



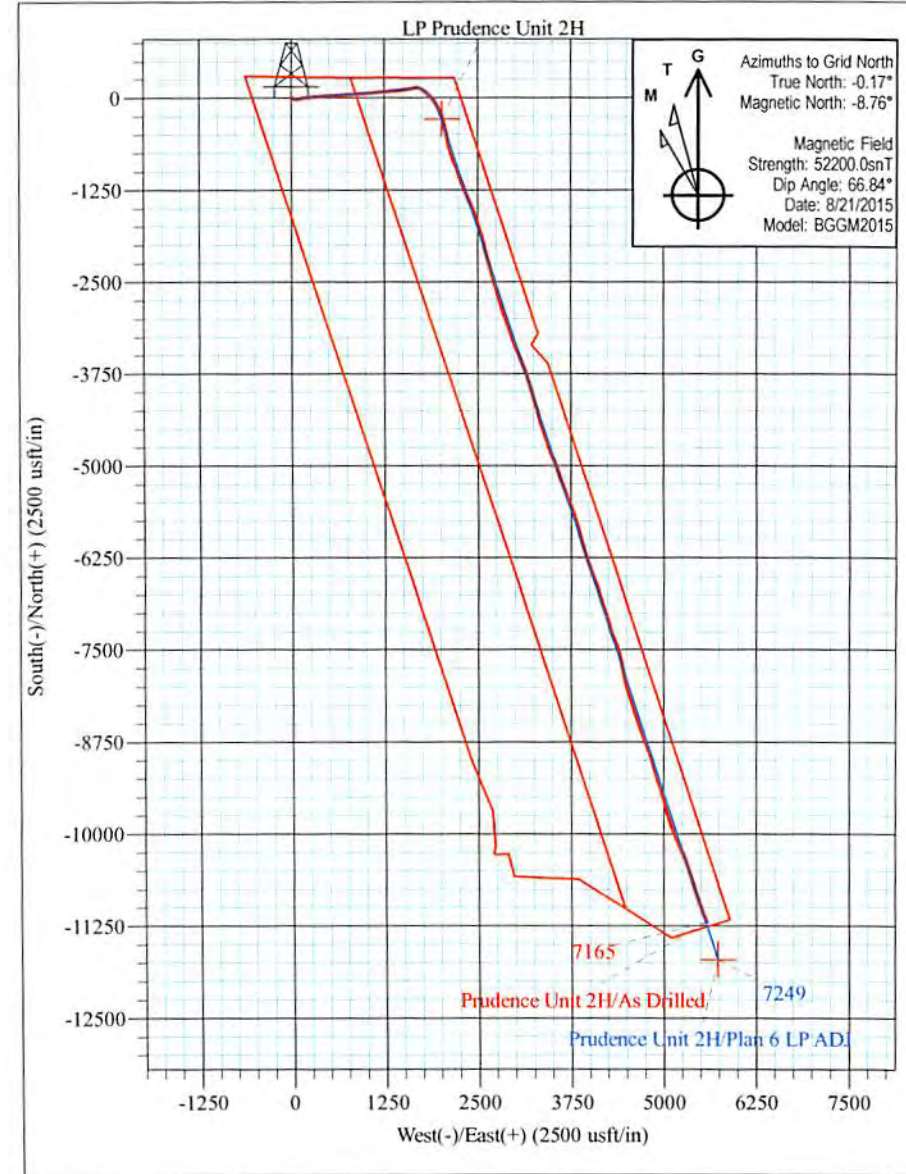
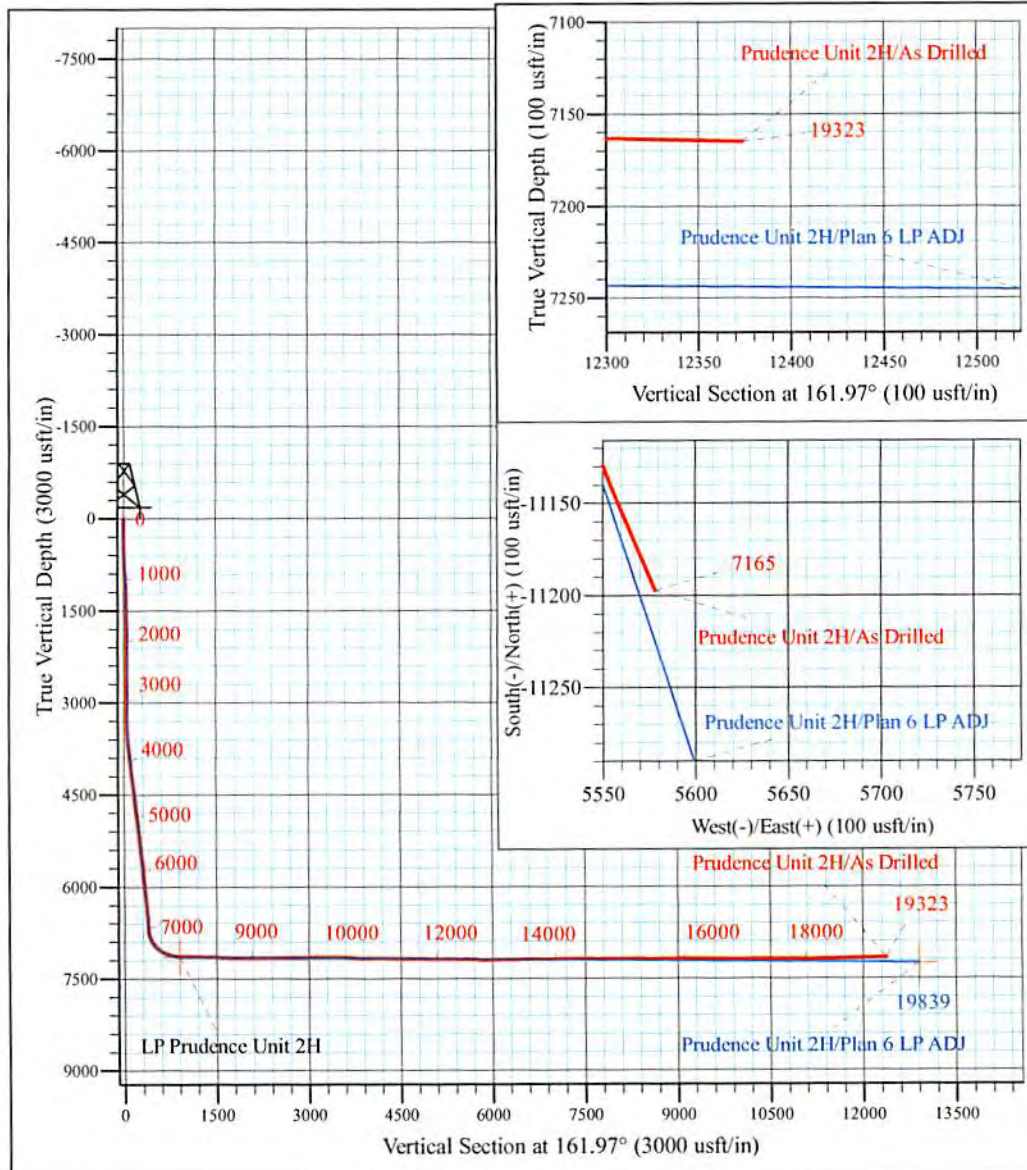
Coastal 2 Pad: Banner/Prudence/Tabor
 Prudence Unit 2H
 Plan 6 LP ADJ
 Precision 525: 1188' GL + 19' KB @ 1207.0usft
 Tyler County WV

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



WELL DETAILS: **Prudence Unit 2H SHL**

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14318121.21	1717796.56	39° 25' 43.109 N	80° 43' 33.496 W

