



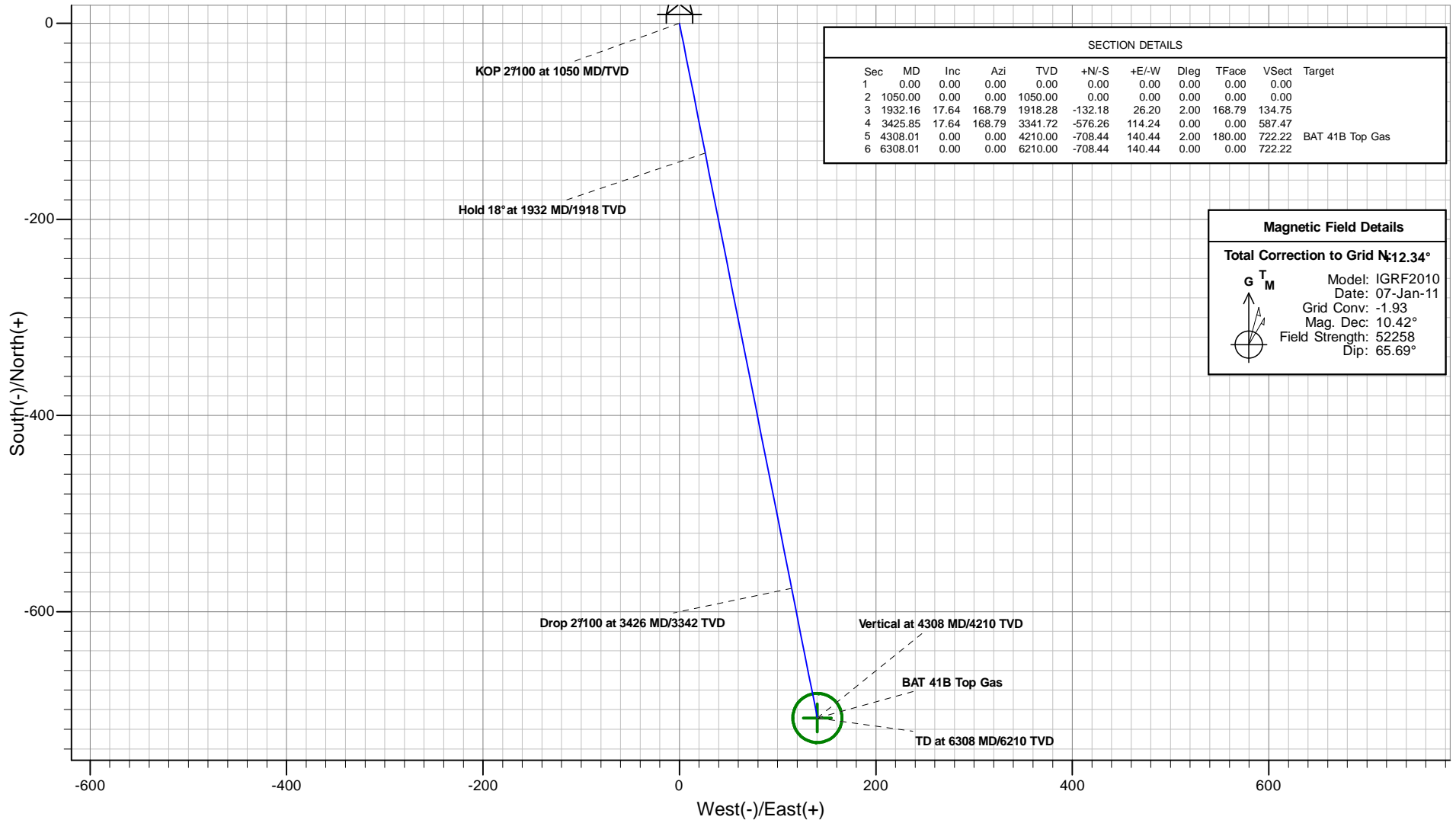
Antero Resources

BAT 41B-19-07-95 (111275)



PLAN VIEW

Project: Monument Ridge
 Site: Monument Ridge Pad
 Well: BAT 41B-19-07-95 (111275)
 Wellbore: BAT 41B
 Design: BAT 41B P01



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1050.00	0.00	0.00	1050.00	0.00	0.00	0.00	0.00	0.00	
3	1932.16	17.64	168.79	1918.28	-132.18	26.20	2.00	168.79	134.75	
4	3425.85	17.64	168.79	3341.72	-576.26	114.24	0.00	0.00	587.47	
5	4308.01	0.00	0.00	4210.00	-708.44	140.44	2.00	180.00	722.22	BAT 41B Top Gas
6	6308.01	0.00	0.00	6210.00	-708.44	140.44	0.00	0.00	722.22	

Magnetic Field Details

Total Correction to Grid N: 12.34°

Model: IGRF2010
 Date: 07-Jan-11
 Grid Conv: -1.93
 Mag. Dec: 10.42°
 Field Strength: 52258
 Dip: 65.69°

Plan: BAT 41B P01
 Created By: ARK Directional Services
 Date: 14:34, October 07 2010

