



End of Well Report

Prepared for



Maves A1

September 14, 2010

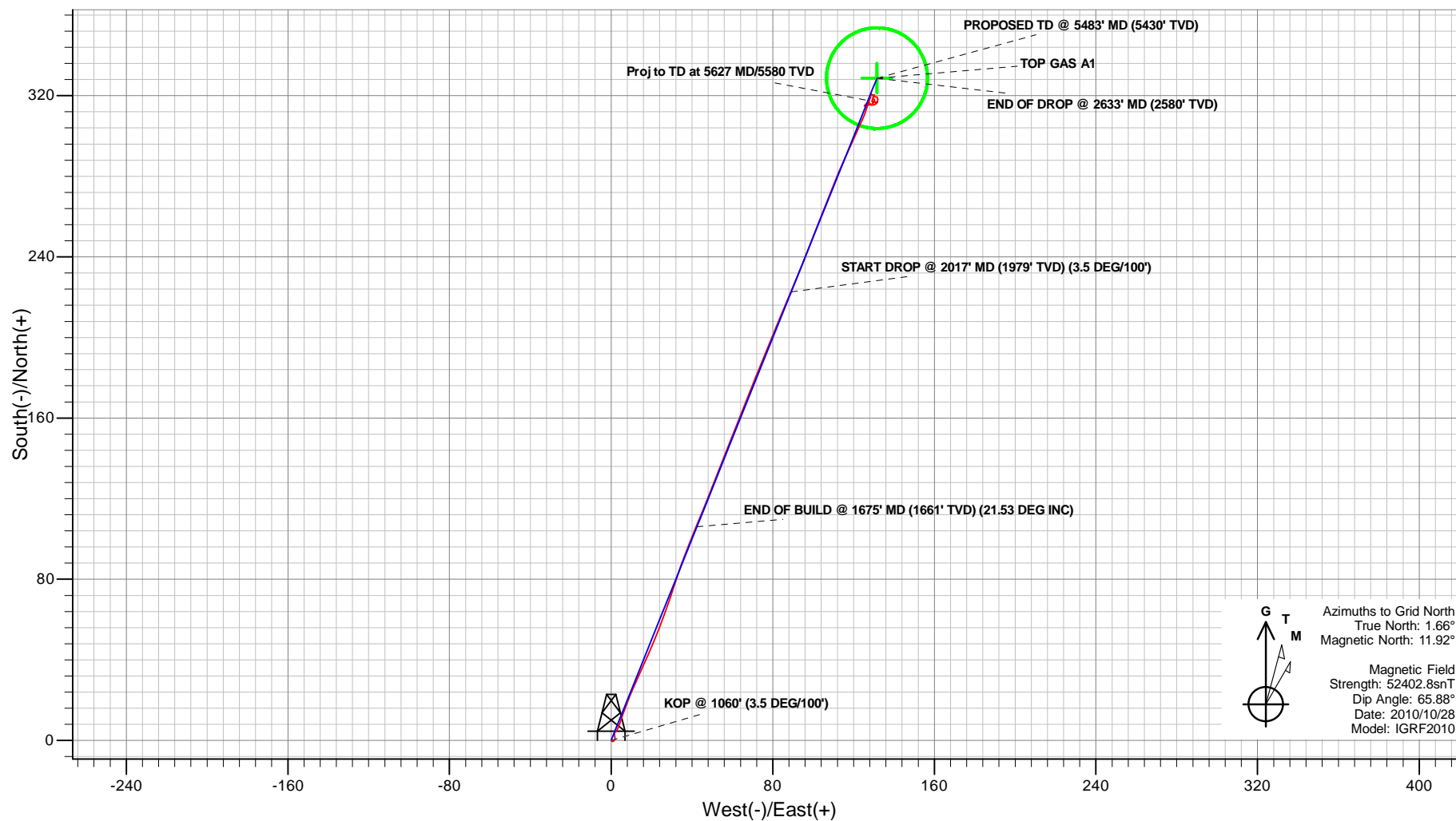
ARK Directional Services Inc
191 University Blvd, # 601
Denver, CO 80206



PLAN VIEW

Antero Resources

Project: MAVES A PROJECT
Site: FRONTIER 12
Well: MAVES A1 (111169)
Wellbore: ANTERO MAVES A1
Design: ANTERO MAVES A1 P01



ANTERO MAVES A1 P01
Created By: ARK Directional Services
Date: 7:51, September 07 2010

