



Antero Resources  
 Owo Unit 2H  
 Tyler County WV  
 Northing: 14316224.18  
 Easting: 1715434.70  
 As Drilled

**WELL DETAILS: Owo Unit 2H**  
 Ground Level: 164.0  
 Slot  
 Northing: 14316224.18  
 Easting: 1715434.70  
 Longitude: 90° 44' 3.678 W  
 Latitude: 39° 25' 24.922 N

**REFERENCE INFORMATION**  
 Geocentric Reference: Well Owo Unit 2H, Owo Unit 2H  
 Datum: NAD 1983 (NAD83)  
 Spheroid: GRS 80  
 Ellipsoid: GRS 80  
 Meridian: Clarke 1866  
 Calculation Method: Minimum Curvature

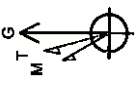
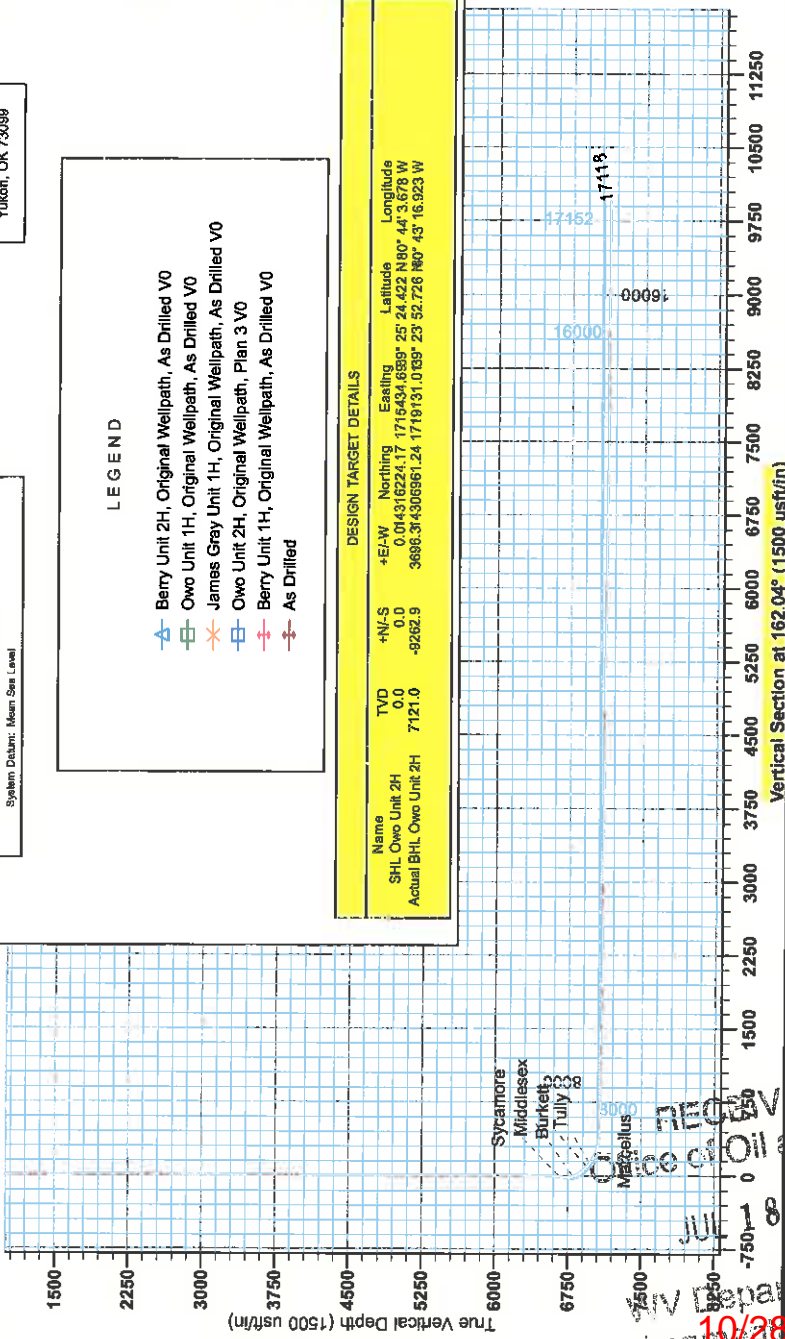
**PROJECT DETAILS: Tyler County WV**  
 Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1983 (NAD83)  
 Ellipsoid: GRS 80  
 Zone: Zone 17N (84 W to 78 W)  
 System Datum: Mean Sea Level

**LEGEND**

- ▲ Berry Unit 2H, Original Wellpath, As Drilled V0
- Owo Unit 1H, Original Wellpath, As Drilled V0
- ✱ James Gray Unit 1H, Original Wellpath, As Drilled V0
- Owo Unit 2H, Original Wellpath, Plan 3 V0
- ⊖ Berry Unit 1H, Original Wellpath, As Drilled V0
- ⊕ As Drilled

**DESIGN TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL Owo Unit 2H	0.0	0.0	0.0	14316224.17	1715434.6889	25° 24' 42.22 N	80° 44' 3.678 W
Actual BHL Owo Unit 2H	7121.0	-9262.9	3696.3	14306961.24	1719131.0739	23° 52' 72.6 N	80° 43' 16.923 W



To convert Magnetic North to Grid, Subtract 6.70°  
 To convert True North to Grid, Subtract 0.17°

Magnetic Field  
 Strength: 52296.8 nT  
 Dip Angle: 66.95°  
 Date: 8/19/2014  
 Model: BCGM2014



Gerie Lightfoot  
 10-41, December 02 2014  
 Scientific Drilling, Inc.  
 11220 NW 10th Street  
 Yukon, OK 73098

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# Antero Resources

Tyler County WV  
Coastal 1 Pad: Berry/Gray/Owo  
Owo Unit 2H  
Original Wellpath