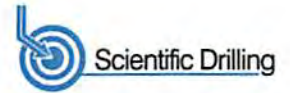


Prudence Unit 2H
Approx. BHL
 39° 23' 52.224 N 80° 42' 22.845 W

Shane Rhodes
 10:07, September 21 2015
 Scientific Drilling International
 124 Vista Drive
 Charlecoi, PA 15022



Scientific Drilling International
Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Project	Tyler County WV, Tyler Co West Virginia		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 17N (84 W to 78 W)		

Site	Coastal 2 Pad: Banner/Prudence/Tabor				
Site Position:	Northing:	14,318,150.53 usft	Latitude:	39° 25' 43.400 N	
From:	Map	Easting:	1,717,756.08 usft	Longitude:	80° 43' 34.011 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.17 °

Well	Prudence Unit 2H, Marcellus					
Well Position	+N/-S	0.0 usft	Northing:	14,318,121.21 usft	Latitude:	39° 25' 43.109 N
	+E/-W	0.0 usft	Easting:	1,717,796.56 usft	Longitude:	80° 43' 33.496 W
Position Uncertainty	2.0 usft		Wellhead Elevation:	1,207.0 usft	Ground Level:	1,188.0 usft

Wellbore	Original Wellpath				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2015	8/21/2015	-8.58	66.84	52,200

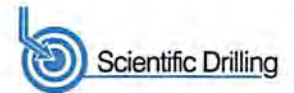
Design	As Drilled				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	161.97	

Survey Program	Date	9/21/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	6,713.7	Survey #6 Def Fin Gyro (Original Wellpath)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
6,733.0	19,323.0	Survey #7 SDI MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.06	230.50	100.0	0.0	0.0	0.0	0.06	0.06	0.00	
First SDI Gyro @ 100 MD										
125.0	0.06	144.81	125.0	-0.1	0.0	0.0	0.33	0.00	-342.76	
150.0	0.11	252.30	150.0	-0.1	-0.1	0.0	0.56	0.20	429.96	
175.0	0.28	246.98	175.0	-0.1	-0.1	0.1	0.68	0.68	-21.28	
200.0	0.16	264.31	200.0	-0.1	-0.2	0.1	0.54	-0.48	69.32	
225.0	0.08	266.46	225.0	-0.1	-0.3	0.0	0.32	-0.32	8.60	
250.0	0.23	238.28	250.0	-0.2	-0.3	0.0	0.66	0.60	-112.72	
275.0	0.35	218.63	275.0	-0.2	-0.4	0.1	0.62	0.48	-78.60	



Scientific Drilling International
Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
300.0	0.36	229.96	300.0	-0.4	-0.5	0.2	0.28	0.04	45.32
325.0	0.35	229.47	325.0	-0.5	-0.7	0.2	0.04	-0.04	-1.96
350.0	0.33	228.05	350.0	-0.6	-0.8	0.3	0.09	-0.08	-5.68
375.0	0.10	248.48	375.0	-0.6	-0.8	0.3	0.96	-0.92	81.72
400.0	0.14	281.87	400.0	-0.6	-0.9	0.3	0.32	0.16	133.56
425.0	0.12	248.51	425.0	-0.6	-0.9	0.3	0.31	-0.08	-133.44
450.0	0.29	144.11	450.0	-0.7	-0.9	0.4	1.36	0.68	-417.60
475.0	0.35	133.30	475.0	-0.8	-0.8	0.5	0.34	0.24	-43.24
500.0	1.12	109.72	500.0	-0.9	-0.6	0.7	3.25	3.08	-94.32
525.0	1.28	108.99	525.0	-1.1	-0.1	1.0	0.64	0.64	-2.92
550.0	1.31	107.96	550.0	-1.3	0.5	1.4	0.15	0.12	-4.12
575.0	1.55	108.10	575.0	-1.5	1.1	1.7	0.96	0.96	0.56
600.0	1.86	105.06	600.0	-1.7	1.8	2.1	1.29	1.24	-12.16
625.0	2.67	103.45	624.9	-1.9	2.7	2.7	3.25	3.24	-6.44
650.0	3.36	103.02	649.9	-2.2	4.0	3.3	2.76	2.76	-1.72
675.0	3.73	102.22	674.9	-2.5	5.5	4.1	1.49	1.48	-3.20
700.0	4.08	100.61	699.8	-2.9	7.2	5.0	1.47	1.40	-6.44
725.0	5.04	102.50	724.7	-3.3	9.1	6.0	3.89	3.84	7.56
750.0	5.12	103.93	749.6	-3.8	11.3	7.1	0.60	0.32	5.72
775.0	5.42	102.77	774.5	-4.3	13.5	8.3	1.27	1.20	-4.64
800.0	5.79	104.38	799.4	-4.9	15.9	9.6	1.61	1.48	6.44
823.6	6.13	103.25	822.9	-5.5	18.3	10.9	1.52	1.44	-4.79
849.4	6.22	102.87	848.5	-6.1	21.0	12.3	0.38	0.35	-1.47
872.8	6.29	103.05	871.8	-6.7	23.5	13.6	0.31	0.30	0.77
898.6	6.32	103.63	897.4	-7.3	26.2	15.1	0.27	0.12	2.25
924.3	6.53	103.69	922.9	-8.0	29.0	16.6	0.82	0.82	0.23
947.8	6.36	102.46	946.3	-8.6	31.6	18.0	0.93	-0.72	-5.23
974.0	6.49	102.85	972.4	-9.3	34.5	19.5	0.52	0.50	1.49
997.9	6.42	103.99	996.1	-9.9	37.1	20.9	0.61	-0.29	4.78
1,023.7	6.34	102.52	1,021.8	-10.5	39.9	22.4	0.70	-0.31	-5.69
1,049.5	6.38	104.20	1,047.4	-11.2	42.6	23.8	0.74	0.16	6.52
1,073.7	5.76	102.12	1,071.5	-11.8	45.1	25.2	2.71	-2.56	-8.58
1,099.9	5.24	99.98	1,097.5	-12.3	47.6	26.4	2.14	-1.99	-8.18
1,123.0	5.08	99.57	1,120.5	-12.6	49.6	27.4	0.71	-0.69	-1.77
1,149.1	5.09	99.28	1,146.5	-13.0	51.9	28.4	0.11	0.04	-1.11
1,174.3	4.58	99.69	1,171.7	-13.3	54.0	29.4	2.02	-2.02	1.62
1,199.6	4.49	102.27	1,196.9	-13.7	56.0	30.4	0.86	-0.36	10.21
1,224.9	4.15	101.87	1,222.1	-14.1	57.8	31.3	1.35	-1.34	-1.58
1,248.4	3.89	102.05	1,245.5	-14.5	59.5	32.2	1.11	-1.11	0.77
1,274.0	3.57	102.41	1,271.1	-14.8	61.1	33.0	1.25	-1.25	1.41
1,299.3	3.23	100.13	1,296.3	-15.1	62.6	33.7	1.45	-1.34	-9.02
1,323.4	3.07	101.39	1,320.4	-15.4	63.9	34.4	0.72	-0.67	5.24
1,348.6	2.86	101.98	1,345.6	-15.6	65.1	35.0	0.84	-0.83	2.33



Scientific Drilling International
Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