PROJECT DETAILS: MAVES A PROJECT

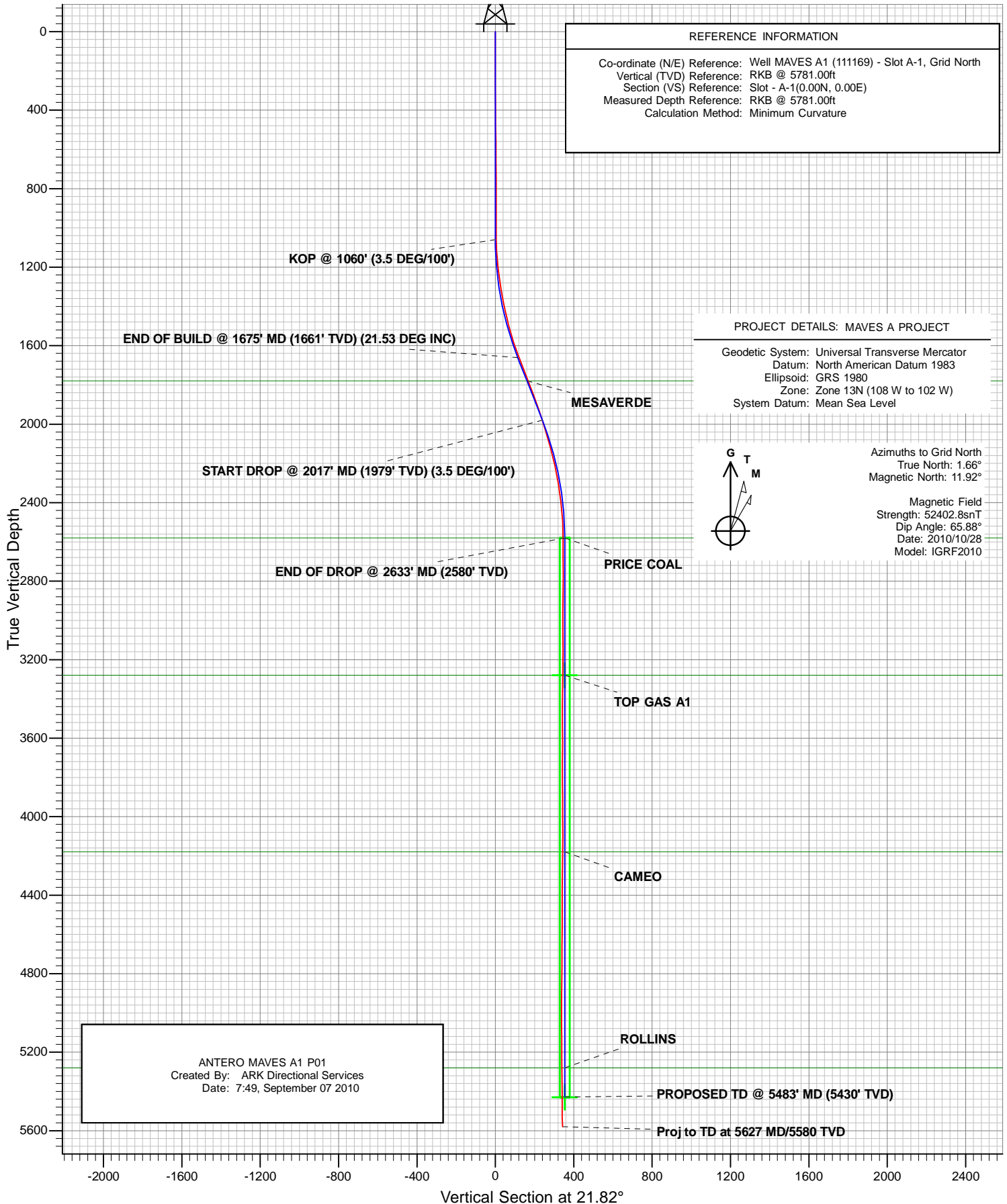
Geodetic System: Universal Transverse Mercator
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Zone 13N (108 W to 102 W)
System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well MAVES A1 (111169) - Slot A-1, Grid North
Vertical (TVD) Reference: RKB @ 5781.00ft
Section (VS) Reference: Slot - A-1(0.00N, 0.00E)
Measured Depth Reference: RKB @ 5781.00ft
Calculation Method: Minimum Curvature



Antero Resources
ANTERO MAVES A1
PLANNED VS ACTUAL



Antero Resources

Maves

Maves A

Maves A01 (111169) - Slot A-1

ANTERO MAVES A1

Survey: Maves A1

Survey Report - Geographic

17 November, 2010

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Well Maves A01 (111169) - Slot A-1
Project:	Maves	TVD Reference:	RKB @ 5781.00ft
Site:	Maves A	MD Reference:	RKB @ 5781.00ft
Well:	Maves A01 (111169)	North Reference:	Grid
Wellbore:	ANTERO MAVES A1	Survey Calculation Method:	Minimum Curvature
Design:	ANTERO MAVES A1	Database:	EDM SERVER DB

