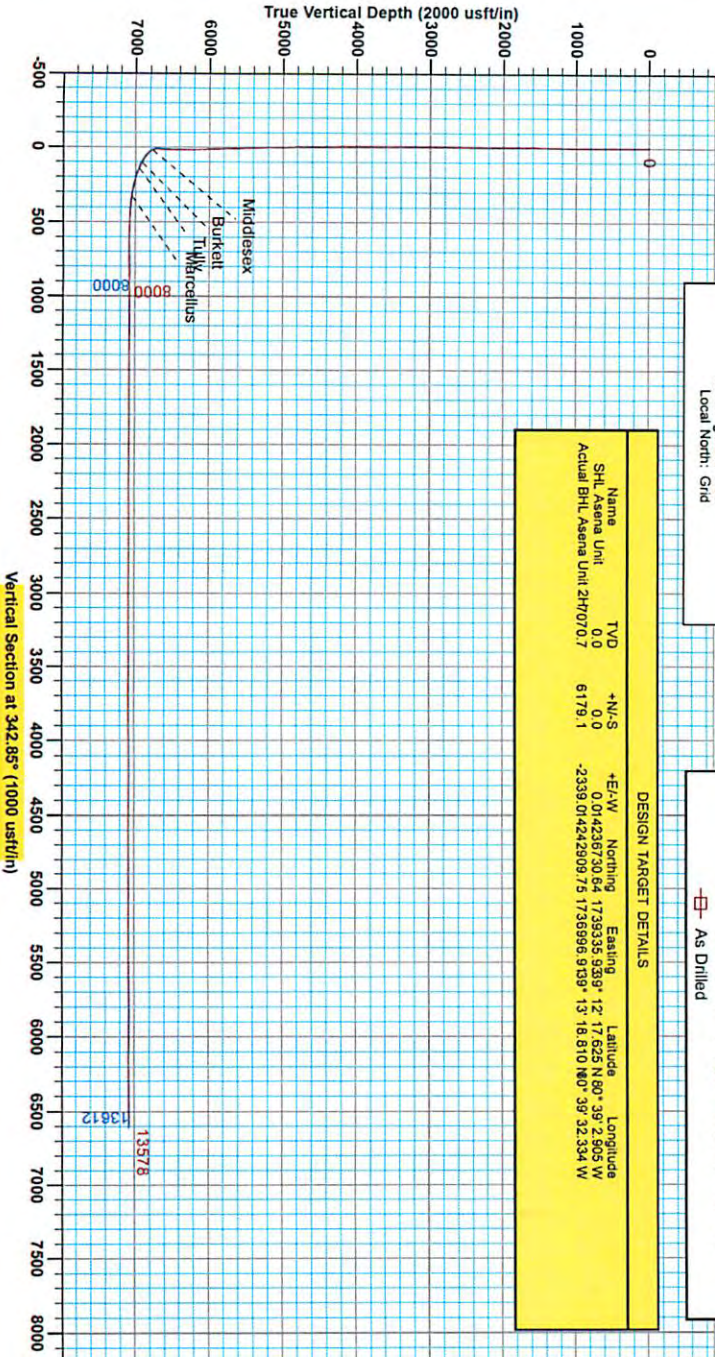
Positional Uncertainty: 0.0  
 Convergence: 0.22  
 Local North: Grid

**PROJECT DETAILS:** Doddridge County WV  
 Geoidic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1982 (NAD83 CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Zone 17N (64 W to 78 W)  
 System Datum: Mean Sea Level

Gene Lightfoot  
 Scientific Drilling  
 421 South Eagle Lane  
 Oklahoma City, Oklahoma  
 405-787-3563

**LEGEND**  
 ▲ Asema Unit 2H, Original Wellpath, Plan 2 V0  
 ▣ As Drilled

DESIGN TARGET DETAILS									
Name	TVD	N/S	E/W	North	East	Latitude	Longitude		
SHL Asema Unit	0.0	0.0	0.0	14236730.64	1739335.94	39° 12' 17.825 N	80° 39' 2.905 W		
Actual BHL Asema Unit 2H 0707.0.7				6179.1	-2339.01424290975	1738996.939° 13' 18.810 N	80° 39' 32.334 W		



Magnetic Field  
 Strength: 52.189 98nT  
 Dip Angle: 65.76°  
 Date: 7/16/2014  
 Model: BGSMM2014



# Antero Resources

Doddridge County WV  
Dufflemeyer Pad  
Asena Unit 2H  
Original Wellpath

Design: As Drilled

## EOW Completion Report

18 September, 2014



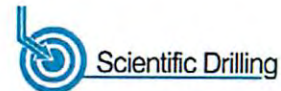
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Environmental Protection



EOW Completion Report



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Asena Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

<b>Project</b>	Doddridge County WV, McClellan District		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Zone 17N (84 W to 78 W)		

<b>Site</b>	Dufflemeyer Pad				
<b>Site Position:</b>		<b>Northing:</b>	14,236,747.63 usft	<b>Latitude:</b>	39° 12' 17.792 N
<b>From:</b>	Map	<b>Easting:</b>	1,739,372.13 usft	<b>Longitude:</b>	80° 39' 2.444 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16"	<b>Grid Convergence:</b>	0.22 °