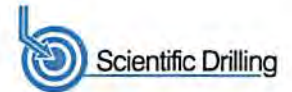
Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,373.8	2.75	101.80	1,370.8	-15.9	66.3	35.6	0.44	-0.44	-0.71
1,399.8	2.33	104.59	1,396.7	-16.1	67.5	36.2	1.68	-1.62	10.73
1,422.6	2.16	102.70	1,419.5	-16.3	68.3	36.7	0.81	-0.75	-8.29
1,447.8	1.81	105.39	1,444.7	-16.6	69.2	37.2	1.43	-1.39	10.65
1,473.1	1.76	108.11	1,470.0	-16.8	69.9	37.6	0.39	-0.20	10.77
1,499.2	1.59	106.44	1,496.1	-17.0	70.7	38.0	0.68	-0.65	-6.39
1,524.4	1.39	109.79	1,521.2	-17.2	71.3	38.4	0.87	-0.79	13.30
1,550.0	1.27	111.19	1,546.8	-17.4	71.8	38.8	0.49	-0.47	5.47
1,572.9	1.10	117.82	1,569.7	-17.6	72.3	39.1	0.95	-0.74	28.95
1,598.4	1.03	114.13	1,595.2	-17.8	72.7	39.4	0.38	-0.27	-14.46
1,623.6	0.98	122.34	1,620.5	-18.0	73.1	39.8	0.60	-0.20	32.50
1,648.9	0.85	119.72	1,645.7	-18.2	73.4	40.1	0.54	-0.51	-10.38
1,674.2	0.73	124.86	1,671.0	-18.4	73.7	40.3	0.55	-0.48	20.35
1,699.8	0.70	126.03	1,696.7	-18.6	74.0	40.6	0.13	-0.12	4.56
1,723.2	0.65	121.91	1,720.0	-18.8	74.2	40.8	0.30	-0.21	-17.65
1,748.4	0.51	120.32	1,745.2	-18.9	74.4	41.0	0.56	-0.56	-6.31
1,774.3	0.42	119.78	1,771.1	-19.0	74.6	41.2	0.35	-0.35	-2.08
1,799.6	0.48	125.09	1,796.4	-19.1	74.8	41.3	0.29	0.24	21.00
1,824.9	0.60	139.42	1,821.7	-19.3	75.0	41.5	0.71	0.47	56.66
1,847.9	0.51	123.73	1,844.7	-19.4	75.1	41.7	0.77	-0.39	-68.34
1,874.0	0.57	134.13	1,870.8	-19.6	75.3	41.9	0.44	0.23	39.83
1,899.3	0.60	124.07	1,896.1	-19.7	75.5	42.1	0.42	0.12	-39.76
1,924.6	0.48	126.74	1,921.4	-19.9	75.7	42.3	0.48	-0.47	10.56
1,950.0	0.37	103.90	1,946.8	-20.0	75.9	42.5	0.79	-0.43	-89.82
1,972.9	0.32	90.20	1,969.8	-20.0	76.0	42.5	0.42	-0.22	-59.67
1,999.9	0.33	100.03	1,996.7	-20.0	76.2	42.6	0.21	0.04	36.49
2,025.0	0.39	121.99	2,021.8	-20.0	76.3	42.7	0.59	0.24	87.52
2,049.6	0.47	118.81	2,046.5	-20.1	76.5	42.8	0.34	0.32	-12.89
2,074.3	0.32	76.18	2,071.1	-20.2	76.6	42.9	1.30	-0.61	-173.08
2,098.7	0.13	161.69	2,095.5	-20.2	76.7	42.9	1.37	-0.78	349.88
2,124.9	0.11	78.75	2,121.7	-20.2	76.7	43.0	0.61	-0.08	-316.93
2,149.8	0.07	108.94	2,146.6	-20.2	76.8	43.0	0.24	-0.16	121.05
2,174.5	0.07	152.45	2,171.3	-20.2	76.8	43.0	0.21	0.00	176.37
2,199.6	0.17	171.79	2,196.4	-20.3	76.8	43.0	0.42	0.40	77.11
2,224.2	0.02	202.88	2,221.0	-20.3	76.8	43.1	0.62	-0.61	126.18
2,249.3	0.14	161.29	2,246.1	-20.3	76.8	43.1	0.50	0.48	-166.09
2,273.9	0.08	132.91	2,270.7	-20.4	76.8	43.2	0.32	-0.24	-114.99
2,298.6	0.06	132.33	2,295.4	-20.4	76.8	43.2	0.08	-0.08	-2.36
2,323.7	0.06	191.23	2,320.5	-20.4	76.9	43.2	0.23	0.00	234.57
2,348.6	0.10	123.37	2,345.4	-20.5	76.9	43.2	0.38	0.16	-271.88
2,373.8	0.17	146.65	2,370.6	-20.5	76.9	43.3	0.35	0.28	92.64
2,399.2	0.18	71.05	2,396.0	-20.5	77.0	43.3	0.84	0.04	-297.40
2,424.3	0.01	175.14	2,421.1	-20.5	77.0	43.3	0.73	-0.68	414.87



Scientific Drilling International

Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,450.0	0.14	101.98	2,446.8	-20.5	77.0	43.4	0.53	0.51	-284.67
2,474.1	0.07	154.39	2,470.9	-20.5	77.1	43.4	0.46	-0.29	217.11
2,499.9	0.09	139.30	2,496.7	-20.6	77.1	43.4	0.11	0.08	-58.44
2,549.7	0.24	277.27	2,546.5	-20.6	77.0	43.4	0.63	0.30	277.44
2,574.3	0.18	284.67	2,571.1	-20.6	76.9	43.4	0.27	-0.24	30.01
2,599.3	0.26	279.94	2,596.1	-20.5	76.8	43.3	0.33	0.32	-18.93
2,623.6	0.31	272.32	2,620.4	-20.5	76.7	43.3	0.26	0.21	-31.33
2,649.9	0.25	282.47	2,646.7	-20.5	76.6	43.2	0.30	-0.23	38.59
2,674.9	0.29	271.19	2,671.7	-20.5	76.5	43.2	0.27	0.16	-45.08
2,699.3	0.36	260.33	2,696.1	-20.5	76.3	43.1	0.38	0.29	-44.62
2,724.3	0.40	258.60	2,721.1	-20.5	76.2	43.1	0.17	0.16	-6.91
2,749.5	0.31	261.59	2,746.3	-20.6	76.0	43.1	0.36	-0.36	11.87
2,774.5	0.44	253.41	2,771.3	-20.6	75.9	43.1	0.56	0.52	-32.68
2,799.8	0.41	262.81	2,796.6	-20.6	75.7	43.1	0.30	-0.12	37.21
2,824.4	0.38	254.82	2,821.2	-20.7	75.5	43.0	0.25	-0.12	-32.47
2,849.8	0.28	251.70	2,846.6	-20.7	75.4	43.0	0.40	-0.39	-12.30
2,874.4	1.17	87.20	2,871.2	-20.7	75.6	43.1	5.87	3.62	-669.24
2,898.4	1.73	84.58	2,895.2	-20.7	76.2	43.2	2.35	2.33	-10.90
2,923.8	2.13	75.89	2,920.6	-20.5	77.0	43.4	1.94	1.57	-34.13
2,949.6	2.58	76.30	2,946.3	-20.3	78.0	43.4	1.75	1.75	1.59
2,974.3	4.12	77.95	2,971.0	-20.0	79.4	43.6	6.25	6.23	6.68
2,998.9	4.31	77.32	2,995.5	-19.6	81.2	43.7	0.79	0.77	-2.56
3,024.9	4.74	76.06	3,021.4	-19.1	83.2	43.9	1.70	1.65	-4.84
3,049.8	5.75	77.06	3,046.2	-18.6	85.4	44.1	4.08	4.06	4.02
3,074.1	6.74	76.36	3,070.4	-18.0	88.0	44.3	4.08	4.07	-2.87
3,099.5	6.99	75.37	3,095.6	-17.2	90.9	44.5	1.09	0.98	-3.90
3,123.8	7.17	74.68	3,119.7	-16.4	93.8	44.7	0.82	0.74	-2.85
3,149.5	8.53	74.67	3,145.2	-15.5	97.2	44.8	5.28	5.28	-0.04
3,173.9	9.00	74.56	3,169.3	-14.5	100.8	45.0	1.93	1.93	-0.45
3,199.7	8.75	74.59	3,194.8	-13.5	104.6	45.2	0.97	-0.97	0.12
3,224.6	9.30	74.88	3,219.4	-12.4	108.4	45.4	2.21	2.21	1.16
3,249.6	10.47	75.54	3,244.1	-11.4	112.6	45.6	4.70	4.68	2.64
3,274.0	10.98	74.53	3,268.0	-10.2	116.9	45.9	2.23	2.10	-4.15
3,299.2	11.11	74.15	3,292.8	-8.9	121.6	46.1	0.59	0.51	-1.50
3,323.9	11.94	76.57	3,317.0	-7.6	126.4	46.4	3.89	3.36	9.80
3,349.3	12.92	76.71	3,341.8	-6.4	131.7	46.8	3.86	3.85	0.55
3,374.9	13.07	76.91	3,366.6	-5.1	137.3	47.3	0.61	0.59	0.78
3,399.7	13.13	77.16	3,390.8	-3.8	142.8	47.8	0.33	0.24	1.01
3,424.2	13.90	80.41	3,414.7	-2.7	148.4	48.5	4.40	3.14	13.24
3,449.2	14.75	80.84	3,438.9	-1.7	154.5	49.4	3.43	3.40	1.72
3,474.8	15.04	80.52	3,463.6	-0.6	161.0	50.4	1.18	1.13	-1.25
3,499.5	15.79	80.59	3,487.5	0.5	167.5	51.4	3.03	3.03	0.28
3,524.1	16.11	80.74	3,511.1	1.6	174.1	52.4	1.31	1.30	0.61
3,549.1	17.11	80.17	3,535.0	2.7	181.2	53.5	4.06	4.01	-2.29