Project	Maves		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	Maves A				
Site Position:		Northing:	14,377,668.141 usft	Latitude:	39.561488840°N
From:	Map	Easting:	907,104.064 usft	Longitude:	107.601759382°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-1.66 °

Well	Maves A01 (111169) - Slot A-1					
Well Position	+N/-S	0.00 ft	Northing:	14,377,668.141 usft	Latitude:	39.561488840°N
	+E/-W	0.00 ft	Easting:	907,104.064 usft	Longitude:	107.601759382°W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,757.00 ft

Wellbore	ANTERO MAVES A1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2010/10/28	10.26	65.88	52,403

Design		ANTERO MAVES A1			
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)		+N/-S (ft)	+E/-W (ft)	Direction (°)
	3,280.00		0.00	0.00	21.82

Survey Program		Date	2010/11/17		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
100.00	5,627.00	Maves A1 (ANTERO MAVES A1)	MWD	MWD - Standard	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,377,668.141	907,104.064	39.561488840°N	107.601759382°W
100.00	0.18	167.22	100.00	-0.15	0.03	14,377,667.988	907,104.099	39.561488423°N	107.601759243°W
193.00	0.44	114.49	193.00	-0.44	0.39	14,377,667.697	907,104.456	39.561487654°N	107.601757947°W
286.00	0.44	60.61	286.00	-0.42	1.03	14,377,667.725	907,105.092	39.561487779°N	107.601755695°W
379.00	0.62	40.05	378.99	0.14	1.66	14,377,668.285	907,105.727	39.561489367°N	107.601753502°W
472.00	0.79	357.86	471.99	1.17	1.96	14,377,669.311	907,106.027	39.561492205°N	107.601752545°W
565.00	0.88	341.25	564.98	2.49	1.71	14,377,670.628	907,105.773	39.561495798°N	107.601753578°W
659.00	0.44	25.46	658.97	3.50	1.63	14,377,671.637	907,105.696	39.561498562°N	107.601753954°W
752.00	0.09	61.49	751.97	3.85	1.85	14,377,671.995	907,105.914	39.561499559°N	107.601753219°W
845.00	0.44	319.98	844.97	4.16	1.68	14,377,672.303	907,105.749	39.561500392°N	107.601753837°W
938.00	0.26	107.55	937.97	4.37	1.66	14,377,672.513	907,105.720	39.561500966°N	107.601753960°W
968.00	0.32	134.53	967.97	4.29	1.78	14,377,672.433	907,105.845	39.561500758°N	107.601753510°W