<b>Well</b>	Asena Unit 2H					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,236,730.64 usft	<b>Latitude:</b>	39° 12' 17.625 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	1,739,335.94 usft	<b>Longitude:</b>	80° 39' 2.905 W
<b>Position Uncertainty</b>	2.0 usft		<b>Wellhead Elevation:</b>	1,106.0 usft	<b>Ground Level:</b>	1,081.0 usft

<b>Wellbore</b>	Original Wellpath				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2014	7/16/2014	-8.55	66.78	52,190

<b>Design</b>	As Drilled				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	342.85	

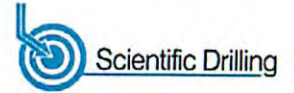
<b>Survey Program</b>	<b>Date</b>	9/18/2014			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
37.0	6,280.0	Survey #1 Def Gyro to KOP (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper	
6,297.0	13,578.0	Survey #2 MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1	

<b>Survey</b>									
<b>MD (usft)</b>	<b>Inc (°)</b>	<b>Azi (azimuth) (°)</b>	<b>TVD (usft)</b>	<b>N/S (usft)</b>	<b>E/W (usft)</b>	<b>V. Sec (usft)</b>	<b>DLeg (°/100usft)</b>		
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
37.0	0.04	35.86	37.0	0.0	0.0	0.0	0.00	0.11	
62.0	0.08	35.86	62.0	0.0	0.0	0.0	0.00	0.16	
87.0	0.11	35.86	87.0	0.1	0.0	0.0	0.00	0.12	
112.0	0.15	35.86	112.0	0.1	0.1	0.1	0.10	0.16	
137.0	0.10	152.67	137.0	0.1	0.1	0.1	0.10	0.86	
162.0	0.07	125.01	162.0	0.1	0.1	0.1	0.00	0.00	
187.0	0.06	127.86	187.0	0.1	0.2	0.2	0.00	0.04	
212.0	0.05	119.85	212.0	0.1	0.2	0.2	0.00	0.05	
237.0	0.05	136.94	237.0	0.0	0.2	0.2	0.00	0.06	
262.0	0.05	158.65	262.0	0.0	0.2	0.2	0.00	0.08	

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EOW Completion Report



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Asena Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)		
287.0	0.04	145.99	287.0	0.0	0.2	-0.1	0.06		
312.0	0.04	215.07	312.0	0.0	0.2	-0.1	0.18		
337.0	0.07	249.77	337.0	0.0	0.2	-0.1	0.17		
362.0	0.06	255.04	362.0	0.0	0.2	-0.1	0.05		
387.0	0.07	267.93	387.0	0.0	0.1	-0.1	0.07		
412.0	0.09	266.86	412.0	0.0	0.1	-0.1	0.08		
437.0	0.12	237.61	437.0	0.0	0.1	-0.1	0.24		
462.0	0.09	243.00	462.0	-0.1	0.0	-0.1	0.13		
487.0	0.06	255.62	487.0	-0.1	0.0	-0.1	0.14		
512.0	0.03	209.53	512.0	-0.1	0.0	-0.1	0.18		
537.0	0.04	154.53	537.0	-0.1	0.0	-0.1	0.13		
562.0	0.06	156.24	562.0	-0.1	0.0	-0.1	0.08		
587.0	0.05	154.17	587.0	-0.1	0.0	-0.1	0.04		
612.0	0.07	187.31	612.0	-0.2	0.0	-0.2	0.16		
637.0	0.07	216.17	637.0	-0.2	0.0	-0.2	0.14		
662.0	0.04	215.71	662.0	-0.2	0.0	-0.2	0.12		
687.0	0.04	141.89	687.0	-0.2	0.0	-0.2	0.19		
712.0	0.04	123.90	712.0	-0.2	0.0	-0.2	0.05		
737.0	0.04	105.44	737.0	-0.2	0.0	-0.2	0.05		
762.0	0.06	97.67	762.0	-0.3	0.0	-0.2	0.08		
787.0	0.07	131.83	787.0	-0.3	0.0	-0.3	0.16		
812.0	0.07	121.07	812.0	-0.3	0.1	-0.3	0.05		
837.0	0.06	101.72	837.0	-0.3	0.1	-0.3	0.10		
862.0	0.06	136.42	862.0	-0.3	0.1	-0.3	0.14		
887.0	0.04	133.72	887.0	-0.3	0.1	-0.3	0.08		
912.0	0.02	33.47	912.0	-0.3	0.1	-0.4	0.19		
937.0	0.02	209.85	937.0	-0.3	0.1	-0.4	0.16		
962.0	0.04	185.50	962.0	-0.3	0.1	-0.4	0.09		
987.0	0.05	150.16	987.0	-0.4	0.1	-0.4	0.12		
1,012.0	0.05	166.19	1,012.0	-0.4	0.2	-0.4	0.06		
1,037.0	0.03	216.18	1,037.0	-0.4	0.2	-0.4	0.15		
1,062.0	0.07	250.29	1,062.0	-0.4	0.1	-0.4	0.19		
1,087.0	0.07	269.90	1,087.0	-0.4	0.1	-0.4	0.10		
1,112.0	0.03	122.33	1,112.0	-0.4	0.1	-0.4	0.39		
1,137.0	0.09	137.94	1,137.0	-0.4	0.1	-0.4	0.25		
1,162.0	0.10	148.13	1,162.0	-0.5	0.1	-0.5	0.08		
1,187.0	0.10	133.24	1,187.0	-0.5	0.2	-0.5	0.10		
1,212.0	0.11	118.53	1,212.0	-0.5	0.2	-0.6	0.11		
1,237.0	0.11	135.12	1,237.0	-0.5	0.2	-0.6	0.13		
1,262.0	0.15	153.76	1,262.0	-0.6	0.3	-0.6	0.23		
1,287.0	0.15	149.97	1,287.0	-0.7	0.3	-0.7	0.04		
1,312.0	0.22	158.68	1,312.0	-0.7	0.3	-0.8	0.24		
1,337.0	0.28	158.69	1,337.0	-0.8	0.4	-0.9	0.24		
1,362.0	0.23	151.66	1,362.0	-0.9	0.4	-1.0	0.24		

