



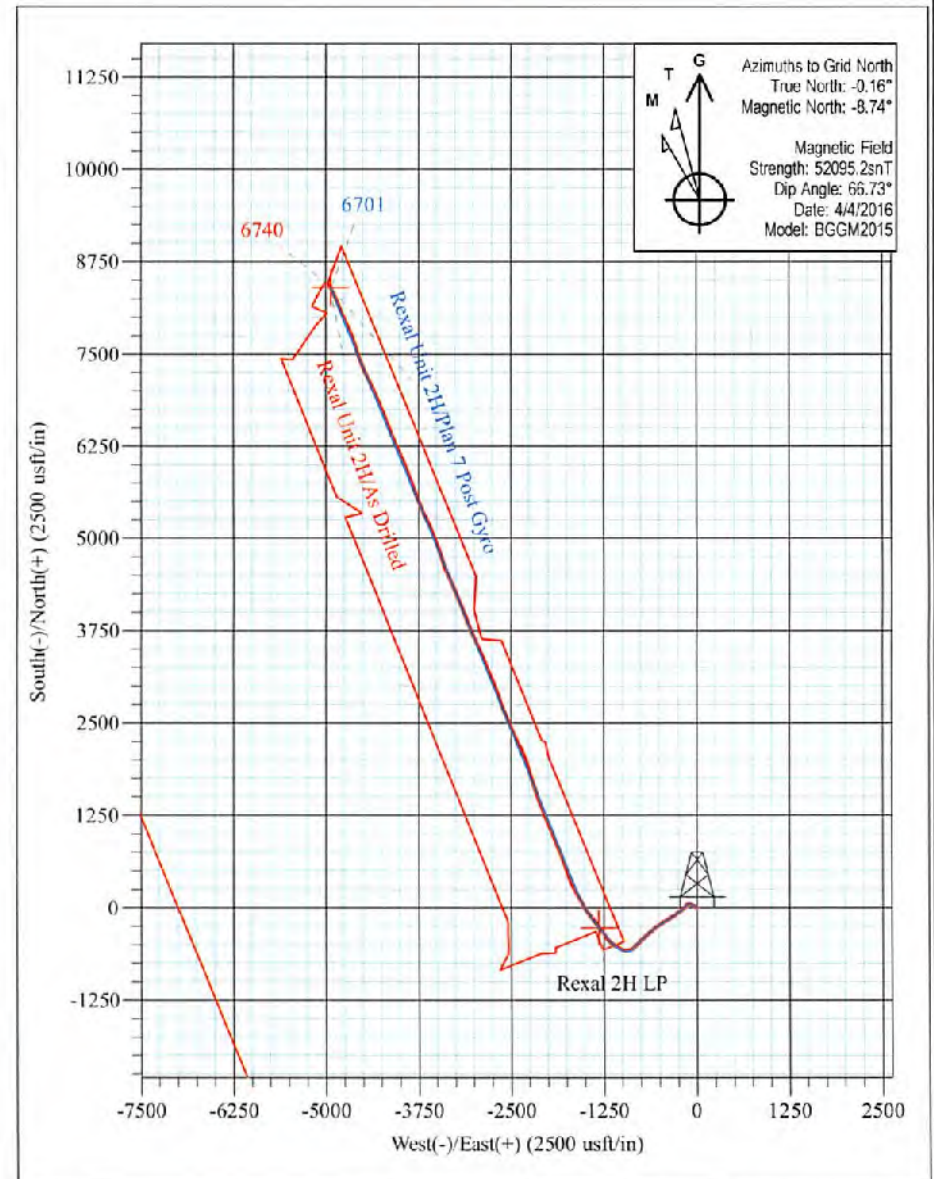
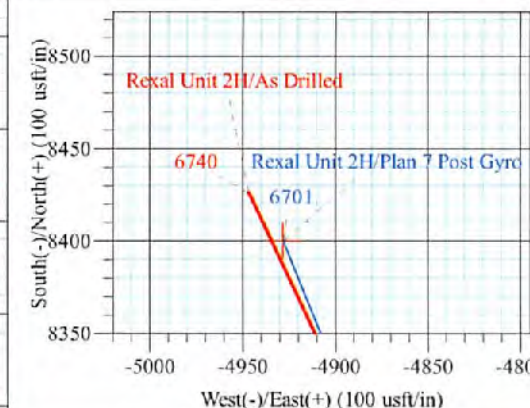
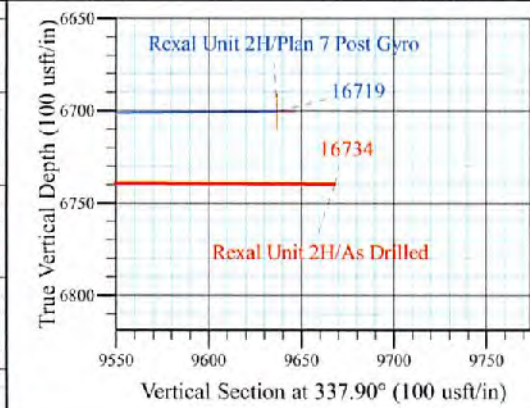
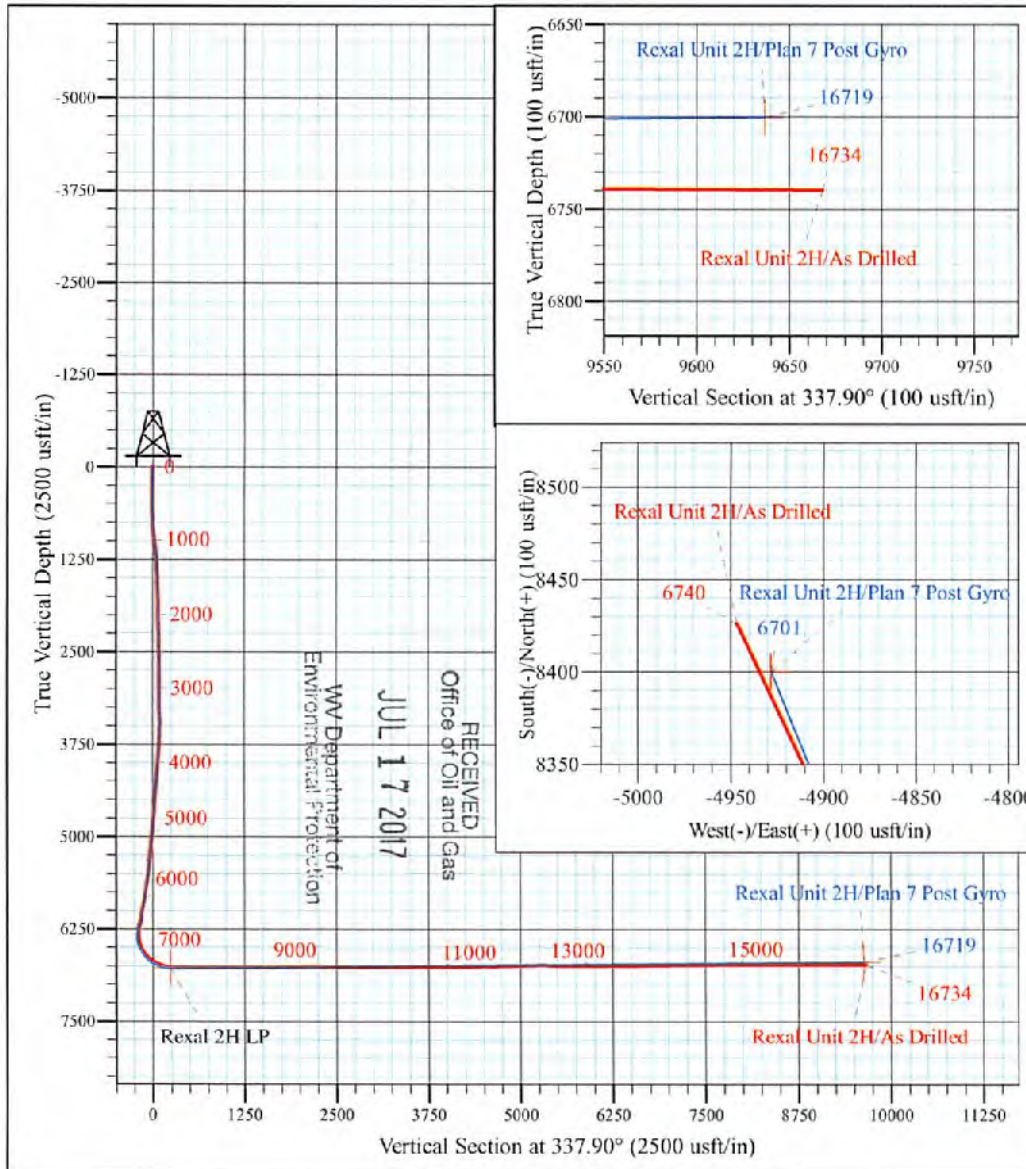
Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa
 Rexal Unit 2H
 Plan 7 Post Gyro
 Precision 522: 1001' GL + 18' KB @ 1019.0usft
 Doddridge County WV

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: **Rexal Unit 2H SHL**

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	14293383.25	1711342.78	39° 21' 38.700 N	80° 44' 56.650 W



Rexal Unit 2H
Approx. BHL
39° 23' 2.144 N 80° 45' 59.371 W

Shane Rhodes
 7:41, April 20 2016
 Scientific Drilling International
 124 Vista Drive
 Charleroi, PA 15022



Scientific Drilling International
Survey Report - Geographic



Company:	Antero Resources	Local Co-ordinate Reference:	Well Rexal Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Site:	Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa	MD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Well:	Rexal Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

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WV Department of
Environmental Protection

Project	Doddridge County WV, McClellan District		
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	Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa				
Site Position:		Northing:	14,293,344.77 usft	Latitude:	39° 21' 38.319 N
From:	Map	Easting:	1,711,355.33 usft	Longitude:	80° 44' 56.491 W
Position Uncertainty:	2.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.16 °

Well	Rexal Unit 2H, Marcellus					
Well Position	+N/-S	0.0 usft	Northing:	14,293,383.25 usft	Latitude:	39° 21' 38.700 N
	+E/-W	0.0 usft	Easting:	1,711,342.77 usft	Longitude:	80° 44' 56.650 W
Position Uncertainty		2.0 usft	Wellhead Elevation:	1,019.0 usft	Ground Level:	1,001.0 usft

Wellbore	Original Wellpath				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	4/20/2015	-8.52	66.85	52.183
	BGGM2015	4/4/2016	-8.58	66.73	52.095