Design: As Drilled

## EOW Completion Report

02 December, 2014



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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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>	Tyler County WV, Tyler Co West Virginia		
<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>	Coastal 1 Pad Berry/Gray/Owo				
<b>Site Position:</b>		<b>Northing:</b>	14,316,233.70 usft	<b>Latitude:</b>	39° 25' 24.517 N
<b>From:</b>	Map	<b>Easting:</b>	1,715,406.00 usft	<b>Longitude:</b>	80° 44' 4.043 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16"	<b>Grid Convergence:</b>	0.17 °

<b>Well</b>	Owo Unit 2H, Marcellus					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,316,224.18 usft	<b>Latitude:</b>	39° 25' 24.422 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	1,715,434.70 usft	<b>Longitude:</b>	80° 44' 3.678 W
<b>Position Uncertainty</b>		2.0 usft	<b>Wellhead Elevation:</b>	1,182.0 usft	<b>Ground Level:</b>	1,164.0 usft

<b>Wellbore</b>	Original Wellpath				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	8/19/2014	-8.53	66.95	52,296

<b>Design</b>	As Drilled				
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<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	162.04

Survey Program		Date			
From (usft)	To (usft)	12/2/2014	Survey (Wellbore)	Tool Name	Description
30.0	6,300.0		Survey #4 Final Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper
6,335.0	17,118.0		Survey #5 SDI MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1

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
30.0	0.07	139.76	30.0	0.0	0.0	0.0	0.23
55.0	0.15	139.76	55.0	-0.1	0.0	0.1	0.32
80.0	0.22	139.76	80.0	-0.1	0.1	0.1	0.28
105.0	0.28	140.25	105.0	-0.2	0.2	0.2	0.24
130.0	0.25	145.57	130.0	-0.3	0.2	0.2	0.16
155.0	0.26	156.39	155.0	-0.4	0.3	0.3	0.20
180.0	0.30	162.13	180.0	-0.5	0.3	0.3	0.20
205.0	0.28	155.71	205.0	-0.6	0.4	0.4	0.15
230.0	0.31	176.69	230.0	-0.7	0.4	0.4	0.45
255.0	0.32	178.11	255.0	-0.9	0.4	1.0	0.05

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad. Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)
280.0	0.24	159.97	280.0	-1.0	0.4	1.1	0.47
305.0	0.19	172.20	305.0	-1.1	0.5	1.2	0.27
330.0	0.20	173.30	330.0	-1.2	0.5	1.3	0.04
355.0	0.24	175.53	355.0	-1.3	0.5	1.4	0.16
380.0	0.24	171.18	380.0	-1.4	0.5	1.5	0.07
405.0	0.25	170.73	405.0	-1.5	0.5	1.6	0.04
430.0	0.27	175.97	430.0	-1.6	0.5	1.7	0.12
455.0	0.28	187.77	455.0	-1.7	0.5	1.8	0.23
480.0	0.25	190.33	480.0	-1.8	0.5	1.9	0.13
505.0	0.24	178.20	505.0	-1.9	0.5	2.0	0.21
530.0	0.26	187.73	530.0	-2.0	0.5	2.1	0.18
555.0	0.25	194.89	555.0	-2.1	0.5	2.2	0.13
580.0	0.24	195.62	580.0	-2.2	0.4	2.3	0.04
605.0	0.23	181.46	605.0	-2.3	0.4	2.4	0.24
630.0	0.26	174.90	630.0	-2.5	0.4	2.5	0.16
655.0	0.29	179.47	655.0	-2.6	0.4	2.6	0.15
680.0	0.23	174.50	680.0	-2.7	0.4	2.7	0.26
705.0	0.25	180.83	705.0	-2.8	0.4	2.8	0.13
730.0	0.31	184.70	730.0	-2.9	0.4	2.9	0.25
755.0	0.35	184.77	755.0	-3.1	0.4	3.0	0.16
780.0	0.34	178.07	780.0	-3.2	0.4	3.2	0.17
805.0	0.40	190.47	805.0	-3.4	0.4	3.3	0.40
830.0	0.38	193.74	830.0	-3.5	0.4	3.5	0.12
855.0	0.32	187.31	855.0	-3.7	0.3	3.6	0.29
880.0	0.29	191.00	880.0	-3.8	0.3	3.7	0.14
905.0	0.29	192.30	905.0	-3.9	0.3	3.8	0.03
930.0	0.30	192.78	930.0	-4.1	0.3	3.9	0.04
955.0	0.28	189.97	955.0	-4.2	0.2	4.1	0.10
980.0	0.25	180.74	980.0	-4.3	0.2	4.2	0.21
1,005.0	0.24	177.68	1,005.0	-4.4	0.2	4.3	0.07
1,030.0	0.29	179.41	1,030.0	-4.5	0.2	4.4	0.20
1,055.0	0.29	187.26	1,055.0	-4.7	0.2	4.5	0.16
1,080.0	0.30	192.64	1,080.0	-4.8	0.2	4.6	0.12
1,105.0	0.28	196.60	1,105.0	-4.9	0.2	4.7	0.11
1,130.0	0.25	207.38	1,130.0	-5.0	0.1	4.8	0.23
1,155.0	0.24	198.99	1,155.0	-5.1	0.1	4.9	0.15
1,180.0	0.26	189.08	1,180.0	-5.2	0.1	5.0	0.19
1,205.0	0.25	183.95	1,205.0	-5.3	0.0	5.1	0.10
1,230.0	0.27	194.43	1,230.0	-5.4	0.0	5.2	0.21
1,255.0	0.24	194.35	1,255.0	-5.5	0.0	5.3	0.12
1,280.0	0.26	201.27	1,280.0	-5.6	0.0	5.4	0.14
1,305.0	0.29	204.83	1,305.0	-5.8	-0.1	5.5	0.14
1,330.0	0.22	192.08	1,330.0	-5.9	-0.1	5.5	0.36
1,355.0	0.21	190.19	1,355.0	-6.0	-0.1	5.5	0.05