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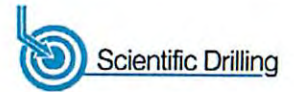
<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Asena Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)		
1,387.0	0.23	160.22	1,387.0	-1.0	0.5	-1.1	0.14		
1,412.0	0.25	163.19	1,412.0	-1.1	0.5	-1.2	0.09		
1,437.0	0.28	159.25	1,437.0	-1.2	0.5	-1.3	0.14		
1,462.0	0.33	161.37	1,462.0	-1.4	0.6	-1.5	0.20		
1,487.0	0.31	161.75	1,487.0	-1.5	0.6	-1.6	0.08		
1,512.0	0.26	159.55	1,512.0	-1.6	0.7	-1.7	0.20		
1,537.0	0.22	164.69	1,537.0	-1.7	0.7	-1.8	0.18		
1,562.0	0.22	169.04	1,562.0	-1.8	0.7	-1.9	0.07		
1,587.0	0.28	165.90	1,587.0	-1.9	0.7	-2.0	0.25		
1,612.0	0.32	166.10	1,612.0	-2.0	0.8	-2.2	0.16		
1,637.0	0.31	169.50	1,637.0	-2.2	0.8	-2.3	0.08		
1,662.0	0.32	172.22	1,662.0	-2.3	0.8	-2.4	0.07		
1,687.0	0.27	170.17	1,687.0	-2.4	0.8	-2.6	0.20		
1,712.0	0.23	172.11	1,712.0	-2.5	0.9	-2.7	0.16		
1,737.0	0.24	179.52	1,737.0	-2.6	0.9	-2.8	0.13		
1,762.0	0.27	179.36	1,762.0	-2.7	0.9	-2.9	0.12		
1,787.0	0.28	178.52	1,787.0	-2.9	0.9	-3.0	0.04		
1,812.0	0.26	175.99	1,812.0	-3.0	0.9	-3.1	0.09		
1,837.0	0.23	168.51	1,837.0	-3.1	0.9	-3.2	0.18		
1,862.0	0.25	166.94	1,862.0	-3.2	0.9	-3.3	0.08		
1,887.0	0.29	162.33	1,887.0	-3.3	0.9	-3.4	0.18		
1,912.0	0.33	152.61	1,912.0	-3.4	1.0	-3.6	0.26		
1,937.0	0.36	150.88	1,937.0	-3.6	1.1	-3.7	0.13		
1,962.0	0.33	150.21	1,962.0	-3.7	1.1	-3.9	0.12		
1,987.0	0.30	135.79	1,987.0	-3.8	1.2	-4.0	0.34		
2,012.0	0.33	133.01	2,012.0	-3.9	1.3	-4.1	0.13		
2,037.0	0.33	136.48	2,037.0	-4.0	1.4	-4.2	0.08		
2,062.0	0.35	141.86	2,062.0	-4.1	1.5	-4.4	0.15		
2,087.0	0.35	148.30	2,087.0	-4.2	1.6	-4.5	0.16		
2,112.0	0.30	149.24	2,112.0	-4.4	1.7	-4.7	0.20		
2,137.0	0.30	146.88	2,137.0	-4.5	1.8	-4.8	0.05		
2,162.0	0.31	142.10	2,162.0	-4.6	1.8	-4.9	0.11		
2,187.0	0.35	142.24	2,187.0	-4.7	1.9	-5.0	0.16		
2,212.0	0.39	141.08	2,212.0	-4.8	2.0	-5.2	0.16		
2,237.0	0.35	139.48	2,237.0	-4.9	2.1	-5.3	0.17		
2,262.0	0.33	141.87	2,262.0	-5.1	2.2	-5.5	0.10		
2,287.0	0.32	139.08	2,287.0	-5.2	2.3	-5.6	0.07		
2,312.0	0.33	136.68	2,312.0	-5.3	2.4	-5.7	0.07		
2,337.0	0.35	138.70	2,337.0	-5.4	2.5	-5.9	0.09		
2,362.0	0.32	138.43	2,362.0	-5.5	2.6	-6.0	0.12		
2,387.0	0.30	129.59	2,387.0	-5.6	2.7	-6.1	0.02		
2,412.0	0.31	133.85	2,412.0	-5.7	2.8	-6.2	0.10		
2,437.0	0.27	144.22	2,437.0	-5.8	2.9	-6.4	0.26		
2,462.0	0.24	136.29	2,462.0	-5.9	2.9	-6.5	0.19		
2,487.0	0.25	133.17	2,487.0	-5.9	3.0	-6.6	0.07		