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	337.90	

Survey Program	Date	4/20/2016			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
104.7	6,005.0	Survey #7 Final Gyro (Original Wellpath)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
6,037.0	16,734.0	Survey #9 - SDI Curve/Lat MWD (Original)	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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	14,293,383.25	1,711,342.77	39° 21' 38.700 N	80° 44' 56.650 W	
104.7	0.26	71.25	104.7	0.1	0.2	14,293,383.32	1,711,343.00	39° 21' 38.701 N	80° 44' 56.647 W	
105.0	0.26	71.49	105.0	0.1	0.2	14,293,383.32	1,711,343.00	39° 21' 38.701 N	80° 44' 56.647 W	
130.0	0.24	93.45	130.0	0.1	0.3	14,293,383.34	1,711,343.11	39° 21' 38.701 N	80° 44' 56.646 W	
155.0	0.10	111.06	155.0	0.1	0.4	14,293,383.33	1,711,343.18	39° 21' 38.701 N	80° 44' 56.645 W	
180.0	0.07	134.04	180.0	0.1	0.4	14,293,383.30	1,711,343.20	39° 21' 38.701 N	80° 44' 56.645 W	
205.0	0.06	65.60	205.0	0.0	0.4	14,293,383.30	1,711,343.21	39° 21' 38.700 N	80° 44' 56.644 W	
230.0	0.08	206.83	230.0	0.0	0.4	14,293,383.26	1,711,343.21	39° 21' 38.700 N	80° 44' 56.644 W	
255.0	0.09	154.01	255.0	0.0	0.4	14,293,383.25	1,711,343.21	39° 21' 38.700 N	80° 44' 56.644 W	



Scientific Drilling International
Survey Report - Geographic



Company:	Antero Resources	Local Co-ordinate Reference:	Well Rexal Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Site:	Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa	MD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft RECEIVED Office of Oil and Gas
Well:	Rexal Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

JUL 17 2017

Survey										WV Department of Environmental Protection	
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude		
280.0	0.07	141.39	280.0	0.0	0.5	14,293,383.22	1,711,343.23	39° 21' 38.700 N	80° 44' 56.644 W		
305.0	0.10	134.02	305.0	-0.1	0.5	14,293,363.20	1,711,343.26	39° 21' 38.699 N	80° 44' 56.644 W		
330.0	0.05	167.58	330.0	-0.1	0.5	14,293,383.17	1,711,343.28	39° 21' 38.699 N	80° 44' 56.644 W		
355.0	0.10	140.59	355.0	-0.1	0.5	14,293,363.14	1,711,343.29	39° 21' 38.699 N	80° 44' 56.643 W		
380.0	0.22	106.01	380.0	-0.1	0.6	14,293,383.11	1,711,343.35	39° 21' 38.699 N	80° 44' 56.643 W		
405.0	0.22	170.13	405.0	-0.2	0.6	14,293,383.05	1,711,343.41	39° 21' 38.698 N	80° 44' 56.642 W		
430.0	0.08	206.91	430.0	-0.3	0.6	14,293,382.99	1,711,343.41	39° 21' 38.697 N	80° 44' 56.642 W		
455.0	0.09	124.17	455.0	-0.3	0.6	14,293,382.96	1,711,343.41	39° 21' 38.697 N	80° 44' 56.642 W		
480.0	0.11	118.83	480.0	-0.3	0.7	14,293,382.94	1,711,343.45	39° 21' 38.697 N	80° 44' 56.641 W		
505.0	0.07	149.20	505.0	-0.3	0.7	14,293,382.91	1,711,343.48	39° 21' 38.697 N	80° 44' 56.641 W		
530.0	0.08	192.31	530.0	-0.4	0.7	14,293,382.88	1,711,343.49	39° 21' 38.696 N	80° 44' 56.641 W		
555.0	0.29	181.20	555.0	-0.4	0.7	14,293,382.80	1,711,343.48	39° 21' 38.696 N	80° 44' 56.641 W		
580.0	0.25	243.93	580.0	-0.5	0.7	14,293,382.72	1,711,343.43	39° 21' 38.695 N	80° 44' 56.642 W		
605.0	1.18	286.48	605.0	-0.5	0.4	14,293,382.77	1,711,343.13	39° 21' 38.695 N	80° 44' 56.645 W		
630.0	2.14	289.61	630.0	-0.3	-0.3	14,293,383.00	1,711,342.45	39° 21' 38.698 N	80° 44' 56.654 W		
655.0	2.83	292.12	655.0	0.1	-1.3	14,293,383.38	1,711,341.44	39° 21' 38.701 N	80° 44' 56.667 W		
680.0	3.32	295.23	679.9	0.7	-2.6	14,293,383.93	1,711,340.21	39° 21' 38.707 N	80° 44' 56.683 W		
705.0	3.47	295.62	704.9	1.3	-3.9	14,293,384.56	1,711,336.87	39° 21' 38.713 N	80° 44' 56.700 W		
730.0	3.64	295.72	729.8	2.0	-5.3	14,293,385.23	1,711,337.48	39° 21' 38.720 N	80° 44' 56.717 W		
755.0	4.26	297.95	754.8	2.8	-6.8	14,293,386.01	1,711,335.94	39° 21' 38.726 N	80° 44' 56.737 W		
780.0	5.07	298.31	779.7	3.7	-8.6	14,293,386.97	1,711,334.15	39° 21' 38.737 N	80° 44' 56.760 W		
805.0	5.30	298.19	804.6	4.8	-10.6	14,293,388.04	1,711,332.16	39° 21' 38.748 N	80° 44' 56.785 W		
830.0	5.44	298.35	829.5	5.9	-12.7	14,293,389.15	1,711,330.10	39° 21' 38.759 N	80° 44' 56.811 W		
855.0	6.43	299.85	854.3	7.2	-14.9	14,293,390.41	1,711,327.84	39° 21' 38.771 N	80° 44' 56.840 W		
880.0	7.06	299.94	879.2	8.6	-17.5	14,293,391.87	1,711,325.29	39° 21' 38.786 N	80° 44' 56.872 W		
905.0	7.46	300.42	904.0	10.2	-20.2	14,293,393.46	1,711,322.56	39° 21' 38.802 N	80° 44' 56.907 W		
930.0	7.89	300.66	928.7	11.9	-23.1	14,293,395.16	1,711,319.69	39° 21' 38.818 N	80° 44' 56.944 W		
955.0	8.54	301.57	953.5	13.8	-26.1	14,293,397.00	1,711,316.63	39° 21' 38.837 N	80° 44' 56.982 W		
980.0	8.59	302.11	978.2	15.7	-29.3	14,293,398.97	1,711,313.47	39° 21' 38.856 N	80° 44' 57.023 W		
1,005.0	8.46	301.85	1,002.9	17.7	-32.5	14,293,400.93	1,711,310.32	39° 21' 38.876 N	80° 44' 57.063 W		
1,030.0	8.32	301.43	1,027.7	19.6	-35.6	14,293,402.84	1,711,307.22	39° 21' 38.895 N	80° 44' 57.102 W		
1,055.0	8.06	301.21	1,052.4	21.4	-38.6	14,293,404.70	1,711,304.18	39° 21' 38.913 N	80° 44' 57.141 W		
1,080.0	7.88	301.93	1,077.2	23.3	-41.6	14,293,406.51	1,711,301.22	39° 21' 38.931 N	80° 44' 57.178 W		
1,105.0	7.56	301.01	1,101.9	25.0	-44.4	14,293,408.26	1,711,298.36	39° 21' 38.949 N	80° 44' 57.215 W		
1,130.0	7.12	301.53	1,126.7	26.7	-47.1	14,293,409.92	1,711,295.63	39° 21' 38.965 N	80° 44' 57.250 W		
1,155.0	6.75	301.77	1,151.6	28.3	-49.7	14,293,411.51	1,711,293.08	39° 21' 38.981 N	80° 44' 57.282 W		
1,180.0	6.34	302.45	1,176.4	29.8	-52.1	14,293,413.02	1,711,290.64	39° 21' 38.996 N	80° 44' 57.313 W		
1,205.0	5.95	302.74	1,201.3	31.2	-54.4	14,293,414.46	1,711,288.39	39° 21' 39.010 N	80° 44' 57.342 W		
1,230.0	5.57	302.36	1,226.1	32.6	-56.5	14,293,415.81	1,711,286.27	39° 21' 39.024 N	80° 44' 57.368 W		
1,255.0	5.15	302.08	1,251.0	33.8	-58.5	14,293,417.06	1,711,284.30	39° 21' 39.036 N	80° 44' 57.394 W		
1,280.0	4.98	302.21	1,275.9	35.0	-60.3	14,293,418.23	1,711,282.43	39° 21' 39.048 N	80° 44' 57.417 W		
1,305.0	4.63	302.09	1,300.8	36.1	-62.1	14,293,419.35	1,711,280.66	39° 21' 39.059 N	80° 44' 57.440 W		
1,330.0	4.31	302.37	1,325.8	37.1	-63.8	14,293,420.38	1,711,279.01	39° 21' 39.069 N	80° 44' 57.461 W		
1,355.0	4.12	302.16	1,350.7	38.1	-65.3	14,293,421.37	1,711,277.46	39° 21' 39.079 N	80° 44' 57.481 W		
1,380.0	3.71	300.86	1,375.6	39.0	-66.8	14,293,422.26	1,711,276.00	39° 21' 39.088 N	80° 44' 57.499 W		
1,405.0	3.42	299.91	1,400.6	39.8	-68.1	14,293,423.03	1,711,274.65	39° 21' 39.095 N	80° 44' 57.516 W		
1,430.0	3.35	297.64	1,425.5	40.5	-69.4	14,293,423.73	1,711,273.35	39° 21' 39.102 N	80° 44' 57.533 W		
1,455.0	3.32	297.09	1,450.5	41.2	-70.7	14,293,424.40	1,711,272.06	39° 21' 39.109 N	80° 44' 57.549 W		
1,480.0	3.22	296.55	1,475.5	41.8	-72.0	14,293,425.05	1,711,270.79	39° 21' 39.115 N	80° 44' 57.565 W		
1,505.0	2.97	295.00	1,500.4	42.4	-73.2	14,293,425.63	1,711,269.57	39° 21' 39.121 N	80° 44' 57.581 W		
1,530.0	2.83	294.59	1,525.4	42.9	-74.3	14,293,426.16	1,711,268.43	39° 21' 39.126 N	80° 44' 57.595 W		
1,555.0	2.92	295.42	1,550.4	43.4	-75.5	14,293,426.69	1,711,267.29	39° 21' 39.132 N	80° 44' 57.610 W		
1,580.0	2.77	293.72	1,575.3	44.0	-76.6	14,293,427.21	1,711,266.16	39° 21' 39.137 N	80° 44' 57.624 W		
1,605.0	2.65	294.76	1,600.3	44.4	-77.7	14,293,427.70	1,711,265.08	39° 21' 39.142 N	80° 44' 57.638 W		