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<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo Unit 2H	<b>North Reference:</b>	Grd
<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)
1,380.0	0.23	191.12	1,380.0	-6.0	-0.2	5.7	0.08
1,405.0	0.25	187.34	1,405.0	-6.2	-0.2	5.8	0.10
1,430.0	0.37	200.30	1,430.0	-6.3	-0.2	5.9	0.55
1,455.0	0.32	192.90	1,455.0	-6.4	-0.3	6.0	0.27
1,480.0	0.35	200.25	1,480.0	-6.6	-0.3	6.2	0.21
1,505.0	0.36	204.40	1,505.0	-6.7	-0.4	6.3	0.11
1,530.0	0.23	183.35	1,530.0	-6.8	-0.4	6.4	0.67
1,555.0	0.29	195.61	1,555.0	-6.9	-0.4	6.5	0.33
1,580.0	0.29	206.97	1,580.0	-7.1	-0.5	6.6	0.23
1,605.0	0.23	206.02	1,605.0	-7.2	-0.5	6.7	0.24
1,630.0	0.30	200.96	1,630.0	-7.3	-0.5	6.7	0.29
1,655.0	0.42	206.83	1,655.0	-7.4	-0.6	6.9	0.50
1,680.0	0.39	198.14	1,680.0	-7.6	-0.7	7.0	0.27
1,705.0	0.38	199.78	1,705.0	-7.7	-0.7	7.1	0.06
1,730.0	0.34	195.12	1,730.0	-7.9	-0.8	7.3	0.20
1,755.0	0.28	170.62	1,755.0	-8.0	-0.8	7.4	0.58
1,780.0	0.27	156.93	1,780.0	-8.1	-0.8	7.5	0.27
1,805.0	0.39	190.95	1,805.0	-8.3	-0.8	7.6	0.90
1,830.0	0.47	203.20	1,830.0	-8.4	-0.8	7.8	0.49
1,855.0	0.27	180.09	1,855.0	-8.6	-0.8	7.9	0.98
1,880.0	0.31	194.79	1,880.0	-8.7	-0.9	8.0	0.34
1,905.0	0.35	198.28	1,905.0	-8.9	-0.9	8.1	0.18
1,930.0	0.32	198.58	1,930.0	-9.0	-1.0	8.3	0.12
1,955.0	0.31	197.91	1,955.0	-9.1	-1.0	8.4	0.04
1,980.0	0.27	191.66	1,980.0	-9.2	-1.0	8.5	0.20
2,005.0	0.27	183.57	2,005.0	-9.4	-1.0	8.6	0.15
2,030.0	0.32	182.53	2,030.0	-9.5	-1.1	8.7	0.20
2,055.0	0.35	192.33	2,055.0	-9.6	-1.1	8.8	0.26
2,080.0	0.34	199.98	2,080.0	-9.8	-1.1	9.0	0.19
2,105.0	0.30	196.69	2,105.0	-9.9	-1.2	9.1	0.18
2,130.0	0.29	193.40	2,130.0	-10.0	-1.2	9.2	0.08
2,155.0	0.23	207.54	2,155.0	-10.1	-1.2	9.3	0.35
2,180.0	0.24	214.61	2,180.0	-10.2	-1.3	9.3	0.12
2,205.0	0.24	207.09	2,205.0	-10.3	-1.3	9.4	0.13
2,230.0	0.18	190.60	2,230.0	-10.4	-1.4	9.5	0.34
2,255.0	0.15	195.59	2,255.0	-10.5	-1.4	9.5	0.13
2,280.0	0.22	197.65	2,280.0	-10.6	-1.4	9.6	0.28
2,305.0	0.22	185.55	2,305.0	-10.6	-1.4	9.7	0.19
2,330.0	0.17	191.37	2,330.0	-10.7	-1.4	9.8	0.21
2,355.0	0.23	192.05	2,355.0	-10.8	-1.5	9.8	0.24
2,380.0	0.31	196.60	2,380.0	-10.9	-1.5	9.9	0.33
2,405.0	0.28	212.29	2,405.0	-11.0	-1.5	10.0	0.34
2,430.0	0.16	224.67	2,430.0	-11.1	-1.6	10.1	0.51
2,455.0	0.17	212.83	2,455.0	-11.2	-1.6	10.1	0.14
2,480.0	0.27	223.92	2,480.0	-11.3	-1.7	10.2	0.43