Scientific Drilling International
Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,574.5	17.94	80.51	3,559.2	4.0	188.7	54.6	3.29	3.27	1.34
3,599.6	18.41	82.43	3,583.1	5.2	196.4	55.9	3.03	1.87	7.64
3,624.0	19.21	83.14	3,606.2	6.2	204.3	57.4	3.40	3.27	2.90
3,649.9	20.44	83.65	3,630.6	7.2	213.0	59.1	4.80	4.76	1.97
3,674.5	21.62	84.66	3,653.5	8.1	221.8	61.0	5.02	4.80	4.11
3,699.7	23.15	86.23	3,676.9	8.8	231.3	63.2	6.50	6.05	6.21
3,724.2	24.46	86.43	3,699.2	9.5	241.2	65.6	5.37	5.36	0.82
3,749.0	25.08	86.40	3,721.8	10.1	251.6	68.2	2.50	2.50	-0.12
3,774.4	25.08	85.15	3,744.8	10.9	262.3	70.8	2.08	0.00	-4.92
3,799.8	25.13	84.63	3,767.8	11.9	273.0	73.2	0.89	0.20	-2.05
3,824.0	26.18	84.55	3,789.6	12.9	283.5	75.5	4.34	4.33	-0.33
3,848.9	26.49	84.98	3,812.0	13.9	294.5	78.0	1.46	1.24	1.72
3,874.4	26.77	86.72	3,834.7	14.7	305.9	80.7	3.26	1.10	6.84
3,899.4	26.60	86.79	3,857.0	15.3	317.1	83.6	0.69	-0.68	0.28
3,924.9	26.79	86.67	3,879.8	16.0	328.5	86.5	0.77	0.74	-0.47
3,949.7	26.64	86.57	3,901.9	16.6	339.6	89.3	0.63	-0.61	-0.40
3,975.0	27.16	86.66	3,924.5	17.3	351.1	92.2	2.06	2.06	0.36
3,999.4	27.17	85.77	3,946.2	18.1	362.2	94.9	1.67	0.04	-3.65
4,024.1	27.48	85.87	3,968.2	18.9	373.5	97.6	1.27	1.25	0.40
4,049.5	27.70	85.78	3,990.7	19.7	385.2	100.5	0.88	0.87	-0.35
4,074.8	27.73	85.50	4,013.1	20.6	397.0	103.2	0.53	0.12	-1.11
4,100.0	27.17	84.70	4,035.4	21.6	408.5	105.9	2.66	-2.22	-3.18
4,123.6	27.08	84.70	4,056.7	22.6	419.4	108.3	0.38	-0.38	0.00
4,150.0	27.04	84.98	4,080.0	23.7	431.2	110.9	0.51	-0.15	1.07
4,174.1	26.67	84.89	4,101.5	24.7	442.1	113.4	1.54	-1.53	-0.37
4,199.7	27.39	84.86	4,124.3	25.7	453.6	116.0	2.82	2.82	-0.12
4,224.4	26.82	85.67	4,146.3	26.6	464.9	118.6	2.75	-2.31	3.28
4,249.7	27.04	85.91	4,168.8	27.5	476.3	121.3	0.97	0.87	0.95
4,274.0	26.59	85.41	4,190.5	28.3	487.2	123.9	2.07	-1.85	-2.05
4,298.9	26.31	85.77	4,212.8	29.1	498.3	126.5	1.30	-1.13	1.45
4,324.2	25.31	87.80	4,235.6	29.8	509.3	129.3	5.27	-3.95	8.02
4,349.5	25.11	87.89	4,258.5	30.2	520.0	132.3	0.80	-0.79	0.36
4,374.4	24.75	87.93	4,281.0	30.6	530.5	135.1	1.45	-1.45	0.16
4,399.9	24.86	88.45	4,304.2	30.9	541.2	138.1	0.96	0.43	2.03
4,424.7	24.44	89.41	4,326.7	31.1	551.5	141.1	2.35	-1.70	3.88
4,449.1	23.97	88.92	4,349.0	31.2	561.6	144.1	2.09	-1.92	-2.00
4,474.4	24.02	88.54	4,372.1	31.5	571.9	147.1	0.64	0.20	-1.50
4,499.2	24.25	88.39	4,394.8	31.7	582.0	150.0	0.96	0.93	-0.60
4,524.0	24.51	88.13	4,417.4	32.0	592.2	152.8	1.13	1.05	-1.05
4,549.3	23.37	85.86	4,440.4	32.6	602.5	155.5	5.81	-4.52	-9.00
4,573.9	23.66	85.70	4,463.0	33.3	612.3	157.8	1.20	1.18	-0.65
4,599.4	24.26	85.15	4,486.3	34.1	622.6	160.2	2.51	2.35	-2.16
4,624.0	24.28	84.13	4,508.7	35.1	632.6	162.5	1.71	0.08	-4.15