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EOW Completion Report

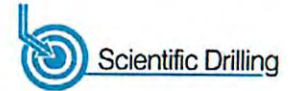


<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Asena Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
2,512.0	0.24	135.16	2,512.0	-6.0	3.1	-6.7	0.05
2,537.0	0.24	136.50	2,537.0	-6.1	3.2	-6.7	0.02
2,562.0	0.24	141.50	2,562.0	-6.2	3.2	-6.8	0.08
2,587.0	0.21	139.18	2,587.0	-6.2	3.3	-6.9	0.13
2,612.0	0.17	137.00	2,612.0	-6.3	3.4	-7.0	0.16
2,637.0	0.13	137.20	2,637.0	-6.3	3.4	-7.1	0.16
2,662.0	0.09	132.66	2,662.0	-6.4	3.4	-7.1	0.16
2,687.0	0.10	138.29	2,687.0	-6.4	3.5	-7.1	0.05
2,712.0	0.09	124.24	2,712.0	-6.4	3.5	-7.2	0.10
2,737.0	0.08	126.65	2,737.0	-6.5	3.5	-7.2	0.04
2,762.0	0.13	140.96	2,762.0	-6.5	3.6	-7.3	0.22
2,787.0	0.21	133.38	2,787.0	-6.5	3.6	-7.3	0.33
2,812.0	0.21	126.05	2,812.0	-6.6	3.7	-7.4	0.11
2,837.0	0.24	113.66	2,837.0	-6.6	3.8	-7.5	0.23
2,862.0	0.24	116.90	2,862.0	-6.7	3.9	-7.5	0.05
2,887.0	0.19	125.40	2,887.0	-6.7	3.9	-7.6	0.24
2,912.0	0.19	123.09	2,912.0	-6.8	4.0	-7.7	0.03
2,937.0	0.19	114.46	2,937.0	-6.8	4.1	-7.7	0.11
2,962.0	0.16	94.23	2,962.0	-6.8	4.2	-7.8	0.27
2,987.0	0.16	80.23	2,987.0	-6.8	4.2	-7.8	0.16
3,012.0	0.15	71.98	3,012.0	-6.8	4.3	-7.8	0.10
3,037.0	0.14	44.73	3,037.0	-6.8	4.3	-7.8	0.28
3,062.0	0.11	10.22	3,062.0	-6.8	4.4	-7.7	0.32
3,087.0	0.10	337.15	3,087.0	-6.7	4.4	-7.7	0.24
3,112.0	0.06	301.82	3,112.0	-6.7	4.3	-7.7	0.25
3,137.0	0.02	259.34	3,137.0	-6.7	4.3	-7.7	0.19
3,162.0	0.04	37.28	3,162.0	-6.7	4.3	-7.6	0.23
3,187.0	0.12	41.18	3,187.0	-6.6	4.3	-7.6	0.32
3,212.0	0.13	337.91	3,212.0	-6.6	4.4	-7.6	0.53
3,237.0	0.11	297.66	3,237.0	-6.6	4.3	-7.5	0.34
3,262.0	0.11	301.28	3,262.0	-6.5	4.3	-7.5	0.03
3,287.0	0.12	300.84	3,287.0	-6.5	4.2	-7.5	0.04
3,312.0	0.11	284.40	3,312.0	-6.5	4.2	-7.4	0.14
3,337.0	0.03	290.37	3,337.0	-6.5	4.2	-7.4	0.32
3,362.0	0.07	68.90	3,362.0	-6.5	4.2	-7.4	0.38
3,387.0	0.12	47.37	3,387.0	-6.5	4.2	-7.4	0.24
3,412.0	0.12	48.61	3,412.0	-6.4	4.2	-7.4	0.01
3,437.0	0.12	50.30	3,437.0	-6.4	4.3	-7.4	0.01
3,462.0	0.11	58.41	3,462.0	-6.4	4.3	-7.3	0.08
3,487.0	0.08	70.72	3,487.0	-6.3	4.4	-7.3	0.14
3,512.0	0.08	67.76	3,512.0	-6.3	4.4	-7.3	0.02
3,537.0	0.10	51.87	3,537.0	-6.3	4.4	-7.3	0.22
3,562.0	0.14	32.89	3,562.0	-6.3	4.5	-7.3	0.08
3,587.0	0.13	25.34	3,587.0	-6.2	4.5	-7.3	0.08