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<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)
2,505.0	0.24	251.47	2,505.0	-11.3	-1.8	10.2	0.50
2,530.0	0.28	270.57	2,530.0	-11.3	-1.9	10.2	0.38
2,555.0	0.29	269.76	2,555.0	-11.3	-2.0	10.2	0.04
2,580.0	0.30	271.33	2,580.0	-11.3	-2.2	10.1	0.05
2,605.0	0.32	281.93	2,605.0	-11.3	-2.3	10.1	0.24
2,630.0	0.32	284.79	2,630.0	-11.3	-2.4	10.0	0.06
2,655.0	0.35	278.88	2,655.0	-11.2	-2.6	9.9	0.18
2,680.0	0.39	281.78	2,680.0	-11.2	-2.7	9.8	0.18
2,705.0	0.42	284.10	2,705.0	-11.2	-2.9	9.7	0.14
2,730.0	0.41	284.08	2,730.0	-11.1	-3.1	9.6	0.04
2,755.0	0.42	278.92	2,755.0	-11.1	-3.3	9.6	0.15
2,780.0	0.39	277.17	2,780.0	-11.1	-3.4	9.5	0.13
2,805.0	0.40	277.79	2,805.0	-11.1	-3.6	9.4	0.04
2,830.0	0.42	274.88	2,830.0	-11.0	-3.8	9.3	0.12
2,855.0	0.42	273.02	2,855.0	-11.0	-4.0	9.3	0.05
2,880.0	0.49	271.71	2,880.0	-11.0	-4.2	9.2	0.28
2,905.0	0.53	269.70	2,905.0	-11.0	-4.4	9.1	0.18
2,930.0	0.46	270.36	2,930.0	-11.0	-4.6	9.1	0.28
2,955.0	0.44	268.12	2,955.0	-11.0	-4.8	9.0	0.11
2,980.0	0.47	268.04	2,980.0	-11.0	-5.0	8.9	0.12
3,005.0	0.47	270.24	3,005.0	-11.0	-5.2	8.9	0.07
3,030.0	0.53	272.47	3,030.0	-11.0	-5.4	8.8	0.25
3,055.0	0.55	274.44	3,055.0	-11.0	-5.6	8.7	0.11
3,080.0	0.51	279.21	3,080.0	-11.0	-5.9	8.6	0.24
3,105.0	0.51	278.14	3,105.0	-10.9	-6.1	8.5	0.04
3,130.0	0.58	276.16	3,130.0	-10.9	-6.3	8.4	0.29
3,155.0	0.61	277.14	3,155.0	-10.9	-6.6	8.3	0.13
3,180.0	0.58	278.45	3,180.0	-10.8	-6.8	8.2	0.13
3,205.0	0.57	280.33	3,205.0	-10.8	-7.1	8.1	0.09
3,230.0	0.59	279.13	3,230.0	-10.8	-7.3	8.0	0.09
3,255.0	0.60	277.75	3,255.0	-10.7	-7.6	7.9	0.07
3,280.0	0.60	280.44	3,280.0	-10.7	-7.9	7.7	0.11
3,305.0	0.64	281.02	3,305.0	-10.6	-8.1	7.6	0.16
3,330.0	0.67	278.65	3,330.0	-10.6	-8.4	7.5	0.16
3,355.0	0.61	280.30	3,355.0	-10.5	-8.7	7.3	0.25
3,380.0	0.58	282.40	3,379.9	-10.5	-8.9	7.2	0.15
3,405.0	0.60	280.05	3,404.9	-10.4	-9.2	7.1	0.13
3,430.0	0.60	277.58	3,429.9	-10.4	-9.4	7.0	0.10
3,455.0	0.54	280.81	3,454.9	-10.4	-9.7	6.9	0.27
3,480.0	0.50	284.30	3,479.9	-10.3	-9.9	6.7	0.20
3,505.0	0.53	282.31	3,504.9	-10.3	-10.1	6.6	0.14
3,530.0	0.55	280.73	3,529.9	-10.2	-10.4	6.5	0.10
3,555.0	0.55	281.54	3,554.9	-10.2	-10.6	6.4	0.03
3,580.0	0.55	282.05	3,579.9	-10.1	-10.8	6.3	0.02

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)
3,605.0	0.56	282.46	3,604.9	-10.1	-11.1	6.2	0.04
3,630.0	0.57	281.66	3,629.9	-10.0	-11.3	6.0	0.05
3,655.0	0.58	281.96	3,654.9	-10.0	-11.6	5.9	0.04
3,680.0	0.58	280.64	3,679.9	-9.9	-11.8	5.8	0.05
3,705.0	0.57	280.66	3,704.9	-9.9	-12.1	5.7	0.04
3,730.0	0.59	280.21	3,729.9	-9.8	-12.3	5.5	0.08
3,755.0	0.60	279.28	3,754.9	-9.8	-12.6	5.4	0.06
3,780.0	0.57	281.09	3,779.9	-9.7	-12.8	5.3	0.14
3,805.0	0.58	279.73	3,804.9	-9.7	-13.1	5.2	0.07
3,830.0	0.57	277.44	3,829.9	-9.6	-13.3	5.1	0.10
3,855.0	0.52	277.06	3,854.9	-9.6	-13.5	5.0	0.20
3,880.0	0.50	279.59	3,879.9	-9.6	-13.8	4.9	0.12
3,905.0	0.52	277.65	3,904.9	-9.6	-14.0	4.8	0.11
3,930.0	0.54	276.53	3,929.9	-9.5	-14.2	4.7	0.09
3,955.0	0.57	273.49	3,954.9	-9.5	-14.4	4.6	0.17
3,980.0	0.60	269.62	3,979.9	-9.5	-14.7	4.5	0.20
4,005.0	0.51	268.99	4,004.9	-9.5	-14.9	4.4	0.36
4,030.0	0.46	269.89	4,029.9	-9.5	-15.2	4.4	0.20
4,055.0	0.49	268.61	4,054.9	-9.5	-15.4	4.3	0.13
4,080.0	0.49	266.95	4,079.9	-9.5	-15.6	4.2	0.06
4,105.0	0.49	266.00	4,104.9	-9.5	-15.8	4.2	0.03
4,130.0	0.49	262.60	4,129.9	-9.5	-16.0	4.1	0.12
4,155.0	0.44	266.79	4,154.9	-9.6	-16.2	4.1	0.24
4,180.0	0.41	266.25	4,179.9	-9.6	-16.4	4.1	0.12
4,205.0	0.33	261.69	4,204.9	-9.6	-16.6	4.0	0.34
4,230.0	0.26	260.84	4,229.9	-9.6	-16.7	4.0	0.28
4,255.0	0.25	259.61	4,254.9	-9.6	-16.8	4.0	0.05
4,280.0	0.23	265.10	4,279.9	-9.6	-16.9	4.0	0.12
4,305.0	0.19	277.44	4,304.9	-9.6	-17.0	3.9	0.24
4,330.0	0.11	297.16	4,329.9	-9.6	-17.0	3.9	0.38
4,355.0	0.08	354.69	4,354.9	-9.6	-17.1	3.9	0.38
4,380.0	0.09	9.56	4,379.9	-9.6	-17.1	3.8	0.10
4,405.0	0.08	320.03	4,404.9	-9.5	-17.1	3.8	0.29
4,430.0	0.09	253.99	4,429.9	-9.5	-17.1	3.8	0.37
4,455.0	0.10	242.19	4,454.9	-9.5	-17.1	3.8	0.09
4,480.0	0.11	289.26	4,479.9	-9.5	-17.2	3.8	0.34
4,505.0	0.10	291.50	4,504.9	-9.5	-17.2	3.7	0.04
4,530.0	0.09	289.36	4,529.9	-9.5	-17.3	3.7	0.04
4,555.0	0.11	298.10	4,554.9	-9.5	-17.3	3.7	0.10
4,580.0	0.07	297.88	4,579.9	-9.5	-17.3	3.7	0.16
4,605.0	0.00	146.67	4,604.9	-9.5	-17.4	3.7	0.28
4,630.0	0.05	152.22	4,629.9	-9.5	-17.4	3.7	0.20
4,655.0	0.04	139.96	4,654.9	-9.5	-17.5	3.7	0.06
4,680.0	0.07	84.93	4,679.9	-9.5	-17.3	3.7	0.23