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Well Maves A01 (111169) - Slot A-1
Project:	Maves	TVD Reference:	RKB @ 5781.00ft
Site:	Maves A	MD Reference:	RKB @ 5781.00ft
Well:	Maves A01 (111169)	North Reference:	Grid
Wellbore:	ANTERO MAVES A1	Survey Calculation Method:	Minimum Curvature
Design:	ANTERO MAVES A1	Database:	EDM SERVER DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,059.00	0.70	56.66	1,058.96	4.42	2.43	14,377,672.561	907,106.490	39.561501158°N	107.601751235°W
1,090.00	1.93	26.69	1,089.96	4.99	2.82	14,377,673.131	907,106.883	39.561502755°N	107.601749901°W
1,122.00	3.34	23.43	1,121.92	6.33	3.43	14,377,674.468	907,107.496	39.561506471°N	107.601747867°W
1,153.00	4.57	20.71	1,152.85	8.31	4.23	14,377,676.452	907,108.292	39.561511977°N	107.601745249°W
1,185.00	5.71	18.25	1,184.72	11.02	5.18	14,377,679.156	907,109.241	39.561519472°N	107.601742162°W
1,216.00	6.68	19.21	1,215.54	14.18	6.25	14,377,682.324	907,110.317	39.561528247°N	107.601738672°W
1,248.00	7.56	21.15	1,247.29	17.90	7.63	14,377,686.044	907,111.689	39.561538565°N	107.601734191°W
1,279.00	8.26	21.15	1,277.99	21.88	9.16	14,377,690.023	907,113.228	39.561549603°N	107.601729143°W
1,311.00	9.23	24.58	1,309.62	26.36	11.06	14,377,694.501	907,115.125	39.561562038°N	107.601722878°W
1,342.00	10.11	23.70	1,340.18	31.11	13.19	14,377,699.253	907,117.253	39.561575246°N	107.601715824°W
1,374.00	11.16	24.58	1,371.63	36.50	15.61	14,377,704.641	907,119.670	39.561590220°N	107.601707809°W
1,405.00	12.04	23.96	1,402.00	42.18	18.17	14,377,710.324	907,122.231	39.561606015°N	107.601699315°W
1,436.00	12.92	23.26	1,432.26	48.32	20.85	14,377,716.463	907,124.913	39.561623069°N	107.601690439°W
1,468.00	13.80	21.06	1,463.40	55.17	23.63	14,377,723.311	907,127.697	39.561642080°N	107.601681273°W
1,499.00	14.59	19.13	1,493.45	62.31	26.24	14,377,730.451	907,130.305	39.561661874°N	107.601672760°W
1,531.00	15.47	18.87	1,524.36	70.16	28.94	14,377,738.297	907,133.007	39.561683615°N	107.601663991°W
1,562.00	16.61	18.25	1,554.15	78.28	31.67	14,377,746.417	907,135.731	39.561706110°N	107.601655166°W
1,594.00	18.02	19.92	1,584.70	87.27	34.79	14,377,755.415	907,138.850	39.561731043°N	107.601645034°W
1,625.00	19.34	21.76	1,614.07	96.55	38.32	14,377,764.691	907,142.387	39.561756773°N	107.601633449°W
1,657.00	20.39	22.20	1,644.16	106.63	42.39	14,377,774.773	907,146.458	39.561784759°N	107.601620054°W
1,688.00	21.18	21.59	1,673.14	116.84	46.50	14,377,784.981	907,150.559	39.561813089°N	107.601606565°W
1,783.00	21.09	21.50	1,761.75	148.70	59.07	14,377,816.841	907,163.138	39.561901499°N	107.601565246°W
1,877.00	20.92	21.41	1,849.51	180.06	71.40	14,377,848.201	907,175.462	39.561988514°N	107.601524778°W
1,971.00	19.07	23.35	1,937.84	209.79	83.61	14,377,877.926	907,187.676	39.562071036°N	107.601484535°W
2,066.00	16.79	22.03	2,028.22	236.76	94.91	14,377,904.897	907,198.975	39.562145931°N	107.601447251°W
2,160.00	15.12	20.45	2,118.59	260.83	104.29	14,377,928.971	907,208.352	39.562212724°N	107.601416485°W
2,255.00	12.39	23.26	2,210.86	281.81	112.64	14,377,949.948	907,216.707	39.562270938°N	107.601389020°W
2,349.00	9.32	24.40	2,303.17	298.01	119.77	14,377,966.148	907,223.836	39.562315951°N	107.601365415°W
2,444.00	6.77	23.43	2,397.23	310.15	125.18	14,377,978.293	907,229.241	39.562349702°N	107.601347501°W
2,538.00	3.78	11.74	2,490.82	318.27	128.01	14,377,986.413	907,232.075	39.562372203°N	107.601338288°W
2,633.00	0.70	167.13	2,585.76	320.77	128.78	14,377,988.914	907,232.842	39.562379127°N	107.601335827°W
2,727.00	0.70	88.56	2,679.76	320.23	129.48	14,377,988.369	907,233.544	39.562377686°N	107.601333283°W
2,822.00	0.53	61.14	2,774.75	320.46	130.45	14,377,988.596	907,234.509	39.562378385°N	107.601329886°W
2,916.00	1.14	222.86	2,868.75	319.98	130.19	14,377,988.120	907,234.253	39.562377060°N	107.601330742°W
3,011.00	0.09	168.54	2,963.74	319.21	129.56	14,377,987.354	907,233.625	39.562374909°N	107.601332889°W
3,105.00	1.14	67.91	3,057.73	319.49	130.44	14,377,987.633	907,234.507	39.562375745°N	107.601329795°W
3,200.00	0.79	149.03	3,152.72	319.29	131.66	14,377,987.427	907,235.719	39.562375276°N	107.601325475°W
3,294.00	0.88	175.31	3,246.71	318.01	132.05	14,377,986.152	907,236.112	39.562371808°N	107.601323953°W
3,327.13	0.89	194.46	3,279.83	317.51	132.00	14,377,985.649	907,236.068	39.562370425°N	107.601324056°W
TOP GAS A1									
3,389.00	1.14	222.68	3,341.70	316.59	131.47	14,377,984.730	907,235.531	39.562367861°N	107.601325866°W
3,484.00	0.44	41.71	3,436.69	316.17	131.07	14,377,984.308	907,235.133	39.562366671°N	107.601327234°W
3,578.00	0.44	298.44	3,530.69	316.61	130.99	14,377,984.749	907,235.056	39.562367875°N	107.601327553°W
3,673.00	0.26	332.98	3,625.69	316.97	130.57	14,377,985.115	907,234.637	39.562368846°N	107.601329074°W
3,767.00	0.79	225.58	3,719.69	316.71	130.01	14,377,984.851	907,234.077	39.562368078°N	107.601331031°W
3,862.00	0.53	350.91	3,814.69	316.69	129.48	14,377,984.827	907,233.540	39.562367968°N	107.601332933°W
3,956.00	0.53	344.59	3,908.68	317.53	129.29	14,377,985.675	907,233.356	39.562370281°N	107.601333673°W
4,051.00	0.70	18.25	4,003.68	318.51	129.36	14,377,986.650	907,233.421	39.562372961°N	107.601333542°W
4,145.00	0.62	145.25	4,097.67	318.64	129.83	14,377,986.778	907,233.891	39.562373348°N	107.601331891°W
4,240.00	0.53	135.76	4,192.67	317.90	130.43	14,377,986.040	907,234.490	39.562371373°N	107.601329690°W
4,334.00	1.32	217.76	4,286.66	316.73	130.07	14,377,984.873	907,234.130	39.562368141°N	107.601330845°W
4,429.00	0.70	235.51	4,381.64	315.54	128.92	14,377,983.679	907,232.982	39.562364775°N	107.601334793°W
4,524.00	0.97	347.84	4,476.64	316.00	128.27	14,377,984.137	907,232.334	39.562365979°N	107.601337136°W
4,618.00	0.97	257.49	4,570.63	316.60	127.33	14,377,984.742	907,231.390	39.562367565°N	107.601340546°W
4,713.00	0.62	214.51	4,665.62	316.00	126.25	14,377,984.144	907,230.314	39.562365840°N	107.601344299°W