Scientific Drilling International
Survey Report - Geographic



Company: Antero Resources
Project: Doddridge County WV
Site: Misery Pad:
Anne/Arthur/Deano/Hardin/Michelle/Rexa
Well: Rexal Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference: Well Rexal Unit 2H
TVD Reference: Precision 522: 1001' GL + 18' KB @ 1019.0usft
MD Reference: Precision 522: 1001' GL + 18' KB @ 1019.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Antero NE

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Survey

WV Department of
Environmental Protection

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,830.0	2.62	295.94	1,625.3	44.9	-78.7	14,293,428.19	1,711,264.05	39° 21' 39.147 N	80° 44' 57.651 W
1,655.0	2.42	297.09	1,650.2	45.4	-79.7	14,293,426.68	1,711,263.06	39° 21' 39.151 N	80° 44' 57.684 W
1,680.0	2.31	299.23	1,675.2	45.9	-80.6	14,293,429.16	1,711,262.15	39° 21' 39.156 N	80° 44' 57.675 W
1,705.0	2.19	298.69	1,700.2	46.4	-81.5	14,293,429.64	1,711,261.29	39° 21' 39.161 N	80° 44' 57.686 W
1,730.0	2.04	302.59	1,725.2	46.9	-82.3	14,293,430.11	1,711,260.50	39° 21' 39.166 N	80° 44' 57.696 W
1,755.0	1.88	300.25	1,750.2	47.3	-83.0	14,293,430.56	1,711,259.77	39° 21' 39.170 N	80° 44' 57.705 W
1,780.0	1.82	300.78	1,775.2	47.7	-83.7	14,293,430.97	1,711,259.08	39° 21' 39.174 N	80° 44' 57.714 W
1,805.0	1.70	299.60	1,800.1	48.1	-84.4	14,293,431.35	1,711,258.41	39° 21' 39.178 N	80° 44' 57.723 W
1,830.0	1.71	299.48	1,825.1	48.5	-85.0	14,293,431.72	1,711,257.77	39° 21' 39.182 N	80° 44' 57.731 W
1,855.0	1.59	297.60	1,850.1	48.8	-85.6	14,293,432.07	1,711,257.14	39° 21' 39.185 N	80° 44' 57.739 W
1,880.0	1.69	304.33	1,875.1	49.2	-86.3	14,293,432.44	1,711,256.52	39° 21' 39.189 N	80° 44' 57.747 W
1,905.0	1.60	301.23	1,900.1	49.6	-86.9	14,293,432.82	1,711,255.92	39° 21' 39.193 N	80° 44' 57.754 W
1,930.0	1.64	302.14	1,925.1	49.9	-87.5	14,293,433.20	1,711,255.32	39° 21' 39.196 N	80° 44' 57.762 W
1,955.0	1.62	304.74	1,950.1	50.3	-88.0	14,293,433.58	1,711,254.73	39° 21' 39.200 N	80° 44' 57.770 W
1,980.0	1.46	304.46	1,975.1	50.7	-88.6	14,293,433.97	1,711,254.17	39° 21' 39.204 N	80° 44' 57.777 W
2,005.0	1.45	306.30	2,000.1	51.1	-89.1	14,293,434.34	1,711,253.66	39° 21' 39.208 N	80° 44' 57.783 W
2,030.0	1.35	299.24	2,025.1	51.4	-89.6	14,293,434.67	1,711,253.14	39° 21' 39.211 N	80° 44' 57.790 W
2,055.0	1.40	306.38	2,050.1	51.7	-90.1	14,293,434.99	1,711,252.64	39° 21' 39.214 N	80° 44' 57.796 W
2,080.0	1.33	304.07	2,075.0	52.1	-90.6	14,293,435.34	1,711,252.15	39° 21' 39.218 N	80° 44' 57.802 W
2,105.0	1.28	301.58	2,100.0	52.4	-91.1	14,293,435.64	1,711,251.68	39° 21' 39.221 N	80° 44' 57.808 W
2,130.0	1.24	297.55	2,125.0	52.7	-91.6	14,293,435.91	1,711,251.21	39° 21' 39.223 N	80° 44' 57.814 W
2,155.0	1.22	300.07	2,150.0	52.9	-92.0	14,293,436.17	1,711,250.74	39° 21' 39.226 N	80° 44' 57.820 W
2,180.0	1.24	304.57	2,175.0	53.2	-92.5	14,293,436.46	1,711,250.28	39° 21' 39.229 N	80° 44' 57.826 W
2,205.0	1.16	299.15	2,200.0	53.5	-92.9	14,293,436.73	1,711,249.84	39° 21' 39.231 N	80° 44' 57.832 W
2,230.0	1.14	302.24	2,225.0	53.7	-93.4	14,293,436.99	1,711,249.41	39° 21' 39.234 N	80° 44' 57.837 W
2,255.0	1.16	303.08	2,250.0	54.0	-93.8	14,293,437.26	1,711,248.99	39° 21' 39.237 N	80° 44' 57.843 W
2,280.0	1.06	304.58	2,275.0	54.3	-94.2	14,293,437.53	1,711,248.58	39° 21' 39.239 N	80° 44' 57.848 W
2,305.0	1.07	300.95	2,300.0	54.5	-94.6	14,293,437.78	1,711,248.19	39° 21' 39.242 N	80° 44' 57.853 W
2,330.0	0.92	296.65	2,325.0	54.7	-95.0	14,293,437.99	1,711,247.81	39° 21' 39.244 N	80° 44' 57.858 W
2,355.0	0.94	303.61	2,350.0	54.9	-95.3	14,293,438.20	1,711,247.46	39° 21' 39.246 N	80° 44' 57.862 W
2,380.0	1.00	298.66	2,375.0	55.2	-95.7	14,293,438.42	1,711,247.10	39° 21' 39.248 N	80° 44' 57.867 W
2,405.0	0.95	291.65	2,400.0	55.4	-96.1	14,293,438.60	1,711,246.72	39° 21' 39.250 N	80° 44' 57.871 W
2,430.0	0.96	298.99	2,425.0	55.5	-96.4	14,293,438.78	1,711,246.35	39° 21' 39.252 N	80° 44' 57.876 W
2,455.0	0.76	303.56	2,450.0	55.7	-96.7	14,293,438.97	1,711,246.02	39° 21' 39.254 N	80° 44' 57.880 W
2,480.0	0.56	311.05	2,475.0	55.9	-97.0	14,293,439.15	1,711,245.79	39° 21' 39.255 N	80° 44' 57.883 W
2,505.0	0.41	311.75	2,500.0	56.0	-97.1	14,293,439.29	1,711,245.64	39° 21' 39.257 N	80° 44' 57.885 W
2,530.0	0.54	311.60	2,525.0	56.2	-97.3	14,293,439.42	1,711,245.48	39° 21' 39.258 N	80° 44' 57.887 W
2,555.0	0.41	311.52	2,550.0	56.3	-97.4	14,293,439.56	1,711,245.33	39° 21' 39.259 N	80° 44' 57.889 W
2,580.0	0.58	309.29	2,575.0	56.5	-97.6	14,293,439.70	1,711,245.16	39° 21' 39.261 N	80° 44' 57.891 W
2,605.0	0.45	318.02	2,600.0	56.6	-97.8	14,293,439.85	1,711,245.00	39° 21' 39.262 N	80° 44' 57.893 W
2,630.0	0.61	308.81	2,625.0	56.8	-97.9	14,293,440.01	1,711,244.82	39° 21' 39.264 N	80° 44' 57.896 W
2,655.0	0.61	310.61	2,650.0	56.9	-98.2	14,293,440.18	1,711,244.62	39° 21' 39.266 N	80° 44' 57.898 W
2,680.0	0.49	310.39	2,675.0	57.1	-98.3	14,293,440.34	1,711,244.44	39° 21' 39.267 N	80° 44' 57.900 W
2,705.0	0.56	309.35	2,700.0	57.2	-98.5	14,293,440.49	1,711,244.26	39° 21' 39.269 N	80° 44' 57.903 W
2,730.0	0.63	309.76	2,725.0	57.4	-98.7	14,293,440.65	1,711,244.06	39° 21' 39.270 N	80° 44' 57.905 W
2,755.0	0.56	309.70	2,750.0	57.6	-98.9	14,293,440.82	1,711,243.86	39° 21' 39.272 N	80° 44' 57.908 W
2,780.0	0.60	301.15	2,775.0	57.7	-99.1	14,293,440.96	1,711,243.66	39° 21' 39.273 N	80° 44' 57.910 W
2,805.0	0.64	300.47	2,800.0	57.9	-99.4	14,293,441.10	1,711,243.42	39° 21' 39.275 N	80° 44' 57.913 W
2,830.0	0.61	296.92	2,825.0	58.0	-99.6	14,293,441.23	1,711,243.16	39° 21' 39.276 N	80° 44' 57.916 W
2,855.0	0.57	295.15	2,850.0	58.1	-99.8	14,293,441.35	1,711,242.95	39° 21' 39.277 N	80° 44' 57.919 W
2,880.0	0.61	285.59	2,875.0	58.2	-100.1	14,293,441.43	1,711,242.71	39° 21' 39.278 N	80° 44' 57.922 W
2,905.0	0.64	281.80	2,900.0	58.3	-100.3	14,293,441.50	1,711,242.45	39° 21' 39.279 N	80° 44' 57.926 W
2,930.0	0.62	281.25	2,925.0	58.3	-100.6	14,293,441.55	1,711,242.18	39° 21' 39.279 N	80° 44' 57.929 W
2,955.0	0.75	285.80	2,950.0	58.4	-100.9	14,293,441.62	1,711,241.89	39° 21' 39.280 N	80° 44' 57.933 W



Scientific Drilling International
Survey Report - Geographic



Company: Antero Resources
Project: Doddridge County WV
Site: Misery Pad:
 Anne/Arthur/Deano/Hardin/Michella/Rexa
Well: Rexal Unit 2H
Wellbore: Original Wellpath
Design: As Drilled