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)
4,705.0	0.11	117.27	4,704.9	-9.5	-17.3	3.7	0.25
4,730.0	0.08	107.96	4,729.9	-9.5	-17.2	3.7	0.13
4,755.0	0.11	99.81	4,754.9	-9.5	-17.2	3.8	0.13
4,780.0	0.14	126.26	4,779.9	-9.6	-17.2	3.8	0.26
4,805.0	0.13	128.57	4,804.9	-9.6	-17.1	3.8	0.05
4,830.0	0.13	115.42	4,829.9	-9.6	-17.1	3.9	0.12
4,855.0	0.13	118.88	4,854.9	-9.6	-17.0	3.9	0.03
4,880.0	0.16	131.50	4,879.9	-9.7	-17.0	4.0	0.17
4,905.0	0.15	128.69	4,904.9	-9.7	-16.9	4.0	0.05
4,930.0	0.12	124.01	4,929.9	-9.8	-16.9	4.1	0.13
4,955.0	0.18	130.44	4,954.9	-9.8	-16.8	4.1	0.25
4,980.0	0.18	127.10	4,979.9	-9.9	-16.7	4.2	0.04
5,005.0	0.16	119.51	5,004.9	-9.9	-16.7	4.3	0.12
5,030.0	0.17	117.02	5,029.9	-9.9	-16.6	4.3	0.05
5,055.0	0.20	124.53	5,054.9	-10.0	-16.6	4.4	0.15
5,080.0	0.21	132.16	5,079.9	-10.0	-16.5	4.5	0.12
5,105.0	0.16	103.66	5,104.9	-10.1	-16.4	4.5	0.41
5,130.0	0.19	100.30	5,129.9	-10.1	-16.3	4.5	0.13
5,155.0	0.23	119.98	5,154.9	-10.1	-16.3	4.6	0.33
5,180.0	0.20	118.66	5,179.9	-10.2	-16.2	4.7	0.12
5,205.0	0.18	117.47	5,204.9	-10.2	-16.1	4.7	0.08
5,230.0	0.23	114.42	5,229.9	-10.2	-16.0	4.8	0.20
5,255.0	0.25	107.76	5,254.9	-10.3	-15.9	4.9	0.14
5,280.0	0.23	97.28	5,279.9	-10.3	-15.8	4.9	0.19
5,305.0	0.23	94.99	5,304.9	-10.3	-15.7	5.0	0.04
5,330.0	0.25	93.78	5,329.9	-10.3	-15.6	5.0	0.08
5,355.0	0.30	106.64	5,354.9	-10.3	-15.5	5.1	0.32
5,380.0	0.33	105.91	5,379.9	-10.4	-15.4	5.1	0.12
5,405.0	0.33	99.05	5,404.9	-10.4	-15.2	5.2	0.16
5,430.0	0.33	102.44	5,429.9	-10.4	-15.1	5.3	0.08
5,455.0	0.34	98.91	5,454.9	-10.5	-14.9	5.3	0.09
5,480.0	0.34	104.91	5,479.9	-10.5	-14.8	5.4	0.14
5,505.0	0.31	99.68	5,504.9	-10.5	-14.7	5.5	0.17
5,530.0	0.33	99.67	5,529.9	-10.5	-14.5	5.6	0.08
5,555.0	0.38	110.41	5,554.9	-10.6	-14.4	5.6	0.33
5,580.0	0.37	105.00	5,579.9	-10.6	-14.2	5.7	0.15
5,605.0	0.36	103.78	5,604.9	-10.7	-14.1	5.8	0.05
5,630.0	0.36	101.36	5,629.9	-10.7	-13.9	5.9	0.06
5,655.0	0.39	105.17	5,654.9	-10.7	-13.8	6.0	0.16
5,680.0	0.41	105.79	5,679.9	-10.8	-13.6	6.1	0.08
5,705.0	0.39	100.42	5,704.9	-10.8	-13.4	6.2	0.17
5,730.0	0.38	103.28	5,729.9	-10.9	-13.3	6.2	0.09
5,755.0	0.42	97.80	5,754.9	-10.9	-12.9	6.3	0.22
5,780.0	0.46	98.67	5,779.9	-10.9	-12.9	6.4	0.16