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Asena Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)		
3,612.0	0.11	36.12	3,612.0	-6.2	4.5	-7.2	0.12		
3,637.0	0.11	39.21	3,637.0	-6.1	4.5	-7.2	0.02		
3,662.0	0.08	351.89	3,662.0	-6.1	4.6	-7.2	0.32		
3,687.0	0.12	329.96	3,687.0	-6.1	4.5	-7.1	0.22		
3,712.0	0.11	313.28	3,712.0	-6.0	4.5	-7.1	0.14		
3,737.0	0.11	285.91	3,737.0	-6.0	4.5	-7.0	0.21		
3,762.0	0.11	292.54	3,762.0	-6.0	4.4	-7.0	0.05		
3,787.0	0.05	262.99	3,787.0	-6.0	4.4	-7.0	0.28		
3,812.0	0.06	200.97	3,812.0	-6.0	4.4	-7.0	0.23		
3,837.0	0.09	207.31	3,837.0	-6.0	4.4	-7.0	0.12		
3,862.0	0.09	216.04	3,862.0	-6.0	4.3	-7.1	0.05		
3,887.0	0.05	254.54	3,887.0	-6.1	4.3	-7.1	0.24		
3,912.0	0.02	106.45	3,912.0	-6.1	4.3	-7.1	0.27		
3,937.0	0.08	94.44	3,937.0	-6.1	4.3	-7.1	0.24		
3,962.0	0.09	70.24	3,962.0	-6.1	4.4	-7.1	0.15		
3,987.0	0.10	53.68	3,987.0	-6.0	4.4	-7.1	0.12		
4,012.0	0.13	47.44	4,012.0	-6.0	4.4	-7.1	0.13		
4,037.0	0.14	42.07	4,037.0	-6.0	4.5	-7.0	0.06		
4,062.0	0.13	44.31	4,062.0	-5.9	4.5	-7.0	0.05		
4,087.0	0.14	47.05	4,087.0	-5.9	4.6	-7.0	0.05		
4,112.0	0.13	40.60	4,112.0	-5.8	4.6	-6.9	0.07		
4,137.0	0.11	42.31	4,137.0	-5.8	4.6	-6.9	0.08		
4,162.0	0.13	44.46	4,162.0	-5.8	4.7	-6.9	0.08		
4,187.0	0.16	40.55	4,187.0	-5.7	4.7	-6.9	0.13		
4,212.0	0.12	42.08	4,212.0	-5.7	4.8	-6.8	0.16		
4,237.0	0.14	34.75	4,237.0	-5.6	4.8	-6.8	0.10		
4,262.0	0.20	25.16	4,262.0	-5.6	4.8	-6.7	0.26		
4,287.0	0.20	24.12	4,287.0	-5.5	4.9	-6.7	0.01		
4,312.0	0.28	11.96	4,312.0	-5.4	4.9	-6.6	0.38		
4,337.0	0.40	359.15	4,337.0	-5.2	4.9	-6.5	0.57		
4,362.0	0.42	355.42	4,362.0	-5.1	4.9	-6.3	0.13		
4,387.0	0.45	358.36	4,387.0	-4.9	4.9	-6.1	0.15		
4,412.0	0.43	355.07	4,412.0	-4.7	4.9	-5.9	0.13		
4,437.0	0.38	346.69	4,437.0	-4.5	4.9	-5.7	0.31		
4,462.0	0.35	344.74	4,462.0	-4.4	4.8	-5.6	0.13		
4,487.0	0.34	345.78	4,487.0	-4.2	4.8	-5.4	0.05		
4,512.0	0.36	346.49	4,512.0	-4.1	4.7	-5.3	0.08		
4,537.0	0.42	347.74	4,537.0	-3.9	4.7	-5.1	0.24		
4,562.0	0.47	348.13	4,562.0	-3.7	4.7	-4.9	0.20		
4,587.0	0.48	342.92	4,587.0	-3.5	4.6	-4.7	0.18		
4,612.0	0.47	338.21	4,612.0	-3.3	4.5	-4.5	0.16		
4,637.0	0.48	341.69	4,637.0	-3.1	4.5	-4.3	0.12		
4,662.0	0.53	348.23	4,662.0	-2.9	4.4	-4.1	0.30		
4,687.0	0.53	349.84	4,687.0	-2.7	4.4	-3.8	0.06		