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Rexal Unit 2H
 Precision 522: 1001' GL + 18' KB @ 1019.0usft
 Precision 522: 1001' GL + 18' KB @ 1019.0usft
 Grid
 Minimum Curvature
 Antero NE

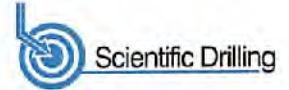
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Survey										WV Department of Environmental Protection	
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude		
2,980.0	0.72	276.65	2,974.9	58.4	-101.2	14,293,441.69	1,711,241.57	39° 21' 39.281 N	80° 44' 57.937 W		
3,005.0	0.66	280.35	2,999.9	58.5	-101.5	14,293,441.73	1,711,241.26	39° 21' 39.281 N	80° 44' 57.941 W		
3,030.0	0.68	280.50	3,024.9	58.5	-101.8	14,293,441.78	1,711,240.99	39° 21' 39.282 N	80° 44' 57.944 W		
3,055.0	0.78	283.09	3,049.9	58.6	-102.1	14,293,441.85	1,711,240.66	39° 21' 39.282 N	80° 44' 57.948 W		
3,080.0	0.74	278.85	3,074.9	58.7	-102.4	14,293,441.91	1,711,240.35	39° 21' 39.283 N	80° 44' 57.952 W		
3,105.0	0.73	282.70	3,099.9	58.7	-102.7	14,293,441.97	1,711,240.04	39° 21' 39.283 N	80° 44' 57.956 W		
3,130.0	0.67	282.89	3,124.9	58.8	-103.0	14,293,442.04	1,711,239.74	39° 21' 39.284 N	80° 44' 57.960 W		
3,155.0	0.73	282.39	3,149.9	58.9	-103.3	14,293,442.11	1,711,239.44	39° 21' 39.285 N	80° 44' 57.964 W		
3,180.0	0.60	275.30	3,174.9	58.9	-103.6	14,293,442.15	1,711,239.16	39° 21' 39.285 N	80° 44' 57.968 W		
3,205.0	0.68	281.52	3,199.9	58.9	-103.9	14,293,442.20	1,711,238.86	39° 21' 39.286 N	80° 44' 57.971 W		
3,230.0	0.68	273.87	3,224.9	59.0	-104.2	14,293,442.24	1,711,238.59	39° 21' 39.286 N	80° 44' 57.975 W		
3,255.0	0.62	272.98	3,249.9	59.0	-104.5	14,293,442.25	1,711,238.31	39° 21' 39.286 N	80° 44' 57.978 W		
3,280.0	0.64	286.42	3,274.9	59.1	-104.7	14,293,442.30	1,711,238.04	39° 21' 39.287 N	80° 44' 57.982 W		
3,305.0	0.57	272.92	3,299.9	59.1	-105.0	14,293,442.34	1,711,237.79	39° 21' 39.287 N	80° 44' 57.985 W		
3,330.0	0.60	282.04	3,324.9	59.1	-105.2	14,293,442.38	1,711,237.53	39° 21' 39.288 N	80° 44' 57.988 W		
3,355.0	0.57	284.02	3,349.9	59.2	-105.5	14,293,442.44	1,711,237.28	39° 21' 39.288 N	80° 44' 57.991 W		
3,380.0	0.42	288.53	3,374.9	59.2	-105.7	14,293,442.49	1,711,237.08	39° 21' 39.289 N	80° 44' 57.994 W		
3,405.0	0.58	286.59	3,399.9	59.3	-105.9	14,293,442.56	1,711,236.87	39° 21' 39.289 N	80° 44' 57.997 W		
3,430.0	0.51	276.09	3,424.9	59.4	-106.1	14,293,442.61	1,711,236.65	39° 21' 39.290 N	80° 44' 58.000 W		
3,455.0	0.58	278.12	3,449.9	59.4	-106.4	14,293,442.63	1,711,236.41	39° 21' 39.290 N	80° 44' 58.003 W		
3,480.0	0.54	283.90	3,474.9	59.4	-106.6	14,293,442.68	1,711,236.17	39° 21' 39.291 N	80° 44' 58.006 W		
3,505.0	0.63	256.97	3,499.9	59.4	-106.9	14,293,442.68	1,711,235.92	39° 21' 39.291 N	80° 44' 58.009 W		
3,530.0	0.60	259.16	3,524.9	59.4	-107.1	14,293,442.62	1,711,235.66	39° 21' 39.290 N	80° 44' 58.012 W		
3,555.0	0.58	258.22	3,549.9	59.3	-107.4	14,293,442.57	1,711,235.41	39° 21' 39.290 N	80° 44' 58.015 W		
3,580.0	0.62	259.56	3,574.9	59.3	-107.6	14,293,442.52	1,711,235.16	39° 21' 39.289 N	80° 44' 58.019 W		
3,605.0	0.78	246.44	3,599.9	59.2	-107.9	14,293,442.43	1,711,234.87	39° 21' 39.288 N	80° 44' 58.022 W		
3,630.0	1.98	231.70	3,624.9	58.8	-108.4	14,293,442.10	1,711,234.37	39° 21' 39.285 N	80° 44' 58.029 W		
3,655.0	3.12	227.21	3,649.9	58.1	-109.2	14,293,441.37	1,711,233.54	39° 21' 39.278 N	80° 44' 58.039 W		
3,680.0	4.11	225.16	3,674.8	57.0	-110.4	14,293,440.27	1,711,232.40	39° 21' 39.267 N	80° 44' 58.054 W		
3,705.0	5.68	222.37	3,699.7	55.5	-111.8	14,293,438.73	1,711,230.94	39° 21' 39.252 N	80° 44' 58.072 W		
3,730.0	6.34	220.69	3,724.6	53.5	-113.6	14,293,436.77	1,711,229.20	39° 21' 39.232 N	80° 44' 58.095 W		
3,755.0	7.52	221.89	3,749.4	51.3	-115.6	14,293,434.51	1,711,227.21	39° 21' 39.210 N	80° 44' 58.120 W		
3,780.0	8.65	222.60	3,774.2	48.7	-117.9	14,293,431.91	1,711,224.85	39° 21' 39.184 N	80° 44' 58.150 W		
3,805.0	9.41	223.11	3,798.9	45.8	-120.6	14,293,429.03	1,711,222.18	39° 21' 39.156 N	80° 44' 58.184 W		
3,830.0	10.26	223.98	3,823.5	42.7	-123.5	14,293,425.94	1,711,219.24	39° 21' 39.125 N	80° 44' 58.222 W		
3,855.0	10.28	224.20	3,848.1	39.5	-126.6	14,293,422.73	1,711,216.13	39° 21' 39.094 N	80° 44' 58.262 W		
3,880.0	11.54	224.50	3,872.6	36.1	-129.9	14,293,419.35	1,711,212.83	39° 21' 39.061 N	80° 44' 58.304 W		
3,905.0	11.82	224.52	3,897.1	32.5	-133.5	14,293,415.74	1,711,209.26	39° 21' 39.025 N	80° 44' 58.349 W		
3,930.0	12.26	224.36	3,921.6	28.8	-137.1	14,293,412.02	1,711,205.63	39° 21' 38.988 N	80° 44' 58.396 W		
3,955.0	12.64	224.86	3,946.0	24.9	-140.9	14,293,408.18	1,711,201.84	39° 21' 38.950 N	80° 44' 58.444 W		
3,980.0	12.82	224.89	3,970.4	21.0	-144.8	14,293,404.28	1,711,197.95	39° 21' 38.912 N	80° 44' 58.494 W		
4,005.0	12.93	225.12	3,994.7	17.1	-148.8	14,293,400.34	1,711,194.02	39° 21' 38.873 N	80° 44' 58.544 W		
4,030.0	13.06	224.86	4,019.1	13.1	-152.7	14,293,396.36	1,711,190.04	39° 21' 38.834 N	80° 44' 58.595 W		
4,055.0	13.03	224.86	4,043.5	9.1	-156.7	14,293,392.36	1,711,186.06	39° 21' 38.794 N	80° 44' 58.646 W		
4,080.0	13.08	225.09	4,067.8	5.1	-160.7	14,293,388.37	1,711,182.07	39° 21' 38.755 N	80° 44' 58.697 W		
4,105.0	13.17	225.40	4,092.2	1.1	-164.7	14,293,384.37	1,711,178.04	39° 21' 38.716 N	80° 44' 58.748 W		
4,130.0	13.04	225.48	4,116.5	-2.9	-168.8	14,293,380.39	1,711,174.00	39° 21' 38.676 N	80° 44' 58.800 W		
4,155.0	12.89	225.89	4,140.9	-6.8	-172.8	14,293,376.48	1,711,169.99	39° 21' 38.638 N	80° 44' 58.851 W		
4,180.0	13.09	225.18	4,165.2	-10.7	-176.8	14,293,372.57	1,711,165.94	39° 21' 38.599 N	80° 44' 58.903 W		
4,205.0	13.15	227.51	4,189.6	-14.6	-181.0	14,293,368.69	1,711,161.80	39° 21' 38.561 N	80° 44' 58.955 W		
4,230.0	13.04	228.21	4,213.9	-18.4	-185.2	14,293,364.89	1,711,157.60	39° 21' 38.524 N	80° 44' 59.009 W		
4,255.0	12.99	228.56	4,238.3	-22.1	-189.4	14,293,361.15	1,711,153.39	39° 21' 38.487 N	80° 44' 59.063 W		
4,280.0	12.99	229.19	4,262.6	-25.8	-193.6	14,293,357.46	1,711,149.16	39° 21' 38.450 N	80° 44' 59.117 W		
4,305.0	13.06	229.47	4,287.0	-29.5	-197.9	14,293,353.79	1,711,144.89	39° 21' 38.414 N	80° 44' 59.171 W		



Scientific Drilling International
Survey Report - Geographic



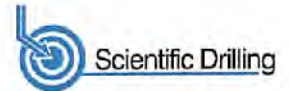
Company: Antero Resources	Local Co-ordinate Reference: Well Rexal Unit 2H
Project: Doddridge County WV	TVD Reference: Precision 522: 1001' GL + 18' KB @ 1019.0usft
Site: Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa	MD Reference: Precision 522: 1001' GL + 18' KB @ 1019.0usft
Well: Rexal Unit 2H	North Reference: Grid
Wellbore: Original Wellpath	Survey Calculation Method: Minimum Curvature
Design: As Drilled	Database: Antero NE