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)
5,805.0	0.48	99.92	5,804.9	-11.0	-12.7	6.5	0.09
5,830.0	0.47	100.69	5,829.9	-11.0	-12.5	6.6	0.05
5,855.0	0.39	104.75	5,854.9	-11.0	-12.3	6.7	0.34
5,880.0	0.38	103.42	5,879.9	-11.1	-12.1	6.8	0.05
5,905.0	0.41	104.96	5,904.9	-11.1	-12.0	6.9	0.13
5,930.0	0.39	109.64	5,929.9	-11.2	-11.8	7.0	0.15
5,955.0	0.40	114.20	5,954.9	-11.2	-11.6	7.1	0.13
5,980.0	0.36	111.69	5,979.9	-11.3	-11.5	7.2	0.17
6,005.0	0.36	112.54	6,004.9	-11.4	-11.3	7.3	0.02
6,030.0	0.40	110.51	6,029.9	-11.4	-11.2	7.4	0.17
6,055.0	0.32	96.48	6,054.9	-11.5	-11.0	7.5	0.47
6,080.0	0.29	95.88	6,079.9	-11.5	-10.9	7.6	0.12
6,105.0	0.37	93.61	6,104.9	-11.5	-10.8	7.6	0.32
6,130.0	0.29	96.07	6,129.9	-11.5	-10.6	7.7	0.32
6,155.0	0.23	96.97	6,154.9	-11.5	-10.5	7.7	0.24
6,180.0	0.30	82.62	6,179.9	-11.5	-10.4	7.7	0.38
6,205.0	0.27	91.85	6,204.9	-11.5	-10.3	7.8	0.22
6,230.0	0.26	112.06	6,229.9	-11.5	-10.2	7.8	0.37
6,255.0	0.30	109.55	6,254.9	-11.6	-10.0	7.9	0.17
6,270.1	0.31	93.64	6,270.0	-11.6	-10.0	7.9	0.56
6,300.0	0.31	93.64	6,299.9	-11.6	-9.8	8.0	0.00
6,335.0	1.38	63.13	6,334.9	-11.4	-9.3	8.0	3.21
6,365.0	4.37	62.75	6,364.8	-10.7	-8.0	7.7	9.97
6,396.0	7.86	64.51	6,395.7	-9.3	-5.0	7.3	11.27
6,427.0	10.84	65.56	6,426.2	-7.1	-0.5	6.7	9.63
6,458.0	14.16	65.30	6,456.5	-4.4	5.6	5.9	10.71
6,489.0	17.78	68.09	6,486.3	-1.0	13.5	5.1	11.93
6,520.0	21.42	69.07	6,515.5	2.8	23.2	4.5	11.79
6,551.0	24.89	69.64	6,544.0	7.1	34.6	3.9	11.22
6,582.0	28.87	69.86	6,571.6	11.9	47.7	3.4	12.84
6,613.0	32.96	68.91	6,598.2	17.5	62.6	2.6	13.29
6,643.0	36.54	68.60	6,622.9	23.7	78.5	1.6	11.95
6,674.0	40.80	67.50	6,647.1	31.0	96.5	0.3	13.92
6,688.0	42.70	66.84	6,657.5	34.6	105.1	-0.5	13.96
<b>Sycamore</b>							
6,705.0	45.02	66.09	6,669.8	39.3	115.9	-1.7	13.96
6,736.0	48.89	65.39	6,690.9	48.6	136.5	-4.1	12.59
6,767.0	53.73	63.72	6,710.3	59.0	158.4	-7.3	16.17
6,798.0	55.75	66.38	6,728.2	69.7	181.3	-10.4	9.57
6,829.0	55.00	71.49	6,745.8	78.9	205.1	-11.8	13.78
6,860.0	55.31	76.27	6,763.5	85.9	229.5	-11.8	12.69
6,890.0	55.47	82.30	6,780.6	90.5	253.8	-7.8	16.55
6,921.0	55.19	86.07	6,798.2	93.1	279.1	-2.5	10.04
6,925.0	55.23	86.37	6,800.5	93.3	282.4	-1.7	6.28
<b>Middlesex</b>							

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EOW Completion Report



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522. GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522. GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)	
6,952.0	55.49	88.41	6,815.9	94.3	304.6	4.2	6.28	
6,983.0	56.16	90.50	6,833.3	94.6	330.3	11.9	5.98	
7,014.0	56.98	93.51	6,850.4	93.6	356.1	20.7	8.52	
7,045.0	57.61	98.44	6,867.1	90.9	382.0	31.3	13.53	
7,076.0	58.41	102.13	6,883.5	86.2	407.9	43.7	10.42	
7,107.0	58.88	106.23	6,899.7	79.7	433.6	57.8	11.39	
7,138.0	58.74	108.46	6,915.7	71.8	458.9	73.2	6.17	
7,168.0	59.48	112.07	6,931.1	62.9	483.0	89.1	10.62	
7,187.0	59.71	114.17	6,940.8	56.5	498.1	99.8	9.61	
<b>Burkett</b>								
7,199.0	59.88	115.49	6,946.8	52.1	507.5	106.9	9.61	
7,230.0	60.78	119.71	6,962.1	39.7	531.4	126.1	12.18	
7,242.0	60.93	120.33	6,968.0	34.4	540.4	133.9	4.71	
<b>Tully</b>								
7,261.0	61.17	121.32	6,977.2	25.9	554.7	146.4	4.71	
7,292.0	62.13	125.08	6,991.9	11.0	577.5	167.7	11.11	
7,323.0	63.77	129.03	7,006.0	-5.7	599.5	190.3	12.52	
7,354.0	66.19	132.19	7,019.1	-24.0	620.9	214.2	12.09	
7,385.0	68.66	135.30	7,031.0	-43.8	641.5	239.4	12.22	
<b>Marcellus</b>								
7,415.0	72.60	137.90	7,041.0	-64.3	661.0	265.0	15.47	
7,446.0	76.93	139.44	7,049.1	-86.8	680.7	292.5	14.77	
7,477.0	79.64	142.52	7,055.4	-110.4	699.8	320.8	13.08	
7,508.0	81.42	146.98	7,060.5	-135.3	717.5	350.0	15.31	
7,539.0	83.71	150.09	7,064.5	-161.5	733.5	379.8	12.39	
7,570.0	87.14	152.76	7,067.0	-188.7	748.3	410.2	14.00	
7,632.0	88.46	159.52	7,069.4	-245.3	773.3	471.8	11.10	
7,669.0	88.81	160.31	7,070.3	-280.0	786.0	508.8	2.33	
7,762.0	89.25	162.34	7,071.8	-368.1	815.8	601.7	2.23	
7,854.0	89.34	161.72	7,073.0	-455.6	844.2	693.7	0.68	
7,947.0	89.60	160.23	7,073.8	-543.5	874.5	786.7	1.63	
8,040.0	90.04	162.95	7,074.1	-631.8	903.9	879.7	2.96	
8,132.0	90.13	162.77	7,074.0	-719.7	931.0	971.7	0.22	
8,225.0	89.46	166.74	7,074.3	-809.4	955.4	1,064.6	4.33	
8,317.0	89.96	164.27	7,074.8	-898.5	978.4	1,156.4	2.74	
8,410.0	90.66	165.41	7,074.3	-988.2	1,002.8	1,249.3	1.44	
8,502.0	89.52	165.85	7,074.1	-1,077.3	1,025.6	1,341.1	1.33	
8,595.0	88.22	163.75	7,076.0	-1,167.1	1,050.0	1,434.0	2.66	
8,687.0	88.55	162.86	7,078.6	-1,255.1	1,076.4	1,525.9	1.03	
8,780.0	87.93	161.28	7,081.4	-1,343.6	1,105.0	1,618.8	1.82	
8,873.0	88.64	160.31	7,084.2	-1,431.4	1,135.6	1,711.8	1.29	
8,965.0	90.66	162.42	7,084.8	-1,518.5	1,165.0	1,803.8	3.17	
9,058.0	89.16	161.19	7,084.9	-1,606.9	1,194.0	1,896.8	2.09	
9,150.0	89.08	159.87	7,086.3	-1,693.6	1,224.7	1,988.7	1.44	
9,243.0	90.04	159.79	7,087.0	-1,780.9	1,256.7	2,081.6	1.04	