Scientific Drilling International
Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,649.7	24.28	83.57	4,532.2	36.2	643.1	164.6	0.90	0.00	-2.18	
4,674.8	24.68	84.78	4,555.1	37.3	653.5	166.8	2.55	1.59	4.81	
4,699.7	25.29	84.95	4,577.6	38.2	664.0	169.2	2.47	2.46	0.68	
4,724.5	24.81	84.46	4,600.0	39.2	674.4	171.5	2.11	-1.94	-1.98	
4,749.8	24.29	84.68	4,623.1	40.2	684.9	173.8	2.08	-2.05	0.87	
4,774.5	24.21	85.59	4,645.6	41.0	695.0	176.1	1.55	-0.32	3.69	
4,798.8	24.14	85.37	4,667.8	41.8	704.9	178.4	0.47	-0.29	-0.90	
4,824.4	24.28	85.09	4,691.1	42.7	715.4	180.8	0.71	0.55	-1.10	
4,849.5	24.45	85.83	4,713.9	43.5	725.7	183.2	1.39	0.68	2.95	
4,874.6	24.67	86.60	4,736.8	44.2	736.1	185.8	1.54	0.87	3.06	
4,899.1	24.93	88.15	4,759.0	44.7	746.4	188.6	2.86	1.06	6.33	
4,923.5	25.50	88.77	4,781.1	44.9	756.8	191.5	2.57	2.33	2.54	
4,949.3	25.91	89.10	4,804.4	45.1	768.0	194.8	1.69	1.59	1.28	
4,973.9	26.14	89.34	4,826.4	45.3	778.7	198.0	1.03	0.94	0.98	
4,999.1	26.42	89.37	4,849.1	45.4	789.9	201.3	1.11	1.11	0.12	
5,024.9	26.15	88.88	4,872.2	45.6	801.3	204.7	1.34	-1.05	-1.90	
5,049.8	25.92	88.15	4,894.5	45.9	812.3	207.8	1.58	-0.92	-2.93	
5,074.6	25.59	87.15	4,916.9	46.3	823.0	210.7	2.20	-1.33	-4.04	
5,099.6	25.55	86.29	4,939.5	46.9	833.8	213.4	1.49	-0.16	-3.43	
5,124.3	25.61	86.23	4,961.7	47.6	844.4	216.1	0.26	0.24	-0.24	
5,149.1	25.97	85.98	4,984.0	48.4	855.2	218.7	1.52	1.45	-1.01	
5,174.1	25.74	84.72	5,006.5	49.2	866.1	221.2	2.38	-0.92	-5.04	
5,199.9	26.01	84.63	5,029.7	50.3	877.3	223.7	1.06	1.05	-0.35	
5,224.9	26.06	84.60	5,052.2	51.3	888.2	226.1	0.21	0.20	-0.12	
5,249.8	26.16	84.42	5,074.6	52.4	899.1	228.5	0.51	0.40	-0.72	
5,274.6	26.11	84.13	5,096.8	53.5	910.0	230.8	0.55	-0.20	-1.17	
5,299.6	25.80	85.50	5,119.3	54.5	920.9	233.2	2.70	-1.24	5.48	
5,324.9	26.14	86.06	5,142.1	55.3	931.9	235.9	1.66	1.34	2.21	
5,349.8	25.44	85.64	5,164.5	56.0	942.7	238.5	2.90	-2.81	-1.68	
5,374.8	25.42	85.35	5,187.1	56.9	953.4	241.0	0.50	-0.08	-1.16	
5,399.0	25.29	85.49	5,208.9	57.7	963.8	243.4	0.59	-0.54	0.58	
5,424.5	25.28	85.29	5,232.0	58.6	974.6	245.9	0.34	-0.04	-0.78	
5,449.1	24.50	84.34	5,254.3	59.5	984.9	248.2	3.57	-3.17	-3.87	
5,474.1	24.57	84.27	5,277.1	60.6	995.3	250.5	0.30	0.28	-0.28	
5,499.7	24.76	84.15	5,300.3	61.6	1,005.9	252.7	0.77	0.74	-0.47	
5,524.4	24.29	83.28	5,322.8	62.8	1,016.1	254.8	2.40	-1.90	-3.52	
5,549.3	24.46	83.07	5,345.5	64.0	1,026.3	256.8	0.77	0.68	-0.84	
5,574.8	24.93	84.67	5,368.7	65.1	1,036.9	259.0	3.20	1.84	6.27	
5,599.9	25.42	85.10	5,391.4	66.1	1,047.5	261.4	2.09	1.95	1.71	
5,624.3	24.98	84.71	5,413.4	67.0	1,057.9	263.7	1.93	-1.80	-1.60	
5,649.7	25.39	85.06	5,436.4	68.0	1,068.6	266.1	1.72	1.62	1.38	
5,674.9	25.77	86.30	5,459.2	68.8	1,079.5	268.7	2.60	1.51	4.91	
5,699.2	25.60	87.13	5,481.0	69.4	1,090.0	271.4	1.64	-0.70	3.42	



Scientific Drilling International
Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,723.8	25.55	87.50	5,503.2	69.9	1,100.6	274.2	0.68	-0.20	1.50	
5,749.7	25.72	87.74	5,526.6	70.3	1,111.8	277.2	0.77	0.66	0.93	
5,774.1	26.17	87.64	5,548.5	70.8	1,122.5	280.1	1.86	1.85	-0.41	
5,799.0	26.11	87.41	5,570.9	71.2	1,133.4	283.1	0.47	-0.24	-0.92	
5,824.7	26.47	86.82	5,593.9	71.8	1,144.8	286.0	1.73	1.40	-2.30	
5,849.3	25.77	85.73	5,616.1	72.5	1,155.6	288.7	3.44	-2.84	-4.42	
5,874.8	25.51	84.92	5,639.0	73.4	1,166.6	291.3	1.72	-1.02	-3.19	
5,899.9	25.26	83.71	5,661.6	74.5	1,177.3	293.6	2.30	-1.00	-4.82	
5,924.4	24.68	83.02	5,683.9	75.7	1,187.6	295.6	2.65	-2.36	-2.81	
5,949.4	24.91	82.11	5,706.6	77.0	1,198.0	297.5	1.78	0.92	-3.63	
5,974.9	24.50	81.53	5,729.7	78.5	1,208.5	299.4	1.87	-1.61	-2.28	
5,999.4	24.80	81.25	5,752.0	80.1	1,218.6	301.0	1.31	1.22	-1.14	
6,024.4	24.84	82.64	5,774.7	81.5	1,229.0	302.8	2.34	0.16	5.57	
6,049.8	24.87	82.90	5,797.8	82.9	1,239.6	304.9	0.45	0.12	1.02	
6,073.9	24.45	82.86	5,819.7	84.1	1,249.6	306.8	1.75	-1.74	-0.17	
6,099.1	24.75	83.23	5,842.6	85.4	1,260.0	308.8	1.34	1.19	1.47	
6,124.2	25.20	84.05	5,865.4	86.6	1,270.5	310.9	2.26	1.79	3.26	
6,149.8	24.46	84.09	5,888.5	87.7	1,281.2	313.2	2.90	-2.90	0.16	
6,174.7	24.26	84.26	5,911.2	88.7	1,291.4	315.3	0.86	-0.80	0.76	
6,199.4	24.15	85.40	5,933.7	89.6	1,301.5	317.6	1.91	-0.45	4.53	
6,224.0	24.46	86.01	5,956.2	90.4	1,311.6	320.0	1.62	1.26	2.47	
6,249.3	23.70	85.97	5,979.3	91.1	1,321.9	322.5	3.01	-3.01	-0.16	
6,274.7	23.51	85.73	6,002.6	91.9	1,332.1	324.9	0.84	-0.75	-0.94	
6,299.8	24.10	85.37	6,025.6	92.6	1,342.2	327.3	2.42	2.35	-1.43	
6,324.5	23.75	85.14	6,048.1	93.5	1,352.1	329.6	1.47	-1.42	-0.93	
6,349.1	23.45	84.91	6,070.7	94.3	1,362.0	331.8	1.27	-1.22	-0.93	
6,374.4	23.62	84.87	6,093.8	95.2	1,372.0	334.1	0.68	0.67	-0.16	
6,399.9	24.33	85.05	6,117.1	96.1	1,382.3	336.4	2.80	2.79	0.71	
6,424.5	24.03	84.59	6,139.6	97.1	1,392.4	338.7	1.44	-1.22	-1.87	
6,449.8	24.14	84.15	6,162.7	98.1	1,402.6	340.9	0.83	0.44	-1.74	
6,474.7	24.90	84.02	6,185.3	99.1	1,412.9	343.1	3.06	3.05	-0.52	
6,499.3	25.46	84.06	6,207.6	100.2	1,423.3	345.2	2.28	2.28	0.16	
6,525.0	25.37	83.74	6,230.8	101.4	1,434.3	347.5	0.64	-0.35	-1.24	
6,549.1	25.83	84.00	6,252.6	102.5	1,444.7	349.7	1.96	1.91	1.08	
6,574.3	26.02	84.17	6,275.2	103.6	1,455.6	352.0	0.81	0.75	0.68	
6,599.2	26.40	84.25	6,297.5	104.7	1,466.5	354.3	1.53	1.53	0.32	
6,624.4	26.61	84.36	6,320.1	105.9	1,477.8	356.7	0.85	0.83	0.44	
6,649.8	27.09	84.51	6,342.8	107.0	1,489.2	359.2	1.91	1.89	0.59	
6,674.6	27.29	84.25	6,364.8	108.1	1,500.4	361.6	0.94	0.81	-1.05	
6,699.3	27.01	83.30	6,386.8	109.3	1,511.7	363.9	2.08	-1.13	-3.84	
6,713.0	27.19	82.72	6,399.0	110.1	1,517.8	365.1	2.34	1.32	-4.25	
Last SDI Gyro @ 6713 MD										
6,713.7	27.20	82.69	6,399.6	110.1	1,518.2	365.2	2.34	1.33	-4.22	
6,733.0	27.29	80.07	6,416.8	111.4	1,526.9	366.6	6.23	0.47	-13.58	