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Asena Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)		
4,712.0	0.51	349.85	4,712.0	-2.4	4.3	-3.6	0.08		
4,737.0	0.53	356.27	4,737.0	-2.2	4.3	-3.4	0.25		
4,762.0	0.57	355.10	4,762.0	-2.0	4.3	-3.2	0.17		
4,787.0	0.61	354.26	4,787.0	-1.7	4.3	-2.9	0.16		
4,812.0	0.71	359.68	4,812.0	-1.4	4.3	-2.6	0.47		
4,837.0	0.75	1.94	4,837.0	-1.1	4.3	-2.3	0.20		
4,862.0	0.70	2.54	4,862.0	-0.8	4.3	-2.0	0.20		
4,887.0	0.70	359.92	4,887.0	-0.5	4.3	-1.7	0.13		
4,912.0	0.74	359.00	4,912.0	-0.2	4.3	-1.4	0.17		
4,937.0	0.80	0.78	4,937.0	0.2	4.3	-1.1	0.26		
4,962.0	0.87	0.74	4,961.9	0.5	4.3	-0.8	0.28		
4,987.0	0.83	359.72	4,986.9	0.9	4.3	-0.4	0.17		
5,012.0	0.81	359.56	5,011.9	1.2	4.3	-0.1	0.08		
5,037.0	0.87	0.83	5,036.9	1.6	4.3	0.3	0.25		
5,062.0	0.91	0.95	5,061.9	2.0	4.3	0.6	0.16		
5,087.0	0.86	359.15	5,086.9	2.4	4.3	1.0	0.23		
5,112.0	0.87	358.21	5,111.9	2.8	4.3	1.4	0.07		
5,137.0	0.91	359.38	5,136.9	3.1	4.3	1.8	0.18		
5,162.0	0.94	357.61	5,161.9	3.6	4.3	2.1	0.17		
5,187.0	0.97	355.83	5,186.9	4.0	4.2	2.5	0.17		
5,212.0	0.96	358.68	5,211.9	4.4	4.2	3.0	0.20		
5,237.0	0.93	0.92	5,236.9	4.8	4.2	3.3	0.19		
5,262.0	0.93	359.35	5,261.9	5.2	4.2	3.7	0.10		
5,287.0	0.93	358.42	5,286.9	5.6	4.2	4.1	0.06		
5,312.0	0.90	359.75	5,311.9	6.0	4.2	4.5	0.15		
5,337.0	0.90	0.28	5,336.9	6.4	4.2	4.9	0.03		
5,362.0	0.90	358.04	5,361.9	6.8	4.2	5.3	0.14		
5,387.0	0.87	359.71	5,386.9	7.2	4.2	5.6	0.16		
5,412.0	0.87	359.39	5,411.9	7.6	4.2	6.0	0.02		
5,437.0	0.88	357.35	5,436.9	7.9	4.2	6.4	0.13		
5,462.0	0.90	356.24	5,461.9	8.3	4.1	6.7	0.11		
5,487.0	0.90	355.73	5,486.9	8.7	4.1	7.1	0.03		
5,512.0	0.89	355.90	5,511.9	9.1	4.1	7.5	0.04		
5,537.0	0.91	354.76	5,536.9	9.5	4.1	7.9	0.11		
5,562.0	0.92	356.55	5,561.9	9.9	4.0	8.3	0.12		
5,587.0	0.94	356.97	5,586.9	10.3	4.0	8.7	0.08		
5,612.0	0.92	356.86	5,611.9	10.7	4.0	9.1	0.08		
5,637.0	0.88	356.04	5,636.9	11.1	4.0	9.4	0.17		
5,662.0	0.90	356.76	5,661.9	11.5	3.9	9.8	0.09		
5,687.0	0.95	357.91	5,686.9	11.9	3.9	10.2	0.21		
5,712.0	0.98	357.61	5,711.9	12.3	3.9	10.6	0.12		
5,737.0	0.94	356.56	5,736.9	12.7	3.9	11.0	0.17		
5,762.0	0.95	357.43	5,761.8	13.1	3.9	11.4	0.07		
5,787.0	0.99	357.99	5,786.8	13.6	3.8	11.8	0.16		

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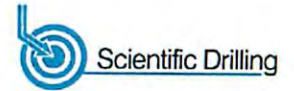


<b>Company:</b> Antero Resources	<b>Local Co-ordinate Reference:</b> Well Asena Unit 2H
<b>Project:</b> Doddridge County WV	<b>TVD Reference:</b> Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b> Dufflemeyer Pad	<b>MD Reference:</b> Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b> Asena Unit 2H	<b>North Reference:</b> Grid
<b>Wellbore:</b> Original Wellpath	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> As Drilled	<b>Database:</b> Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)
5,812.0	1.01	356.51	5,811.8	14.0	3.8	12.3	0.13
5,837.0	1.03	352.30	5,836.8	14.4	3.8	12.7	0.31
5,862.0	1.01	349.96	5,861.8	14.9	3.7	13.1	0.18
5,887.0	0.92	347.98	5,886.8	15.3	3.6	13.6	0.38
5,912.0	0.81	344.44	5,911.8	15.7	3.5	13.9	0.49
5,937.0	0.81	347.72	5,936.8	16.0	3.5	14.3	0.19
5,962.0	0.75	349.45	5,961.8	16.3	3.4	14.6	0.26
5,987.0	0.75	348.42	5,986.8	16.7	3.3	14.9	0.05
6,012.0	0.73	344.51	6,011.8	17.0	3.2	15.3	0.22
6,037.0	0.63	347.35	6,036.8	17.3	3.2	15.6	0.42
6,062.0	0.57	356.84	6,061.8	17.5	3.1	15.8	0.46
6,087.0	0.55	0.57	6,086.8	17.8	3.1	16.1	0.17
6,112.0	0.51	356.83	6,111.8	18.0	3.1	16.3	0.21
6,137.0	0.48	359.82	6,136.8	18.2	3.1	16.5	0.16
6,162.0	0.54	12.29	6,161.8	18.4	3.1	16.7	0.50
6,187.0	0.59	7.54	6,186.8	18.7	3.2	16.9	0.27
6,212.0	0.57	355.35	6,211.8	18.9	3.2	17.1	0.50
6,237.0	0.54	356.66	6,236.8	19.2	3.2	17.4	0.13
6,262.0	0.53	358.71	6,261.8	19.4	3.2	17.6	0.09
6,280.0	0.51	1.23	6,279.8	19.6	3.2	17.8	0.17
6,297.0	0.74	343.57	6,296.8	19.7	3.1	17.9	1.75
6,328.0	0.41	4.94	6,327.8	20.1	3.1	18.2	1.25
6,360.0	1.62	268.23	6,359.8	20.2	2.6	18.5	5.37
6,391.0	3.65	250.71	6,390.8	19.8	1.3	18.6	6.97
6,422.0	7.02	254.26	6,421.6	19.0	-1.5	18.6	10.92
6,454.0	9.42	255.44	6,453.3	17.8	-5.9	18.7	7.52
6,485.0	12.47	255.64	6,483.7	16.3	-11.6	19.0	9.84
6,517.0	15.51	254.30	6,514.8	14.3	-19.1	19.3	9.55
6,548.0	18.94	252.89	6,544.4	11.7	-27.9	19.4	11.15
6,579.0	22.34	250.93	6,573.4	8.3	-38.2	19.2	11.19
6,610.0	25.74	249.35	6,601.7	4.0	-50.1	18.6	11.16
6,642.0	29.33	248.29	6,630.1	-1.4	-63.9	17.5	11.32
6,673.0	33.00	247.19	6,656.6	-7.4	-78.7	16.1	11.98
6,705.0	35.54	249.67	6,683.0	-14.1	-95.5	14.7	9.06
6,736.0	36.77	256.67	6,708.1	-19.3	-113.0	14.8	13.89
6,768.0	38.56	261.67	6,733.4	-23.0	-132.2	17.0	11.06
6,799.0	40.53	267.00	6,757.3	-24.9	-151.8	21.0	12.65
6,815.0	41.11	270.16	6,769.4	-25.2	-162.3	27.0	13.43
<b>Middlesex</b>							
6,830.0	41.74	273.06	6,780.7	-24.9	-172.2	27.0	13.43
6,862.0	43.22	278.62	6,804.3	-22.7	-193.7	35.1	12.61
6,893.0	44.23	283.23	6,826.7	-18.6	-214.7	45.9	10.78
6,925.0	45.56	289.31	6,849.4	-12.3	-236.3	58.0	14.04
6,956.0	47.57	294.26	6,870.7	-3.9	-257.2	70.0	13.28