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Survey										WV Department of Environmental Protection
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,330.0	12.68	229.53	4,311.4	-33.1	-202.2	14,293,350.14	1,711,140.62	39° 21' 38.378 N	80° 44' 59.226 W	
4,355.0	12.80	229.16	4,335.7	-36.7	-206.4	14,293,346.52	1,711,136.40	39° 21' 38.343 N	80° 44' 59.280 W	
4,380.0	12.52	226.33	4,360.1	-40.3	-210.5	14,293,342.91	1,711,132.29	39° 21' 38.307 N	80° 44' 59.332 W	
4,405.0	12.39	227.77	4,384.5	-43.9	-214.5	14,293,339.31	1,711,128.28	39° 21' 38.271 N	80° 44' 59.383 W	
4,430.0	12.42	228.08	4,409.0	-47.5	-218.5	14,293,335.71	1,711,124.29	39° 21' 38.236 N	80° 44' 59.434 W	
4,455.0	12.42	231.05	4,433.4	-51.0	-222.6	14,293,332.22	1,711,120.20	39° 21' 38.202 N	80° 44' 59.487 W	
4,480.0	12.37	232.75	4,457.8	-54.3	-226.6	14,293,328.91	1,711,115.96	39° 21' 38.169 N	80° 44' 59.541 W	
4,505.0	12.55	234.53	4,482.2	-57.5	-231.1	14,293,325.71	1,711,111.63	39° 21' 38.137 N	80° 44' 59.596 W	
4,530.0	12.53	235.64	4,506.6	-60.6	-235.6	14,293,322.61	1,711,107.18	39° 21' 38.107 N	80° 44' 59.653 W	
4,555.0	12.54	235.67	4,531.0	-63.7	-240.1	14,293,319.55	1,711,102.70	39° 21' 38.077 N	80° 44' 59.710 W	
4,580.0	12.69	235.83	4,555.4	-66.8	-244.6	14,293,316.47	1,711,098.19	39° 21' 38.046 N	80° 44' 59.768 W	
4,605.0	13.31	235.05	4,579.8	-70.0	-249.2	14,293,313.28	1,711,093.56	39° 21' 38.015 N	80° 44' 59.827 W	
4,630.0	14.27	233.70	4,604.0	-73.4	-254.1	14,293,309.81	1,711,089.71	39° 21' 37.981 N	80° 44' 59.888 W	
4,655.0	14.71	233.31	4,628.2	-77.2	-259.1	14,293,306.09	1,711,083.89	39° 21' 37.944 N	80° 44' 59.953 W	
4,680.0	15.97	231.21	4,652.4	-81.2	-264.3	14,293,302.04	1,711,078.46	39° 21' 37.904 N	80° 45' 0.019 W	
4,705.0	16.28	230.62	4,676.4	-85.6	-269.7	14,293,297.66	1,711,073.07	39° 21' 37.861 N	80° 45' 0.088 W	
4,730.0	17.41	231.04	4,700.3	-90.2	-275.3	14,293,293.08	1,711,067.45	39° 21' 37.816 N	80° 45' 0.160 W	
4,755.0	18.62	231.62	4,724.1	-95.0	-281.4	14,293,288.23	1,711,061.38	39° 21' 37.768 N	80° 45' 0.237 W	
4,780.0	20.21	232.45	4,747.6	-100.2	-288.0	14,293,283.09	1,711,054.80	39° 21' 37.718 N	80° 45' 0.321 W	
4,805.0	21.61	233.58	4,771.0	-105.5	-295.1	14,293,277.70	1,711,047.64	39° 21' 37.665 N	80° 45' 0.413 W	
4,830.0	22.63	235.61	4,794.1	-111.0	-302.8	14,293,272.23	1,711,039.93	39° 21' 37.611 N	80° 45' 0.511 W	
4,855.0	22.99	236.24	4,817.1	-116.4	-310.9	14,293,266.80	1,711,031.90	39° 21' 37.557 N	80° 45' 0.613 W	
4,880.0	23.07	236.22	4,840.2	-121.9	-319.0	14,293,261.36	1,711,023.77	39° 21' 37.504 N	80° 45' 0.717 W	
4,905.0	23.39	235.77	4,863.1	-127.4	-327.2	14,293,255.65	1,711,015.60	39° 21' 37.449 N	80° 45' 0.822 W	
4,930.0	24.08	235.31	4,886.0	-133.1	-335.5	14,293,250.15	1,711,007.30	39° 21' 37.393 N	80° 45' 0.927 W	
4,955.0	24.67	235.28	4,908.8	-139.0	-344.0	14,293,244.28	1,710,998.82	39° 21' 37.335 N	80° 45' 1.036 W	
4,980.0	25.27	235.72	4,931.4	-144.9	-352.7	14,293,238.30	1,710,990.12	39° 21' 37.277 N	80° 45' 1.147 W	
5,005.0	25.48	235.99	4,954.0	-151.0	-361.5	14,293,232.29	1,710,981.26	39° 21' 37.217 N	80° 45' 1.260 W	
5,030.0	26.39	237.24	4,976.5	-157.0	-370.6	14,293,226.27	1,710,972.13	39° 21' 37.158 N	80° 45' 1.376 W	
5,055.0	26.40	237.50	4,998.9	-163.0	-380.0	14,293,220.28	1,710,962.77	39° 21' 37.099 N	80° 45' 1.496 W	
5,080.0	26.40	237.64	5,021.3	-168.9	-389.4	14,293,214.32	1,710,953.38	39° 21' 37.040 N	80° 45' 1.615 W	
5,105.0	26.80	237.67	5,043.7	-174.9	-398.8	14,293,208.33	1,710,943.93	39° 21' 36.981 N	80° 45' 1.736 W	
5,130.0	26.95	237.99	5,066.0	-180.9	-408.4	14,293,202.32	1,710,934.36	39° 21' 36.922 N	80° 45' 1.858 W	
5,155.0	27.27	238.19	5,088.2	-187.0	-418.1	14,293,196.29	1,710,924.69	39° 21' 36.863 N	80° 45' 1.981 W	
5,180.0	27.43	238.01	5,110.4	-193.0	-427.8	14,293,190.22	1,710,914.94	39° 21' 36.803 N	80° 45' 2.106 W	
5,205.0	27.69	238.03	5,132.6	-199.1	-437.6	14,293,184.10	1,710,905.13	39° 21' 36.743 N	80° 45' 2.231 W	
5,230.0	27.61	237.98	5,154.7	-205.3	-447.5	14,293,177.95	1,710,895.29	39° 21' 36.682 N	80° 45' 2.357 W	
5,255.0	27.78	238.02	5,176.9	-211.5	-457.3	14,293,171.80	1,710,885.44	39° 21' 36.622 N	80° 45' 2.482 W	
5,280.0	28.12	237.85	5,198.9	-217.7	-467.3	14,293,165.58	1,710,875.51	39° 21' 36.561 N	80° 45' 2.609 W	
5,305.0	27.25	237.55	5,221.1	-223.9	-477.1	14,293,159.37	1,710,865.69	39° 21' 36.499 N	80° 45' 2.734 W	
5,330.0	27.03	236.80	5,243.3	-230.1	-486.7	14,293,153.19	1,710,856.11	39° 21' 36.439 N	80° 45' 2.856 W	
5,355.0	26.28	236.47	5,265.7	-236.2	-496.0	14,293,147.02	1,710,846.74	39° 21' 36.378 N	80° 45' 2.976 W	
5,380.0	26.44	235.96	5,288.1	-242.4	-505.3	14,293,140.85	1,710,837.52	39° 21' 36.317 N	80° 45' 3.094 W	
5,405.0	26.04	235.33	5,310.5	-248.6	-514.4	14,293,134.61	1,710,828.39	39° 21' 36.256 N	80° 45' 3.210 W	
5,430.0	25.83	234.95	5,333.0	-254.9	-523.4	14,293,128.36	1,710,819.42	39° 21' 36.194 N	80° 45' 3.325 W	
5,455.0	25.52	234.47	5,355.5	-261.1	-532.2	14,293,122.10	1,710,810.58	39° 21' 36.133 N	80° 45' 3.437 W	
5,480.0	25.89	234.38	5,378.0	-267.5	-541.0	14,293,115.80	1,710,801.76	39° 21' 36.070 N	80° 45' 3.550 W	
5,505.0	26.10	234.49	5,400.5	-273.8	-549.9	14,293,109.42	1,710,792.85	39° 21' 36.008 N	80° 45' 3.664 W	
5,530.0	26.29	234.22	5,422.9	-280.3	-558.9	14,293,102.99	1,710,783.88	39° 21' 35.944 N	80° 45' 3.778 W	
5,555.0	26.09	233.84	5,445.4	-286.7	-567.8	14,293,096.51	1,710,774.95	39° 21' 35.880 N	80° 45' 3.892 W	
5,580.0	25.90	233.37	5,467.8	-293.2	-576.6	14,293,090.01	1,710,766.13	39° 21' 35.816 N	80° 45' 4.005 W	
5,605.0	25.27	232.47	5,490.4	-299.7	-585.3	14,293,083.50	1,710,757.52	39° 21' 35.752 N	80° 45' 4.115 W	
5,630.0	25.09	231.77	5,513.0	-306.3	-593.7	14,293,076.97	1,710,749.12	39° 21' 35.688 N	80° 45' 4.222 W	
5,655.0	25.36	231.17	5,535.6	-312.9	-602.0	14,293,070.33	1,710,740.79	39° 21' 35.623 N	80° 45' 4.328 W	