Scientific Drilling International

Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
First SDI MWD @ 6733 MD									
6,823.0	25.80	78.95	6,497.3	118.7	1,566.4	371.9	1.75	-1.66	-1.24
6,913.0	24.91	80.50	6,578.6	125.6	1,604.4	377.1	1.23	-0.99	1.72
7,003.0	26.18	81.14	6,659.8	131.8	1,642.7	383.1	1.44	1.41	0.71
7,047.0	25.09	79.69	6,699.5	135.0	1,661.4	385.9	2.86	-2.48	-3.30
7,055.0	25.48	80.73	6,706.7	135.6	1,664.8	386.4	7.37	4.83	13.04
Sycamore @ 7055 MD									
7,092.0	27.35	85.19	6,739.9	137.5	1,681.1	389.5	7.37	5.06	12.04
7,137.0	27.56	98.54	6,779.8	136.9	1,701.7	396.6	13.66	0.47	29.67
7,182.0	28.26	110.39	6,819.6	131.6	1,722.0	407.9	12.41	1.56	26.33
7,227.0	31.73	119.53	6,858.6	122.1	1,742.3	423.2	12.73	7.71	20.31
7,242.0	32.92	120.79	6,871.3	118.0	1,749.3	429.2	9.13	7.95	8.42
Middlesex @ 7242 MD									
7,272.0	35.34	123.09	6,896.1	109.1	1,763.5	442.1	9.13	8.06	7.66
7,317.0	40.77	126.68	6,931.5	93.2	1,786.3	464.2	13.03	12.07	7.98
7,361.0	44.95	129.95	6,963.8	74.6	1,809.7	489.2	10.76	9.50	7.43
7,406.0	50.18	133.44	6,994.2	52.5	1,834.5	517.8	12.95	11.62	7.76
7,430.0	52.38	135.11	7,009.2	39.5	1,847.9	534.4	10.67	9.18	6.98
Burkett @ 7430 MD									
7,451.0	54.33	136.50	7,021.7	27.4	1,859.6	549.5	10.67	9.27	6.60
7,480.0	57.17	139.89	7,038.0	9.5	1,875.6	571.5	13.77	9.81	11.70
Tully @ 7480 MD									
7,496.0	58.78	141.67	7,046.5	-1.0	1,884.1	584.1	13.77	10.04	11.11
7,541.0	63.48	145.53	7,068.2	-32.7	1,907.5	621.5	12.86	10.44	8.58
7,586.0	68.05	149.72	7,086.7	-67.4	1,929.4	661.3	13.23	10.16	9.31
7,631.0	71.44	152.48	7,102.3	-104.3	1,949.8	702.7	9.48	7.53	6.13
7,644.0	72.40	152.91	7,106.3	-115.3	1,955.5	714.9	7.98	7.35	3.29
MRCL_HOT @ 7644 MD									
7,676.0	74.75	153.94	7,115.4	-142.8	1,969.2	745.2	7.98	7.36	3.23
7,721.0	78.03	157.59	7,126.0	-182.6	1,987.2	788.7	10.74	7.29	8.11
7,765.0	81.91	160.39	7,133.6	-223.1	2,002.7	832.0	10.82	8.82	6.36
7,817.0	86.81	163.20	7,138.7	-272.2	2,018.8	883.7	10.85	9.42	5.40
7,907.0	90.27	163.29	7,141.0	-358.3	2,044.8	973.6	3.85	3.84	0.10
7,997.0	89.60	165.21	7,141.1	-445.0	2,069.2	1,063.6	2.26	-0.74	2.13
8,086.0	89.37	169.15	7,141.9	-531.7	2,088.9	1,152.2	4.43	-0.26	4.43
8,176.0	88.18	170.27	7,143.9	-620.3	2,105.0	1,241.3	1.82	-1.32	1.24
8,265.0	87.46	164.26	7,147.2	-707.0	2,124.6	1,329.8	6.80	-0.81	-6.75
8,355.0	90.05	159.50	7,149.2	-792.4	2,152.6	1,419.8	6.02	2.88	-5.29
8,445.0	87.56	157.36	7,151.1	-876.1	2,185.7	1,509.6	3.65	-2.77	-2.38
8,534.0	87.09	160.06	7,155.2	-958.9	2,217.9	1,598.3	3.08	-0.53	3.03
8,624.0	87.97	158.59	7,159.1	-1,043.1	2,249.7	1,688.2	1.90	0.98	-1.63
8,714.0	90.93	160.43	7,160.0	-1,127.4	2,281.2	1,778.0	3.87	3.29	2.04
8,803.0	90.15	159.74	7,159.1	-1,211.0	2,311.5	1,867.0	1.17	-0.88	-0.78
8,893.0	89.04	158.12	7,159.8	-1,295.0	2,343.8	1,956.9	2.18	-1.23	-1.80