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Asena Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
6,987.0	49.11	298.48	6,891.3	6.4	-278.0	88.1	11.32	
7,019.0	50.86	302.43	6,911.9	18.8	-299.1	106.2	10.92	
<b>Burkett</b>								
7,050.0	52.26	305.66	6,931.2	32.4	-319.2	125.1	9.33	
7,081.0	54.35	308.94	6,949.7	47.5	-338.9	145.3	10.84	
<b>Tully</b>								
7,113.0	56.96	312.11	6,967.7	64.6	-359.0	167.6	11.55	
7,145.0	59.56	314.87	6,984.6	83.4	-378.7	191.3	10.95	
7,176.0	62.05	317.53	6,999.7	102.9	-397.5	215.5	10.98	
7,207.0	64.81	320.43	7,013.6	123.8	-415.7	240.9	12.22	
7,239.0	68.02	323.19	7,026.4	146.9	-433.8	268.3	12.77	
7,270.0	70.54	325.96	7,037.3	170.5	-450.6	295.8	11.66	
7,301.0	73.83	328.94	7,046.8	195.4	-466.4	324.2	14.01	
7,307.0	74.25	329.40	7,048.5	200.3	-469.4	329.8	10.25	
<b>Marcellus</b>								
7,333.0	76.10	331.39	7,055.1	222.2	-481.8	354.4	10.25	
7,364.0	78.98	333.54	7,061.8	249.0	-495.8	384.1	11.50	
7,396.0	80.79	335.01	7,067.4	277.4	-509.5	415.3	7.24	
7,427.0	82.55	336.11	7,071.9	305.3	-522.2	445.7	6.68	
7,502.0	86.74	339.89	7,078.9	374.5	-550.1	520.1	7.51	
7,595.0	87.62	340.28	7,083.5	461.9	-581.8	612.9	1.03	
7,687.0	92.86	341.59	7,083.1	548.8	-611.8	704.8	5.87	
7,780.0	91.68	340.97	7,079.4	636.8	-641.6	797.7	1.43	
7,872.0	91.65	342.70	7,076.8	724.2	-670.3	889.6	1.88	
7,964.0	91.98	344.04	7,073.8	812.3	-696.6	981.6	1.50	
8,056.0	90.74	343.46	7,071.7	900.6	-722.3	1,073.5	1.49	
8,149.0	91.18	343.71	7,070.1	989.8	-748.6	1,166.5	0.54	
8,240.0	87.82	341.24	7,070.9	1,076.5	-776.0	1,257.5	4.58	
8,334.0	87.68	342.00	7,074.6	1,165.7	-805.6	1,351.4	0.82	
8,428.0	88.46	343.28	7,077.7	1,255.3	-833.7	1,445.3	1.59	
8,522.0	89.70	343.81	7,079.3	1,345.5	-860.3	1,539.3	1.43	
8,616.0	90.13	344.95	7,079.4	1,436.0	-885.6	1,633.3	1.30	
8,710.0	89.80	344.17	7,079.5	1,526.6	-910.6	1,727.2	0.90	
8,804.0	89.97	343.53	7,079.6	1,616.9	-936.8	1,821.2	0.70	
8,898.0	89.80	341.76	7,079.8	1,706.6	-964.8	1,915.2	1.89	
8,993.0	90.94	343.00	7,079.2	1,797.1	-993.6	2,010.2	1.77	
9,087.0	90.97	342.56	7,077.6	1,886.9	-1,021.4	2,104.2	0.47	
9,182.0	90.00	342.92	7,076.8	1,977.6	-1,049.6	2,199.2	1.09	
9,275.0	90.40	342.72	7,076.5	2,066.5	-1,077.0	2,292.2	0.48	
9,370.0	90.30	342.24	7,075.9	2,157.1	-1,105.6	2,387.2	0.52	
9,464.0	90.37	341.45	7,075.4	2,246.4	-1,134.9	2,481.2	0.84	
9,558.0	89.87	342.21	7,075.2	2,335.7	-1,164.2	2,575.1	0.97	
9,652.0	89.87	343.38	7,075.4	2,425.5	-1,192.0	2,669.1	0.25	
9,745.0	89.80	343.04	7,075.7	2,514.5	-1,218.9	2,762.1	0.37	
9,840.0	89.90	343.30	7,075.9	2,605.5	-1,246.4	2,857.1	0.29	