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)
9,335.0	90.48	159.26	7,086.6	-1,867.1	1,288.9	2,173.6	0.75
9,428.0	90.13	160.84	7,086.1	-1,954.5	1,320.6	2,266.5	1.74
9,520.0	90.04	162.77	7,086.0	-2,041.9	1,349.4	2,358.5	2.10
9,613.0	89.69	162.86	7,086.2	-2,130.7	1,376.9	2,451.5	0.39
9,705.0	90.66	162.42	7,085.9	-2,218.6	1,404.3	2,543.5	1.16
9,798.0	90.22	164.53	7,085.2	-2,307.7	1,430.8	2,636.4	2.32
9,890.0	89.08	161.81	7,085.8	-2,395.8	1,457.4	2,728.4	3.21
9,983.0	89.25	158.29	7,087.1	-2,483.2	1,489.1	2,821.3	3.79
10,075.0	90.40	160.05	7,087.4	-2,569.1	1,521.8	2,913.2	2.29
10,168.0	90.22	162.77	7,086.9	-2,657.3	1,551.5	3,006.2	2.93
10,261.0	90.75	164.53	7,086.1	-2,746.5	1,577.6	3,099.1	1.98
10,353.0	90.13	162.51	7,085.4	-2,834.7	1,603.7	3,191.1	2.30
10,446.0	90.61	163.88	7,084.8	-2,923.7	1,630.6	3,284.1	1.56
10,538.0	88.81	158.47	7,085.3	-3,010.8	1,660.3	3,376.0	6.20
10,631.0	88.45	158.92	7,087.5	-3,097.4	1,694.1	3,468.8	0.62
10,723.0	89.60	158.82	7,089.1	-3,183.2	1,727.2	3,560.7	1.25
10,818.0	90.22	159.52	7,089.2	-3,272.0	1,761.0	3,655.6	0.98
10,912.0	89.78	160.23	7,089.2	-3,360.3	1,793.4	3,749.5	0.89
11,006.0	88.72	161.10	7,090.5	-3,448.9	1,824.5	3,843.5	1.46
11,100.0	88.81	162.42	7,092.5	-3,538.2	1,853.9	3,937.4	1.41
11,194.0	89.43	162.16	7,093.9	-3,627.7	1,882.5	4,031.4	0.72
11,289.0	89.78	162.25	7,094.6	-3,718.2	1,911.5	4,126.4	0.38
11,384.0	89.96	163.83	7,094.8	-3,809.0	1,939.2	4,221.4	1.67
11,478.0	90.84	163.74	7,094.1	-3,899.3	1,965.5	4,315.4	0.94
11,573.0	90.13	163.74	7,093.3	-3,990.5	1,992.1	4,410.3	0.75
11,667.0	89.43	161.02	7,093.7	-4,080.1	2,020.5	4,504.3	2.99
11,761.0	89.96	159.00	7,094.2	-4,168.4	2,052.7	4,598.2	2.22
11,854.0	89.78	160.49	7,094.4	-4,255.7	2,084.9	4,691.2	1.61
11,946.0	89.87	162.77	7,094.7	-4,343.0	2,113.8	4,783.1	2.48
12,039.0	89.52	164.27	7,095.2	-4,432.1	2,140.2	4,876.1	1.66
12,131.0	89.83	163.70	7,095.7	-4,520.6	2,165.6	4,968.1	0.71
12,224.0	89.87	161.63	7,095.9	-4,609.3	2,193.3	5,061.0	2.23
12,317.0	88.37	157.41	7,097.4	-4,696.4	2,225.8	5,153.9	4.82
12,410.0	88.37	158.47	7,100.0	-4,782.6	2,260.8	5,246.6	1.14
12,502.0	88.81	162.95	7,102.3	-4,869.4	2,291.1	5,338.6	4.89
12,595.0	89.83	163.40	7,103.4	-4,958.4	2,318.1	5,431.5	1.20
12,687.0	90.54	162.26	7,103.1	-5,046.3	2,345.2	5,523.5	1.46
12,780.0	90.48	163.48	7,102.3	-5,135.1	2,372.6	5,616.5	1.31
12,872.0	90.13	165.06	7,101.8	-5,223.7	2,397.5	5,708.4	1.76
12,965.0	88.81	165.68	7,102.6	-5,313.7	2,421.0	5,801.3	1.57
13,057.0	89.78	168.18	7,103.8	-5,403.3	2,441.8	5,892.9	2.91
13,150.0	89.60	168.22	7,104.3	-5,494.3	2,460.8	5,984.4	0.20
13,242.0	89.80	167.56	7,104.8	-5,584.3	2,480.0	6,076.9	0.75
13,335.0	88.81	164.97	7,105.9	-5,674.6	2,502.2	6,169.8	2.98