ARK Directional Services

Survey Report - Geographic

Company:	Antero Resources	Local Co-ordinate Reference:	Well Maves A01 (111169) - Slot A-1
Project:	Maves	TVD Reference:	RKB @ 5781.00ft
Site:	Maves A	MD Reference:	RKB @ 5781.00ft
Well:	Maves A01 (111169)	North Reference:	Grid
Wellbore:	ANTERO MAVES A1	Survey Calculation Method:	Minimum Curvature
Design:	ANTERO MAVES A1	Database:	EDM SERVER DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,807.00	0.18	98.58	4,759.62	315.56	126.11	14,377,983.703	907,230.171	39.562364618°N	107.601344758°W
4,902.00	0.88	197.55	4,854.61	314.85	126.04	14,377,982.986	907,230.099	39.562362643°N	107.601344941°W
4,996.00	0.18	78.80	4,948.61	314.19	125.96	14,377,982.326	907,230.026	39.562360828°N	107.601345131°W
5,091.00	0.18	349.51	5,043.61	314.36	126.08	14,377,982.502	907,230.145	39.562361319°N	107.601344727°W
5,185.00	0.97	308.90	5,137.61	315.01	125.44	14,377,983.147	907,229.499	39.562363037°N	107.601347083°W
5,279.00	0.97	107.72	5,231.60	315.26	125.57	14,377,983.404	907,229.638	39.562363755°N	107.601346618°W
5,374.00	1.67	72.74	5,326.58	315.43	127.66	14,377,983.570	907,231.726	39.562364376°N	107.601339234°W
5,469.00	0.70	161.69	5,421.56	315.29	129.17	14,377,983.430	907,233.230	39.562364110°N	107.601333887°W
5,477.50	0.61	149.55	5,430.06	315.20	129.21	14,377,983.342	907,233.270	39.562363872°N	107.601333739°W
TD A1									
5,563.00	1.49	53.23	5,515.55	315.48	130.33	14,377,983.616	907,234.390	39.562364714°N	107.601329797°W
5,581.00	1.76	48.39	5,533.54	315.80	130.72	14,377,983.940	907,234.784	39.562365633°N	107.601328433°W
5,627.00	1.76	48.39	5,579.52	316.74	131.78	14,377,984.878	907,235.840	39.562368291°N	107.601324785°W
Proj to TD at 5627 MD/5580 TVD									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
5,627.00	5,579.52	316.74	131.78	Proj to TD at 5627 MD/5580 TVD

Checked By: _____ Approved By: _____ Date: _____