Scientific Drilling International
Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,983.0	90.62	160.74	7,160.0	-1,379.3	2,375.5	2,046.8	3.40	1.76	2.91
9,072.0	88.57	155.54	7,160.7	-1,461.8	2,408.6	2,135.5	6.28	-2.30	-5.84
9,162.0	89.11	158.55	7,162.5	-1,544.7	2,443.7	2,225.2	3.40	0.60	3.34
9,251.0	90.78	165.36	7,162.6	-1,629.2	2,471.2	2,314.1	7.88	1.88	7.65
9,341.0	89.14	160.16	7,162.6	-1,715.2	2,497.9	2,404.1	6.06	-1.82	-5.78
9,431.0	89.24	161.73	7,163.9	-1,800.2	2,527.3	2,494.0	1.75	0.11	1.74
9,520.0	91.19	164.40	7,163.6	-1,885.3	2,553.2	2,583.0	3.71	2.19	3.00
9,610.0	90.78	164.90	7,162.0	-1,972.1	2,577.0	2,672.9	0.72	-0.46	0.56
9,699.0	91.35	166.61	7,160.4	-2,058.4	2,598.9	2,761.7	2.02	0.64	1.92
9,789.0	89.57	164.68	7,159.7	-2,145.5	2,621.2	2,851.5	2.92	-1.98	-2.14
9,878.0	90.98	167.60	7,159.2	-2,231.9	2,642.5	2,940.2	3.64	1.58	3.28
9,968.0	91.28	162.82	7,157.4	-2,318.9	2,665.5	3,030.1	5.32	0.33	-5.31
10,058.0	89.40	160.16	7,156.9	-2,404.2	2,694.1	3,120.0	3.62	-2.09	-2.96
10,148.0	91.14	166.60	7,156.5	-2,490.4	2,719.8	3,210.0	7.41	1.93	7.16
10,237.0	88.19	161.96	7,157.0	-2,576.1	2,743.9	3,298.9	6.18	-3.31	-5.21
10,327.0	89.97	164.89	7,158.5	-2,662.3	2,769.6	3,388.8	3.81	1.98	3.26
10,417.0	88.99	162.91	7,159.3	-2,748.8	2,794.5	3,478.7	2.45	-1.09	-2.20
10,506.0	88.69	162.81	7,161.1	-2,833.8	2,820.7	3,567.7	0.36	-0.34	-0.11
10,596.0	88.05	163.39	7,163.6	-2,919.9	2,846.9	3,657.7	0.96	-0.71	0.64
10,686.0	86.98	159.84	7,167.5	-3,005.2	2,875.2	3,747.6	4.12	-1.19	-3.94
10,775.0	88.89	159.72	7,170.7	-3,088.6	2,906.0	3,836.4	2.15	2.15	-0.13
10,865.0	90.27	160.10	7,171.4	-3,173.2	2,936.9	3,926.4	1.59	1.53	0.42
10,954.0	89.97	161.55	7,171.2	-3,257.2	2,966.1	4,015.3	1.66	-0.34	1.63
11,044.0	89.30	160.98	7,171.8	-3,342.5	2,995.0	4,105.3	0.98	-0.74	-0.63
11,134.0	89.16	159.35	7,173.0	-3,427.1	3,025.6	4,195.3	1.82	-0.16	-1.81
11,223.0	89.47	158.03	7,174.1	-3,510.0	3,057.9	4,284.1	1.52	0.35	-1.48
11,313.0	89.94	157.80	7,174.5	-3,593.4	3,091.8	4,373.9	0.58	0.52	-0.26
11,402.0	88.12	158.35	7,176.0	-3,676.0	3,125.0	4,462.7	2.14	-2.04	0.62
11,492.0	90.07	163.29	7,177.5	-3,760.9	3,154.5	4,552.6	5.90	2.17	5.49
11,582.0	89.67	164.58	7,177.7	-3,847.4	3,179.4	4,642.6	1.50	-0.44	1.43
11,671.0	90.17	163.78	7,177.8	-3,933.0	3,203.7	4,731.5	1.06	0.56	-0.90
11,761.0	88.63	160.58	7,178.7	-4,018.7	3,231.2	4,821.5	3.95	-1.71	-3.56
11,850.0	89.70	163.01	7,180.0	-4,103.2	3,259.0	4,910.4	2.98	1.20	2.73
11,940.0	89.27	163.54	7,180.8	-4,189.4	3,284.9	5,000.4	0.76	-0.48	0.59
12,029.0	89.80	165.01	7,181.6	-4,275.1	3,309.1	5,089.3	1.76	0.60	1.65
12,119.0	90.00	165.62	7,181.7	-4,362.1	3,331.9	5,179.2	0.71	0.22	0.68
12,208.0	89.06	162.44	7,182.4	-4,447.7	3,356.3	5,268.1	3.73	-1.06	-3.57
12,298.0	89.13	160.18	7,183.9	-4,532.9	3,385.2	5,358.1	2.51	0.08	-2.51
12,388.0	90.37	163.00	7,184.3	-4,618.3	3,413.6	5,448.1	3.42	1.38	3.13
12,477.0	88.93	162.18	7,184.8	-4,703.2	3,440.2	5,537.1	1.86	-1.62	-0.92
12,567.0	88.73	160.97	7,186.6	-4,788.6	3,468.7	5,627.0	1.36	-0.22	-1.34
12,657.0	86.75	157.09	7,190.2	-4,872.5	3,500.8	5,716.8	4.84	-2.20	-4.31
12,746.0	86.92	158.21	7,195.1	-4,954.7	3,534.6	5,805.4	1.27	0.19	1.26
12,836.0	91.96	161.67	7,196.0	-5,039.2	3,565.5	5,895.3	6.79	5.60	3.84



Scientific Drilling International
Survey Report

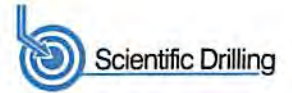


Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,926.0	91.05	161.61	7,193.6	-5,124.6	3,593.8	5,985.3	1.01	-1.01	-0.07
13,015.0	90.89	161.50	7,192.1	-5,209.0	3,622.0	6,074.3	0.22	-0.18	-0.12
13,105.0	89.51	158.22	7,191.8	-5,293.5	3,653.0	6,164.2	3.95	-1.53	-3.64
13,195.0	89.48	161.28	7,192.6	-5,377.9	3,684.1	6,254.1	3.40	-0.03	3.40
13,284.0	90.65	162.14	7,192.5	-5,462.4	3,712.0	6,343.1	1.63	1.31	0.97
13,374.0	89.27	157.10	7,192.6	-5,546.8	3,743.4	6,433.0	5.81	-1.53	-5.60
13,464.0	89.27	159.36	7,193.7	-5,630.3	3,776.7	6,522.8	2.51	0.00	2.51
13,554.0	91.76	163.68	7,192.9	-5,715.7	3,805.3	6,612.8	5.54	2.77	4.80
13,643.0	91.45	164.85	7,190.4	-5,801.3	3,829.4	6,701.7	1.36	-0.35	1.31
13,733.0	89.04	162.41	7,190.0	-5,887.6	3,854.8	6,791.6	3.81	-2.68	-2.71
13,823.0	90.21	164.11	7,190.6	-5,973.8	3,880.7	6,881.6	2.29	1.30	1.89
13,912.0	91.02	164.45	7,189.6	-6,059.5	3,904.8	6,970.5	0.99	0.91	0.38
14,002.0	90.75	163.42	7,188.3	-6,146.0	3,929.7	7,060.5	1.18	-0.30	-1.14
14,091.0	92.19	163.69	7,186.0	-6,231.3	3,954.9	7,149.4	1.65	1.62	0.30
14,181.0	91.39	162.22	7,183.2	-6,317.3	3,981.2	7,239.3	1.86	-0.89	-1.63
14,271.0	90.61	159.61	7,181.6	-6,402.3	4,010.7	7,329.3	3.03	-0.87	-2.90
14,360.0	90.01	159.21	7,181.1	-6,485.6	4,042.0	7,418.2	0.81	-0.67	-0.45
14,450.0	90.01	159.37	7,181.1	-6,569.8	4,073.8	7,508.1	0.18	0.00	0.18
14,540.0	88.66	160.75	7,182.1	-6,654.4	4,104.5	7,598.0	2.14	-1.50	1.53
14,629.0	89.34	164.40	7,183.7	-6,739.3	4,131.1	7,687.0	4.17	0.76	4.10
14,719.0	90.65	163.38	7,183.7	-6,825.8	4,156.1	7,777.0	1.84	1.46	-1.13
14,809.0	90.24	159.30	7,183.0	-6,911.0	4,184.9	7,866.9	4.56	-0.46	-4.53
14,898.0	89.97	160.86	7,182.8	-6,994.7	4,215.2	7,955.9	1.78	-0.30	1.75
14,988.0	89.37	162.69	7,183.4	-7,080.2	4,243.3	8,045.9	2.14	-0.67	2.03
15,078.0	91.48	165.12	7,182.7	-7,166.6	4,268.3	8,135.8	3.58	2.34	2.70
15,167.0	90.44	163.32	7,181.2	-7,252.3	4,292.5	8,224.7	2.34	-1.17	-2.02
15,257.0	90.31	157.25	7,180.6	-7,336.9	4,322.8	8,314.6	6.75	-0.14	-6.74
15,347.0	88.43	155.98	7,181.6	-7,419.5	4,358.6	8,404.2	2.52	-2.09	-1.41
15,436.0	89.13	163.27	7,183.5	-7,502.9	4,389.5	8,493.1	8.23	0.79	8.19
15,526.0	89.97	166.18	7,184.2	-7,589.7	4,413.2	8,583.0	3.37	0.93	3.23
15,615.0	90.44	168.88	7,183.9	-7,676.6	4,432.4	8,671.5	3.08	0.53	3.03
15,705.0	90.88	168.62	7,182.8	-7,764.9	4,450.0	8,760.9	0.57	0.49	-0.29
15,795.0	90.07	165.45	7,182.1	-7,852.5	4,470.2	8,850.5	3.64	-0.90	-3.52
15,884.0	91.18	167.13	7,181.1	-7,939.0	4,491.3	8,939.3	2.26	1.25	1.89
15,974.0	90.44	165.10	7,179.9	-8,026.4	4,512.9	9,029.0	2.40	-0.82	-2.26
16,064.0	90.04	164.49	7,179.5	-8,113.2	4,536.5	9,118.9	0.81	-0.44	-0.68
16,153.0	88.97	159.86	7,180.3	-8,197.9	4,563.7	9,207.9	5.34	-1.20	-5.20
16,243.0	89.20	163.35	7,181.7	-8,283.3	4,592.1	9,297.8	3.89	0.26	3.88
16,333.0	90.38	162.33	7,182.0	-8,369.3	4,618.7	9,387.8	1.73	1.31	-1.13
16,423.0	90.34	161.59	7,181.5	-8,454.8	4,646.5	9,477.8	0.82	-0.04	-0.82
16,512.0	90.48	162.48	7,180.8	-8,539.5	4,674.0	9,566.8	1.01	0.16	1.00
16,602.0	88.80	159.36	7,181.4	-8,624.5	4,703.4	9,656.8	3.94	-1.87	-3.47
16,692.0	88.86	156.66	7,183.2	-8,708.0	4,737.1	9,746.6	3.00	0.07	-3.00