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EOW Completion Report



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Asena Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Orignal Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
9,934.0	89.66	343.23	7,076.3	2,695.5	-1,273.5	2,951.1	0.27
10,028.0	89.46	342.51	7,077.0	2,785.3	-1,301.2	3,045.1	0.79
10,122.0	89.33	341.92	7,078.0	2,874.8	-1,329.9	3,139.1	0.64
10,216.0	89.87	341.58	7,078.7	2,964.1	-1,359.3	3,233.1	0.68
10,311.0	90.00	342.04	7,078.8	3,054.3	-1,389.0	3,328.1	0.50
10,404.0	90.34	343.63	7,078.5	3,143.2	-1,416.4	3,421.1	1.75
10,499.0	89.90	342.21	7,078.3	3,234.0	-1,444.3	3,516.1	1.56
10,593.0	89.66	342.49	7,078.6	3,323.6	-1,472.8	3,610.1	0.39
10,687.0	90.27	343.80	7,078.7	3,413.5	-1,500.1	3,704.1	1.54
10,781.0	89.80	341.86	7,078.6	3,503.3	-1,527.8	3,798.1	2.12
10,875.0	89.97	342.05	7,078.8	3,592.7	-1,556.9	3,892.1	0.27
10,969.0	90.77	344.31	7,078.2	3,682.7	-1,584.1	3,986.0	2.55
11,063.0	90.40	343.87	7,077.3	3,773.1	-1,609.9	4,080.0	0.61
11,157.0	89.70	341.74	7,077.2	3,862.9	-1,637.7	4,174.0	2.39
11,251.0	90.40	341.51	7,077.1	3,952.1	-1,667.3	4,268.0	0.78
11,345.0	89.77	342.51	7,077.0	4,041.5	-1,696.3	4,362.0	1.26
11,439.0	90.20	345.33	7,077.0	4,131.8	-1,722.4	4,456.0	3.03
11,534.0	90.30	344.71	7,076.6	4,223.6	-1,746.9	4,550.9	0.66
11,628.0	90.60	344.21	7,075.8	4,314.1	-1,772.1	4,644.8	0.62
11,722.0	90.50	342.53	7,074.9	4,404.2	-1,799.0	4,738.8	1.79
11,817.0	90.17	340.95	7,074.4	4,494.4	-1,828.8	4,833.8	1.70
11,911.0	90.30	341.76	7,074.0	4,583.5	-1,858.8	4,927.8	0.87
12,005.0	89.30	343.43	7,074.3	4,673.1	-1,886.9	5,021.8	2.07
12,099.0	89.20	343.22	7,075.6	4,763.2	-1,913.9	5,115.8	0.25
12,193.0	89.73	343.34	7,076.4	4,853.2	-1,941.0	5,209.7	0.58
12,287.0	89.53	342.62	7,077.0	4,943.1	-1,968.5	5,303.7	0.79
12,381.0	89.93	344.36	7,077.5	5,033.2	-1,995.2	5,397.7	1.90
12,475.0	92.69	345.37	7,075.3	5,123.9	-2,019.7	5,491.6	3.13
12,570.0	91.21	344.67	7,072.1	5,215.6	-2,044.3	5,586.5	1.72
12,664.0	90.77	345.19	7,070.5	5,306.4	-2,068.7	5,680.4	0.72
12,757.0	90.74	344.79	7,069.3	5,396.2	-2,092.8	5,773.4	0.43
12,852.0	88.26	343.60	7,070.1	5,487.6	-2,118.6	5,868.3	2.90
12,946.0	88.89	343.73	7,072.4	5,577.8	-2,145.1	5,962.3	0.68
13,040.0	88.93	343.76	7,074.2	5,668.0	-2,171.4	6,056.3	0.05
13,134.0	89.90	342.40	7,075.2	5,757.9	-2,198.7	6,150.3	1.78
13,228.0	91.41	342.55	7,074.1	5,847.5	-2,227.0	6,244.2	1.61
13,322.0	90.57	341.23	7,072.5	5,936.9	-2,256.3	6,338.2	1.66
13,416.0	90.74	341.93	7,071.4	6,026.1	-2,286.0	6,432.2	0.77
13,520.0	90.00	340.38	7,070.7	6,124.5	-2,319.5	6,536.1	1.65
13,578.0	90.00	340.38	7,070.7	6,179.1	-2,339.0	6,594.1	0.00

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<b>Site:</b>	Dufflemeyer Pad	<b>MD Reference:</b>	Patterson 347: GL 1081' + KB 25 @ 1106.0usft
<b>Well:</b>	Asena Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,815.0	6,769.4	-25.2	-162.3	Middlesex
7,019.0	6,911.9	18.8	-299.1	Burkett
7,081.0	6,949.7	47.5	-338.9	Tully
7,307.0	7,048.5	200.3	-469.4	Marcellus

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

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