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)
13,428.0	89.34	162.69	7,107.4	-5,763.9	2,528.1	6,262.6	2.52
13,520.0	89.34	161.28	7,108.4	-5,851.4	2,556.6	6,354.6	1.53
13,612.0	89.52	162.60	7,109.4	-5,938.8	2,585.1	6,446.6	1.45
13,705.0	89.43	161.46	7,110.2	-6,027.3	2,613.8	6,539.6	1.23
13,798.0	89.34	161.02	7,111.2	-6,115.3	2,643.7	6,632.5	0.48
13,891.0	90.31	163.30	7,111.5	-6,203.9	2,672.2	6,725.5	2.66
13,983.0	89.96	160.75	7,111.3	-6,291.4	2,700.6	6,817.5	2.80
14,076.0	89.08	160.49	7,112.1	-6,379.1	2,731.4	6,910.5	0.99
14,168.0	89.08	159.00	7,113.5	-6,465.4	2,763.3	7,002.4	1.62
14,261.0	89.34	158.03	7,114.8	-6,551.9	2,797.3	7,095.2	1.08
14,353.0	89.60	158.47	7,115.7	-6,637.4	2,831.4	7,187.0	0.56
14,446.0	89.60	162.16	7,116.3	-6,724.9	2,862.7	7,280.0	3.97
14,538.0	89.08	163.21	7,117.4	-6,812.7	2,890.1	7,371.9	1.27
14,631.0	89.69	162.25	7,118.4	-6,901.5	2,917.7	7,464.9	1.22
14,723.0	89.78	160.84	7,118.8	-6,988.8	2,946.8	7,556.9	1.54
14,815.0	90.04	159.43	7,118.9	-7,075.3	2,978.1	7,648.9	1.56
14,908.0	89.69	161.02	7,119.2	-7,162.8	3,009.6	7,741.8	1.75
15,001.0	89.69	160.05	7,119.7	-7,250.5	3,040.6	7,834.8	1.04
15,093.0	90.66	163.48	7,119.4	-7,337.9	3,069.3	7,926.8	3.87
15,186.0	90.57	162.69	7,118.4	-7,426.9	3,096.4	8,019.7	0.85
15,278.0	90.66	163.21	7,117.4	-7,514.8	3,123.4	8,111.7	0.57
15,371.0	90.66	161.37	7,116.3	-7,603.4	3,151.7	8,204.7	1.98
15,463.0	90.47	162.09	7,115.4	-7,690.7	3,180.5	8,296.7	0.81
15,556.0	89.78	160.05	7,115.2	-7,778.7	3,210.7	8,389.7	2.32
15,648.0	90.13	161.28	7,115.3	-7,865.5	3,241.1	8,481.7	1.39
15,741.0	90.13	160.84	7,115.1	-7,953.5	3,271.3	8,574.6	0.47
15,834.0	89.34	159.96	7,115.5	-8,041.1	3,302.5	8,667.6	1.27
15,926.0	89.52	163.13	7,116.4	-8,128.3	3,331.6	8,759.6	3.45
16,019.0	88.55	162.69	7,118.0	-8,217.2	3,359.0	8,852.6	1.15
16,111.0	88.81	162.16	7,120.1	-8,304.9	3,386.7	8,944.5	0.64
16,204.0	90.31	163.83	7,120.8	-8,393.8	3,413.9	9,037.5	2.41
16,297.0	89.87	162.34	7,120.7	-8,482.8	3,441.0	9,130.5	1.67
16,389.0	90.10	161.29	7,120.7	-8,570.2	3,469.7	9,222.5	1.17
16,482.0	89.96	160.23	7,120.7	-8,658.0	3,500.3	9,315.5	1.15
16,574.0	89.87	159.87	7,120.8	-8,744.5	3,531.7	9,407.4	0.40
16,667.0	90.04	162.60	7,120.9	-8,832.5	3,561.6	9,500.4	2.94
16,760.0	90.13	161.98	7,120.7	-8,921.1	3,589.9	9,593.4	0.67
16,852.0	90.13	164.09	7,120.5	-9,009.1	3,616.8	9,685.4	2.29
16,945.0	89.78	162.51	7,120.6	-9,098.2	3,643.5	9,778.3	1.74
17,038.0	89.60	161.54	7,121.1	-9,186.7	3,672.2	9,871.3	1.06
17,059.0	90.17	162.59	7,121.1	-9,206.6	3,678.7	9,923.3	5.69
17,118.0	90.17	162.59	7,121.0	-9,262.9	3,696.3	9,981.3	0.00

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Owo Unit 2H
<b>Project:</b>	Tyler County WV	<b>TVD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Site:</b>	Coastal 1 Pad: Berry/Gray/Owo	<b>MD Reference:</b>	Precision 522: GL 1164' + KB 18' @ 1182.0usft
<b>Well:</b>	Owo 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)	
6,688.0	6,657.5	34.6	105.1	Sycamore
6,925.0	6,800.5	93.3	282.4	Middlesex
7,187.0	6,940.8	56.5	498.1	Burkett
7,242.0	6,968.0	34.4	540.4	Tully
7,385.0	7,031.0	-43.8	641.5	Marcellus

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

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