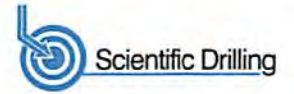
Scientific Drilling International
Survey Report



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,781.0	88.93	158.97	7,184.9	-8,790.4	4,770.7	9,835.3	2.60	0.08	2.60
16,871.0	89.23	161.36	7,186.4	-8,875.0	4,801.2	9,925.2	2.68	0.33	2.66
16,961.0	89.20	162.37	7,187.6	-8,960.5	4,829.2	10,015.2	1.12	-0.03	1.12
17,051.0	90.37	163.18	7,188.0	-9,046.5	4,855.9	10,105.2	1.58	1.30	0.90
17,140.0	90.78	164.64	7,187.1	-9,132.0	4,880.5	10,194.2	1.70	0.46	1.64
17,230.0	90.74	162.75	7,185.9	-9,218.4	4,905.8	10,284.1	2.10	-0.04	-2.10
17,320.0	91.35	163.60	7,184.2	-9,304.5	4,931.8	10,374.1	1.16	0.68	0.94
17,409.0	91.68	161.03	7,181.9	-9,389.2	4,958.9	10,463.0	2.91	0.37	-2.89
17,499.0	89.54	161.65	7,180.9	-9,474.5	4,987.7	10,553.0	2.48	-2.38	0.69
17,589.0	90.21	168.41	7,181.1	-9,561.4	5,010.9	10,642.8	7.55	0.74	7.51
17,678.0	88.63	167.51	7,182.0	-9,648.4	5,029.5	10,731.3	2.04	-1.78	-1.01
17,765.0	90.37	164.68	7,182.8	-9,732.9	5,050.4	10,818.1	3.82	2.00	-3.25
17,855.0	90.03	161.43	7,182.5	-9,819.0	5,076.6	10,908.1	3.63	-0.38	-3.61
17,944.0	89.33	158.27	7,183.0	-9,902.5	5,107.2	10,997.0	3.64	-0.79	-3.55
18,034.0	90.07	156.75	7,183.4	-9,985.6	5,141.7	11,086.7	1.88	0.82	-1.69
18,123.0	89.87	156.71	7,183.5	-10,067.4	5,176.8	11,175.3	0.23	-0.22	-0.04
18,213.0	90.13	158.24	7,183.5	-10,150.5	5,211.3	11,265.1	1.72	0.29	1.70
18,303.0	90.27	157.72	7,183.2	-10,234.0	5,245.0	11,354.8	0.60	0.16	-0.58
18,392.0	90.03	159.18	7,182.9	-10,316.7	5,277.7	11,443.7	1.66	-0.27	1.64
18,482.0	90.20	160.18	7,182.7	-10,401.1	5,309.0	11,533.6	1.13	0.19	1.11
18,572.0	92.35	161.14	7,180.7	-10,486.0	5,338.8	11,623.5	2.62	2.39	1.07
18,661.0	91.38	162.23	7,177.8	-10,570.5	5,366.7	11,712.5	1.64	-1.09	1.22
18,751.0	91.66	162.36	7,175.5	-10,656.2	5,394.1	11,802.5	0.34	0.31	0.14
18,841.0	91.76	162.31	7,172.8	-10,741.9	5,421.4	11,892.4	0.12	0.11	-0.06
18,930.0	91.83	162.47	7,170.0	-10,826.7	5,448.3	11,981.4	0.20	0.08	0.18
19,020.0	91.29	162.09	7,167.5	-10,912.4	5,475.7	12,071.3	0.73	-0.60	-0.42
19,110.0	91.62	161.94	7,165.2	-10,998.0	5,503.5	12,161.3	0.40	0.37	-0.17
19,200.0	90.85	160.57	7,163.3	-11,083.2	5,532.4	12,251.3	1.75	-0.86	-1.52
19,262.0	88.83	157.26	7,163.5	-11,141.0	5,554.7	12,313.2	6.25	-3.26	-5.34
Last SDI MWD @ 19262 MD									
19,323.0	88.83	157.26	7,164.7	-11,197.3	5,578.3	12,374.0	0.00	0.00	0.00
Projection To Bit @ 19323 MD / 7164 TVD									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,055.0	6,706.7	Sycamore @ 7055 MD		0.00		
7,242.0	6,871.3	Middlesex @ 7242 MD		0.00		
7,430.0	7,009.2	Burkett @ 7430 MD		0.00		
7,480.0	7,038.0	Tully @ 7480 MD		0.00		
7,644.0	7,106.3	MRCL_HOT @ 7644 MD		0.00		



Company:	Antero	Local Co-ordinate Reference:	Well Prudence Unit 2H
Project:	Tyler County WV	TVD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Site:	Coastal 2 Pad: Banner/Prudence/Tabor	MD Reference:	Precision 525: 1188' GL + 19' KB @ 1207.0usft
Well:	Prudence Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
100.0	100.0	0.0	0.0	First SDI Gyro @ 100 MD
6,713.0	6,399.0	110.1	1,517.8	Last SDI Gyro @ 6713 MD
6,733.0	6,416.8	111.4	1,526.9	First SDI MWD @ 6733 MD
19,262.0	7,163.5	-11,141.0	5,554.7	Last SDI MWD @ 19262 MD
19,323.0	7,164.7	-11,197.3	5,578.3	Projection To Bit @ 19323 MD / 7164 TVD

Checked By: _____ Approved By: _____ Date: _____