Scientific Drilling International
Survey Report - Geographic



Company:	Antero Resources	Local Co-ordinate Reference:	Well Rexal Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Site:	Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa	MD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Well:	Rexal Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,680.0	25.13	230.37	5,558.3	-319.7	-610.2	14,293,063.59	1,710,732.53	39° 21' 35.556 N	80° 45' 4.434 W
5,705.0	24.00	228.97	5,581.0	-326.4	-618.2	14,293,056.87	1,710,724.60	39° 21' 35.490 N	80° 45' 4.535 W
5,730.0	24.27	228.20	5,603.8	-333.1	-625.8	14,293,050.11	1,710,716.94	39° 21' 35.423 N	80° 45' 4.633 W
5,755.0	24.15	227.97	5,626.6	-340.0	-633.5	14,293,043.26	1,710,709.31	39° 21' 35.356 N	80° 45' 4.730 W
5,780.0	23.85	227.72	5,649.4	-346.8	-641.0	14,293,036.43	1,710,701.77	39° 21' 35.288 N	80° 45' 4.826 W
5,805.0	23.97	227.18	5,672.3	-353.7	-648.5	14,293,029.58	1,710,694.30	39° 21' 35.221 N	80° 45' 4.922 W
5,830.0	24.95	227.25	5,695.1	-360.7	-656.1	14,293,022.55	1,710,686.71	39° 21' 35.152 N	80° 45' 5.019 W
5,855.0	25.13	227.13	5,717.7	-367.9	-663.8	14,293,015.36	1,710,678.95	39° 21' 35.081 N	80° 45' 5.118 W
5,880.0	24.80	227.01	5,740.4	-375.1	-671.6	14,293,008.17	1,710,671.22	39° 21' 35.010 N	80° 45' 5.216 W
5,905.0	24.98	226.62	5,763.0	-382.3	-679.2	14,293,000.97	1,710,663.55	39° 21' 34.939 N	80° 45' 5.314 W
5,930.0	25.73	226.77	5,785.6	-389.6	-687.0	14,292,993.63	1,710,655.76	39° 21' 34.866 N	80° 45' 5.414 W
5,955.0	25.81	227.39	5,808.1	-397.0	-695.0	14,292,986.23	1,710,647.80	39° 21' 34.793 N	80° 45' 5.515 W
5,980.0	24.95	226.70	5,830.7	-404.3	-702.8	14,292,978.93	1,710,639.95	39° 21' 34.721 N	80° 45' 5.616 W
6,005.0	25.28	226.23	5,853.4	-411.6	-710.5	14,292,971.62	1,710,632.27	39° 21' 34.649 N	80° 45' 5.714 W
6,037.0	24.38	224.22	5,882.4	-421.1	-720.0	14,292,962.16	1,710,622.73	39° 21' 34.556 N	80° 45' 5.836 W
First SDI MWD @ 6037									
6,068.0	23.71	223.07	5,910.7	-430.2	-728.8	14,292,953.03	1,710,614.01	39° 21' 34.466 N	80° 45' 5.947 W
6,099.0	23.79	222.94	5,939.1	-439.3	-737.3	14,292,943.90	1,710,605.50	39° 21' 34.376 N	80° 45' 6.056 W
6,130.0	23.38	221.96	5,967.5	-448.5	-745.6	14,292,934.75	1,710,597.13	39° 21' 34.286 N	80° 45' 6.163 W
6,161.0	22.75	221.37	5,996.0	-457.6	-753.7	14,292,925.68	1,710,589.05	39° 21' 34.196 N	80° 45' 6.266 W
6,191.0	22.14	220.85	6,023.8	-466.2	-761.3	14,292,917.05	1,710,581.52	39° 21' 34.111 N	80° 45' 6.362 W
6,222.0	22.17	222.68	6,052.5	-474.9	-769.0	14,292,908.33	1,710,573.73	39° 21' 34.025 N	80° 45' 6.461 W
6,253.0	24.29	227.87	6,081.0	-483.5	-777.7	14,292,899.75	1,710,565.04	39° 21' 33.941 N	80° 45' 6.572 W
6,284.0	26.44	231.58	6,109.0	-492.1	-787.9	14,292,891.18	1,710,556.90	39° 21' 33.856 N	80° 45' 6.702 W
6,315.0	28.19	230.89	6,136.5	-501.0	-799.0	14,292,882.27	1,710,543.81	39° 21' 33.768 N	80° 45' 6.843 W
6,346.0	30.91	224.28	6,163.5	-511.3	-810.2	14,292,871.94	1,710,532.57	39° 21' 33.687 N	80° 45' 6.987 W
6,376.0	32.97	218.79	6,188.9	-523.2	-820.7	14,292,860.06	1,710,522.07	39° 21' 33.549 N	80° 45' 7.121 W
6,407.0	32.50	223.28	6,215.0	-535.8	-831.7	14,292,847.42	1,710,511.08	39° 21' 33.425 N	80° 45' 7.262 W
6,438.0	31.90	232.16	6,241.3	-546.9	-843.9	14,292,836.33	1,710,498.89	39° 21' 33.315 N	80° 45' 7.417 W
6,469.0	32.22	239.74	6,267.6	-556.1	-857.5	14,292,827.13	1,710,485.28	39° 21' 33.225 N	80° 45' 7.591 W
6,500.0	31.56	245.94	6,293.9	-563.6	-872.0	14,292,819.66	1,710,470.73	39° 21' 33.151 N	80° 45' 7.776 W
6,531.0	31.01	250.76	6,320.4	-569.5	-887.0	14,292,813.72	1,710,455.78	39° 21' 33.093 N	80° 45' 7.967 W
6,561.0	29.86	254.65	6,346.2	-574.1	-901.5	14,292,809.20	1,710,441.28	39° 21' 33.049 N	80° 45' 8.152 W
6,568.0	29.42	254.74	6,352.3	-575.0	-904.8	14,292,808.28	1,710,437.94	39° 21' 33.040 N	80° 45' 8.194 W
Sycamore @ 6568									
6,592.0	27.93	255.09	6,373.4	-578.0	-916.0	14,292,805.28	1,710,426.82	39° 21' 33.010 N	80° 45' 8.336 W
6,623.0	27.06	256.35	6,400.9	-581.5	-929.8	14,292,801.75	1,710,412.96	39° 21' 32.976 N	80° 45' 8.513 W
6,654.0	26.53	259.89	6,428.6	-584.4	-943.5	14,292,798.87	1,710,399.29	39° 21' 32.948 N	80° 45' 8.687 W
6,685.0	26.64	271.39	6,456.0	-585.4	-957.7	14,292,797.84	1,710,385.03	39° 21' 32.938 N	80° 45' 8.869 W
6,716.0	32.05	283.05	6,482.8	-583.4	-973.2	14,292,799.88	1,710,369.57	39° 21' 32.958 N	80° 45' 9.065 W
6,746.0	36.96	292.39	6,507.6	-576.1	-989.3	14,292,805.12	1,710,353.46	39° 21' 33.011 N	80° 45' 9.270 W
6,775.0	40.49	296.66	6,530.2	-570.6	-1,005.8	14,292,812.67	1,710,336.97	39° 21' 33.086 N	80° 45' 9.480 W
Middlesex @ 6775									
6,777.0	40.74	296.93	6,531.7	-570.0	-1,007.0	14,292,813.25	1,710,335.81	39° 21' 33.092 N	80° 45' 9.495 W
6,808.0	42.57	298.54	6,554.9	-560.4	-1,025.2	14,292,822.84	1,710,317.58	39° 21' 33.187 N	80° 45' 9.727 W
6,839.0	43.83	298.61	6,577.5	-550.3	-1,043.8	14,292,832.99	1,710,298.95	39° 21' 33.288 N	80° 45' 9.964 W
6,870.0	45.61	298.51	6,599.5	-539.8	-1,063.0	14,292,843.42	1,710,279.79	39° 21' 33.391 N	80° 45' 10.207 W
6,901.0	48.01	300.42	6,620.7	-528.7	-1,082.7	14,292,854.54	1,710,260.12	39° 21' 33.502 N	80° 45' 10.458 W
6,932.0	50.74	302.74	6,640.9	-516.4	-1,102.7	14,292,866.87	1,710,240.08	39° 21' 33.624 N	80° 45' 10.712 W
6,962.0	53.69	306.91	6,659.3	-502.8	-1,122.1	14,292,880.42	1,710,220.64	39° 21' 33.759 N	80° 45' 10.959 W
6,968.0	54.08	307.38	6,661.6	-500.9	-1,124.7	14,292,882.38	1,710,218.05	39° 21' 33.778 N	80° 45' 10.992 W
Burkett @ 6966									
6,993.0	56.74	310.39	6,677.0	-488.9	-1,142.0	14,292,898.32	1,710,200.77	39° 21' 33.917 N	80° 45' 11.212 W

WV Department of Environmental Protection



Scientific Drilling International
Survey Report - Geographic



Company:	Antero Resources	Local Co-ordinate Reference:	Well Rexal Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Site:	Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa	MD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Well:	Rexal Unit 2H	North Reference:	Grid Office of Oil and Gas
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

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Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
7,017.0	59.10	313.39	6,689.7	-473.3	-1,157.1	14,292,909.91	1,710,185.63	39° 21' 34.051 N	80° 45' 11.404 W
Tully @ 7017									
7,024.0	59.80	314.23	6,693.3	-469.2	-1,161.5	14,292,914.08	1,710,181.29	39° 21' 34.093 N	80° 45' 11.459 W
7,055.0	62.24	317.52	6,703.3	-449.7	-1,180.4	14,292,933.54	1,710,162.42	39° 21' 34.285 N	80° 45' 11.899 W
7,086.0	64.84	320.13	6,722.1	-428.8	-1,198.6	14,292,954.43	1,710,144.16	39° 21' 34.493 N	80° 45' 11.931 W
7,117.0	67.61	323.70	6,734.6	-406.5	-1,216.1	14,292,976.76	1,710,126.67	39° 21' 34.714 N	80° 45' 12.153 W
7,136.0	69.23	325.39	6,741.6	-392.1	-1,226.4	14,292,991.16	1,710,116.42	39° 21' 34.857 N	80° 45' 12.263 W
Marcellus @ 7136									
7,148.0	70.26	326.43	6,745.7	-382.8	-1,232.7	14,293,000.48	1,710,110.12	39° 21' 34.949 N	80° 45' 12.363 W
7,178.0	73.67	327.06	6,755.0	-358.9	-1,246.3	14,293,024.33	1,710,094.48	39° 21' 35.185 N	80° 45' 12.561 W
7,209.0	76.87	326.88	6,762.9	-333.8	-1,264.6	14,293,049.46	1,710,078.14	39° 21' 35.434 N	80° 45' 12.769 W
7,240.0	80.06	325.68	6,769.1	-308.5	-1,281.5	14,293,074.72	1,710,061.28	39° 21' 35.684 N	80° 45' 12.982 W
7,271.0	82.76	323.77	6,773.7	-283.5	-1,299.2	14,293,099.74	1,710,043.58	39° 21' 35.932 N	80° 45' 13.207 W
7,302.0	83.87	323.01	6,777.3	-258.8	-1,317.6	14,293,124.45	1,710,025.21	39° 21' 36.177 N	80° 45' 13.440 W
7,332.0	84.40	321.83	6,780.4	-235.1	-1,335.8	14,293,148.10	1,710,007.01	39° 21' 36.411 N	80° 45' 13.671 W
7,357.0	85.81	321.37	6,782.5	-215.6	-1,351.2	14,293,167.62	1,709,991.54	39° 21' 36.605 N	80° 45' 13.867 W
7,396.0	90.01	321.41	6,784.0	-185.2	-1,375.5	14,293,198.07	1,709,967.23	39° 21' 36.908 N	80° 45' 14.176 W
7,419.0	91.05	321.43	6,783.7	-167.2	-1,389.9	14,293,216.05	1,709,952.89	39° 21' 37.085 N	80° 45' 14.358 W
7,512.0	92.16	325.06	6,781.1	-92.7	-1,445.5	14,293,290.52	1,709,897.27	39° 21' 37.822 N	80° 45' 15.064 W
7,604.0	91.97	329.10	6,777.8	-15.6	-1,495.5	14,293,367.66	1,709,847.31	39° 21' 38.587 N	80° 45' 15.897 W
7,697.0	90.34	330.61	6,776.0	64.8	-1,542.2	14,293,448.08	1,709,800.62	39° 21' 39.383 N	80° 45' 16.289 W
7,789.0	90.58	332.25	6,775.2	145.6	-1,586.1	14,293,528.87	1,709,756.63	39° 21' 40.183 N	80° 45' 16.847 W
7,882.0	89.17	329.91	6,775.4	227.0	-1,631.1	14,293,610.27	1,709,711.66	39° 21' 40.989 N	80° 45' 17.417 W
7,975.0	91.06	336.07	6,775.2	309.8	-1,673.3	14,293,693.08	1,709,669.44	39° 21' 41.809 N	80° 45' 17.951 W
8,067.0	90.35	340.03	6,774.1	395.1	-1,707.7	14,293,778.39	1,709,635.06	39° 21' 42.653 N	80° 45' 18.388 W
8,160.0	90.25	340.54	6,773.8	482.7	-1,739.1	14,293,865.93	1,709,603.89	39° 21' 43.520 N	80° 45' 18.783 W
8,252.0	90.25	342.14	6,773.2	569.8	-1,766.5	14,293,953.09	1,709,574.26	39° 21' 44.382 N	80° 45' 19.155 W
8,345.0	90.35	340.78	6,772.7	658.0	-1,798.1	14,294,041.26	1,709,544.67	39° 21' 45.255 N	80° 45' 19.529 W
8,437.0	89.34	336.66	6,773.0	743.7	-1,831.5	14,294,126.96	1,709,511.28	39° 21' 46.103 N	80° 45' 19.951 W
8,530.0	90.05	339.05	6,773.5	829.8	-1,866.6	14,294,213.09	1,709,478.22	39° 21' 46.956 N	80° 45' 20.395 W
8,622.0	89.88	336.27	6,773.5	915.5	-1,900.0	14,294,298.78	1,709,442.74	39° 21' 47.804 N	80° 45' 20.818 W
8,715.0	90.48	337.45	6,773.2	1,001.7	-1,935.1	14,294,384.92	1,709,407.70	39° 21' 48.656 N	80° 45' 21.261 W
8,808.0	90.61	336.47	6,772.3	1,087.3	-1,971.5	14,294,470.50	1,709,371.30	39° 21' 49.504 N	80° 45' 21.722 W
8,900.0	90.95	339.57	6,771.1	1,172.5	-2,005.9	14,294,555.79	1,709,336.87	39° 21' 50.348 N	80° 45' 22.158 W
8,993.0	89.78	335.63	6,770.5	1,258.5	-2,041.3	14,294,641.76	1,709,301.44	39° 21' 51.199 N	80° 45' 22.606 W
9,085.0	91.65	336.00	6,769.4	1,342.4	-2,079.0	14,294,725.67	1,709,263.76	39° 21' 52.029 N	80° 45' 23.083 W
9,177.0	89.77	340.16	6,768.2	1,427.7	-2,113.4	14,294,810.99	1,709,229.42	39° 21' 52.874 N	80° 45' 23.517 W
9,270.0	89.64	342.25	6,768.7	1,515.8	-2,143.3	14,294,899.03	1,709,199.46	39° 21' 53.745 N	80° 45' 23.896 W
9,363.0	89.27	340.89	6,769.6	1,604.0	-2,172.7	14,294,987.25	1,709,170.06	39° 21' 54.618 N	80° 45' 24.267 W
9,455.0	90.08	341.07	6,770.1	1,691.0	-2,202.7	14,295,074.22	1,709,140.08	39° 21' 55.479 N	80° 45' 24.646 W
9,547.0	90.24	343.64	6,769.8	1,778.7	-2,230.4	14,295,161.93	1,709,112.35	39° 21' 56.347 N	80° 45' 24.997 W
9,640.0	89.87	345.74	6,769.8	1,868.4	-2,254.8	14,295,251.67	1,709,087.95	39° 21' 57.235 N	80° 45' 25.304 W
9,733.0	88.63	342.33	6,771.0	1,957.8	-2,280.4	14,295,341.06	1,709,062.38	39° 21' 58.119 N	80° 45' 25.627 W
9,825.0	88.12	335.88	6,773.6	2,043.7	-2,313.2	14,295,426.93	1,709,029.58	39° 21' 58.969 N	80° 45' 26.042 W
9,918.0	91.08	334.55	6,774.2	2,128.1	-2,352.2	14,295,511.34	1,708,990.59	39° 21' 59.805 N	80° 45' 26.536 W
10,010.0	90.98	334.02	6,772.6	2,211.0	-2,392.1	14,295,594.21	1,708,950.68	39° 22' 0.625 N	80° 45' 27.041 W
10,103.0	89.33	333.48	6,772.3	2,294.4	-2,433.2	14,295,677.62	1,708,909.55	39° 22' 1.451 N	80° 45' 27.562 W
10,195.0	91.12	335.20	6,772.0	2,377.3	-2,473.1	14,295,760.54	1,708,869.71	39° 22' 2.272 N	80° 45' 28.067 W
10,288.0	91.65	337.72	6,769.7	2,462.5	-2,510.2	14,295,845.77	1,708,832.58	39° 22' 3.116 N	80° 45' 28.537 W
10,380.0	89.91	337.57	6,768.5	2,547.6	-2,545.2	14,295,930.84	1,708,797.59	39° 22' 3.958 N	80° 45' 28.980 W
10,473.0	89.47	336.30	6,769.0	2,633.2	-2,581.6	14,296,016.40	1,708,761.16	39° 22' 4.805 N	80° 45' 29.441 W
10,534.0	89.66	338.18	6,769.4	2,689.4	-2,605.2	14,296,072.65	1,708,737.56	39° 22' 5.362 N	80° 45' 29.739 W
10,565.0	90.13	339.37	6,769.5	2,718.3	-2,616.4	14,296,101.55	1,708,726.34	39° 22' 5.648 N	80° 45' 29.881 W
10,595.0	90.67	340.24	6,769.3	2,746.5	-2,626.8	14,296,129.70	1,708,715.98	39° 22' 5.926 N	80° 45' 30.012 W

WV Department of Environmental Protection



Scientific Drilling International
Survey Report - Geographic



Company:	Antero Resources	Local Co-ordinate Reference:	Well Rexal Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Site:	Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa	MD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Well:	Rexal Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

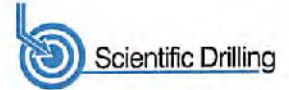
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Survey										WV Department of Environmental Protection	
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude		
10,626.0	90.80	341.27	6,768.9	2,775.7	-2,637.0	14,296,158.97	1,708,705.77	39° 22' 6.215 N	80° 45' 30.141 W		
10,657.0	90.77	341.74	6,768.5	2,805.1	-2,646.8	14,296,188.36	1,708,695.93	39° 22' 6.507 N	80° 45' 30.266 W		
10,749.0	90.44	340.07	6,767.5	2,892.0	-2,676.9	14,296,275.29	1,708,665.84	39° 22' 7.367 N	80° 45' 30.646 W		
10,842.0	90.06	340.84	6,767.1	2,979.7	-2,708.0	14,296,362.93	1,708,634.73	39° 22' 8.235 N	80° 45' 31.039 W		
10,934.0	89.69	336.49	6,767.3	3,065.4	-2,741.5	14,296,448.61	1,708,601.26	39° 22' 9.082 N	80° 45' 31.463 W		
11,027.0	89.96	334.26	6,767.5	3,149.9	-2,780.3	14,296,533.14	1,708,562.52	39° 22' 9.919 N	80° 45' 31.953 W		
11,119.0	90.84	340.69	6,766.9	3,234.8	-2,815.5	14,296,618.08	1,708,527.29	39° 22' 10.760 N	80° 45' 32.399 W		
11,212.0	91.01	336.71	6,765.4	3,321.4	-2,849.3	14,296,704.69	1,708,493.52	39° 22' 11.617 N	80° 45' 32.826 W		
11,305.0	90.43	335.88	6,764.2	3,406.6	-2,886.6	14,296,789.84	1,708,456.14	39° 22' 12.460 N	80° 45' 33.300 W		
11,397.0	89.53	335.08	6,764.3	3,490.3	-2,924.8	14,296,873.54	1,708,417.96	39° 22' 13.289 N	80° 45' 33.763 W		
11,490.0	90.97	337.18	6,763.9	3,575.3	-2,962.4	14,296,958.58	1,708,380.33	39° 22' 14.131 N	80° 45' 34.260 W		
11,582.0	90.13	336.81	6,763.0	3,660.0	-2,996.4	14,297,043.26	1,708,344.37	39° 22' 14.969 N	80° 45' 34.715 W		
11,675.0	90.47	337.35	6,762.5	3,745.7	-3,034.6	14,297,128.91	1,708,308.16	39° 22' 15.817 N	80° 45' 35.173 W		
11,767.0	90.27	338.06	6,761.9	3,830.8	-3,069.5	14,297,214.03	1,708,273.25	39° 22' 16.659 N	80° 45' 35.615 W		
11,860.0	91.55	338.17	6,760.4	3,917.1	-3,104.2	14,297,300.32	1,708,238.59	39° 22' 17.513 N	80° 45' 36.054 W		
11,952.0	91.58	337.00	6,757.9	4,002.1	-3,139.2	14,297,385.33	1,708,203.53	39° 22' 18.355 N	80° 45' 36.497 W		
12,045.0	91.45	337.02	6,755.5	4,087.7	-3,175.6	14,297,470.92	1,708,167.22	39° 22' 19.202 N	80° 45' 36.957 W		
12,138.0	92.15	337.61	6,752.5	4,173.4	-3,211.4	14,297,556.68	1,708,131.37	39° 22' 20.051 N	80° 45' 37.411 W		
12,230.0	91.78	339.17	6,749.4	4,258.9	-3,245.3	14,297,642.16	1,708,097.51	39° 22' 20.897 N	80° 45' 37.839 W		
12,323.0	90.88	335.52	6,747.2	4,344.7	-3,281.1	14,297,727.94	1,708,061.70	39° 22' 21.745 N	80° 45' 38.292 W		
12,415.0	88.66	334.96	6,747.6	4,428.2	-3,319.6	14,297,811.48	1,708,023.17	39° 22' 22.573 N	80° 45' 38.760 W		
12,508.0	88.39	336.02	6,750.0	4,512.8	-3,358.2	14,297,896.07	1,707,984.60	39° 22' 23.410 N	80° 45' 39.269 W		
12,600.0	87.65	339.35	6,753.2	4,597.9	-3,393.1	14,297,981.12	1,707,949.70	39° 22' 24.252 N	80° 45' 39.711 W		
12,693.0	90.94	341.71	6,754.3	4,685.5	-3,424.1	14,298,068.77	1,707,918.71	39° 22' 25.120 N	80° 45' 40.102 W		
12,786.0	90.44	342.05	6,753.2	4,773.9	-3,453.0	14,298,157.15	1,707,889.79	39° 22' 25.994 N	80° 45' 40.468 W		
12,878.0	90.91	340.47	6,752.1	4,861.0	-3,482.5	14,298,244.27	1,707,860.23	39° 22' 26.857 N	80° 45' 40.841 W		
12,971.0	89.63	338.67	6,751.7	4,948.2	-3,515.0	14,298,331.41	1,707,827.77	39° 22' 27.719 N	80° 45' 41.252 W		
13,063.0	90.14	337.82	6,751.9	5,033.6	-3,549.1	14,298,416.86	1,707,793.67	39° 22' 28.565 N	80° 45' 41.663 W		
13,156.0	90.67	337.01	6,751.2	5,119.5	-3,584.6	14,298,502.72	1,707,757.96	39° 22' 29.415 N	80° 45' 42.136 W		
13,249.0	90.17	335.12	6,750.5	5,204.5	-3,622.5	14,298,587.72	1,707,720.23	39° 22' 30.256 N	80° 45' 42.613 W		
13,341.0	90.10	335.00	6,750.3	5,287.9	-3,661.3	14,298,671.14	1,707,681.44	39° 22' 31.082 N	80° 45' 43.105 W		
13,434.0	90.07	338.51	6,750.2	5,373.3	-3,698.0	14,298,756.58	1,707,644.74	39° 22' 31.928 N	80° 45' 43.569 W		
13,526.0	89.64	337.61	6,750.4	5,458.7	-3,732.4	14,298,841.91	1,707,610.37	39° 22' 32.772 N	80° 45' 44.004 W		
13,619.0	90.71	340.71	6,750.1	5,545.6	-3,765.5	14,298,928.81	1,707,577.29	39° 22' 33.632 N	80° 45' 44.423 W		
13,711.0	90.41	340.33	6,749.2	5,632.3	-3,796.2	14,299,015.54	1,707,546.61	39° 22' 34.491 N	80° 45' 44.811 W		
13,804.0	89.64	338.43	6,749.2	5,719.3	-3,828.9	14,299,102.58	1,707,513.86	39° 22' 35.352 N	80° 45' 45.225 W		
13,897.0	89.94	338.77	6,749.5	5,805.9	-3,862.8	14,299,189.17	1,707,479.92	39° 22' 36.209 N	80° 45' 45.654 W		
13,989.0	90.68	338.84	6,749.0	5,891.7	-3,896.1	14,299,274.94	1,707,446.66	39° 22' 37.058 N	80° 45' 46.075 W		
14,081.0	90.47	338.00	6,748.1	5,977.2	-3,929.9	14,299,360.49	1,707,412.83	39° 22' 37.905 N	80° 45' 46.504 W		
14,174.0	90.57	335.87	6,747.2	6,062.8	-3,966.4	14,299,446.05	1,707,376.40	39° 22' 38.752 N	80° 45' 46.965 W		
14,267.0	90.47	337.06	6,746.4	6,148.1	-4,003.5	14,299,531.31	1,707,339.28	39° 22' 39.595 N	80° 45' 47.435 W		
14,359.0	89.94	335.50	6,748.1	6,232.3	-4,040.5	14,299,615.54	1,707,302.29	39° 22' 40.429 N	80° 45' 47.903 W		
14,451.0	89.97	336.26	6,746.1	6,316.3	-4,078.1	14,299,699.51	1,707,264.70	39° 22' 41.261 N	80° 45' 48.379 W		
14,544.0	90.41	339.84	6,745.8	6,402.5	-4,112.8	14,299,785.76	1,707,228.96	39° 22' 42.114 N	80° 45' 48.819 W		
14,636.0	89.77	339.13	6,745.7	6,488.7	-4,145.1	14,299,871.93	1,707,197.72	39° 22' 42.967 N	80° 45' 49.227 W		
14,729.0	90.54	340.61	6,745.4	6,576.0	-4,177.1	14,299,959.24	1,707,165.72	39° 22' 43.831 N	80° 45' 49.632 W		
14,821.0	90.07	338.19	6,745.0	6,662.1	-4,209.4	14,300,045.35	1,707,133.35	39° 22' 44.684 N	80° 45' 50.041 W		
14,914.0	90.00	336.54	6,744.9	6,747.9	-4,245.2	14,300,131.19	1,707,097.56	39° 22' 45.533 N	80° 45' 50.494 W		
15,007.0	90.54	338.23	6,744.5	6,833.8	-4,281.0	14,300,217.03	1,707,061.80	39° 22' 46.383 N	80° 45' 50.947 W		
15,099.0	90.34	335.98	6,743.7	6,918.5	-4,316.8	14,300,301.78	1,707,028.01	39° 22' 47.222 N	80° 45' 51.400 W		
15,192.0	90.31	335.68	6,743.2	7,003.4	-4,354.8	14,300,386.62	1,706,987.93	39° 22' 48.062 N	80° 45' 51.882 W		
15,285.0	89.33	334.86	6,743.5	7,087.8	-4,393.7	14,300,471.09	1,706,949.03	39° 22' 48.898 N	80° 45' 52.375 W		
15,377.0	90.27	336.14	6,743.8	7,171.6	-4,431.9	14,300,554.80	1,706,910.88	39° 22' 49.728 N	80° 45' 52.858 W		
15,470.0	90.00	336.62	6,743.6	7,256.8	-4,469.2	14,300,640.01	1,706,873.62	39° 22' 50.570 N	80° 45' 53.330 W		



Scientific Drilling International
Survey Report - Geographic



Company:	Antero Resources	Local Co-ordinate Reference:	Well Rexal Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft
Site:	Misery Pad: Anne/Arthur/Deano/Hardin/Michelle/Rexa	MD Reference:	Precision 522: 1001' GL + 18' KB @ 1019.0usft RECEIVED Office of Oil and Gas
Well:	Rexal Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Antero NE

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Survey									WV Department of Environmental Protection	
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
15,562.0	90.07	337.93	6,743.6	7,341.6	-4,504.7	14,300,724.87	1,706,838.08	39° 22' 51.410 N	80° 45' 53.780 W	
15,655.0	90.64	340.06	6,743.0	7,428.4	-4,538.0	14,300,811.68	1,706,804.74	39° 22' 52.269 N	80° 45' 54.202 W	
15,748.0	90.34	340.78	6,742.2	7,516.0	-4,569.2	14,300,699.30	1,706,773.58	39° 22' 53.136 N	80° 45' 54.596 W	
15,840.0	90.04	340.65	6,741.9	7,602.9	-4,599.6	14,300,986.13	1,706,743.19	39° 22' 53.996 N	80° 45' 54.980 W	
15,933.0	91.01	342.71	6,741.0	7,691.2	-4,628.8	14,301,074.41	1,706,713.97	39° 22' 54.869 N	80° 45' 55.350 W	
16,025.0	90.34	338.73	6,739.9	7,778.0	-4,659.2	14,301,161.23	1,706,683.60	39° 22' 55.728 N	80° 45' 55.734 W	
16,118.0	89.87	335.92	6,739.8	7,863.8	-4,695.0	14,301,247.03	1,706,647.75	39° 22' 56.578 N	80° 45' 56.188 W	
16,210.0	89.90	336.45	6,740.0	7,947.9	-4,732.2	14,301,331.20	1,706,610.60	39° 22' 57.411 N	80° 45' 56.658 W	
16,303.0	89.77	336.06	6,740.2	8,033.1	-4,769.6	14,301,416.32	1,706,573.15	39° 22' 58.253 N	80° 45' 57.133 W	
16,395.0	90.20	336.55	6,740.3	8,117.3	-4,806.6	14,301,500.57	1,706,536.18	39° 22' 59.087 N	80° 45' 57.601 W	
16,488.0	90.51	336.43	6,739.7	8,202.6	-4,843.7	14,301,585.84	1,706,499.08	39° 22' 59.931 N	80° 45' 58.071 W	
16,580.0	90.00	335.22	6,739.3	8,286.5	-4,881.4	14,301,669.77	1,706,461.41	39° 23' 0.762 N	80° 45' 58.548 W	
16,671.0	89.70	334.95	6,739.5	8,369.1	-4,919.7	14,301,752.33	1,706,423.06	39° 23' 1.580 N	80° 45' 59.034 W	
Last SDI MWD @ 16671										
16,734.0	89.70	334.95	6,739.8	8,426.1	-4,946.4	14,301,809.38	1,706,386.40	39° 23' 2.144 N	80° 45' 59.372 W	
Projection To Bit @ 16734 MD / 6739 TVD										

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,568.0	6,352.3	Sycamore @ 6568		0.00	
6,775.0	6,530.2	Middlesex @ 6775		0.00	
6,966.0	6,661.6	Burkett @ 6966		0.00	
7,017.0	6,689.7	Tully @ 7017		0.00	
7,136.0	6,741.6	Marcellus @ 7136		0.00	

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,037.0	5,882.4	-421.1	-720.0	First SDI MWD @ 6037
16,671.0	6,739.5	8,369.1	-4,919.7	Last SDI MWD @ 16671
16,734.0	6,739.8	8,426.1	-4,946.4	Projection To Bit @ 16734 MD / 6739 TVD

Checked By: _____ Approved By: _____ Date: _____