PROJECT DETAILS: Monument Ridge

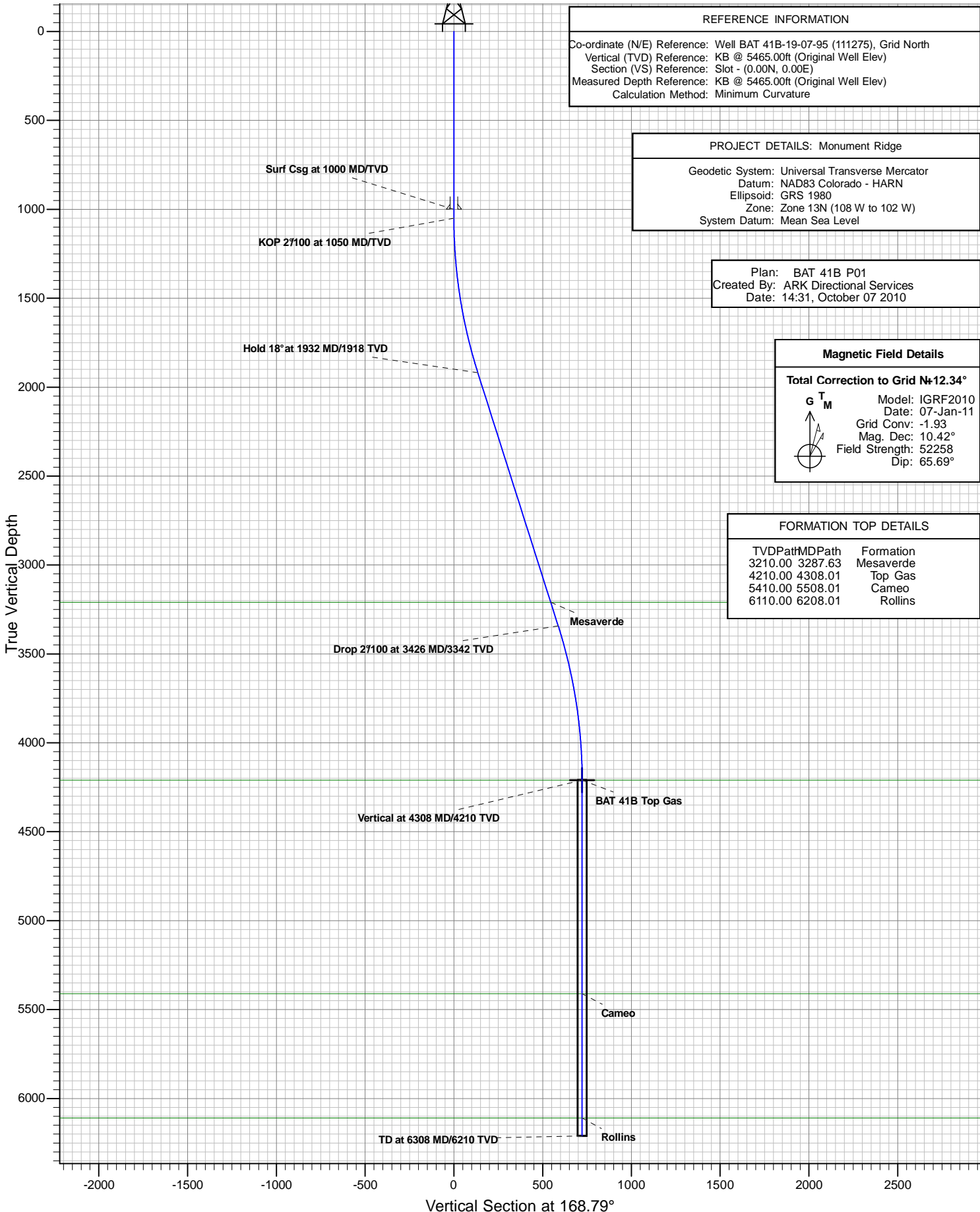
Geodetic System: Universal Transverse Mercator
 Datum: NAD83 Colorado - HARN
 Ellipsoid: GRS 1980
 Zone: Zone 13N (108 W to 102 W)
 System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well BAT 41B-19-07-95 (111275), Grid North
 Vertical (TVD) Reference: KB @ 5465.00ft (Original Well Elev)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: KB @ 5465.00ft (Original Well Elev)
 Calculation Method: Minimum Curvature



VERTICAL SECTION VIEW



REFERENCE INFORMATION
Co-ordinate (N/E) Reference: Well BAT 41B-19-07-95 (111275), Grid North
Vertical (TVD) Reference: KB @ 5465.00ft (Original Well Elev)
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: KB @ 5465.00ft (Original Well Elev)
Calculation Method: Minimum Curvature

PROJECT DETAILS: Monument Ridge
Geodetic System: Universal Transverse Mercator
Datum: NAD83 Colorado - HARN
Ellipsoid: GRS 1980
Zone: Zone 13N (108 W to 102 W)
System Datum: Mean Sea Level

Plan: BAT 41B P01
Created By: ARK Directional Services
Date: 14:31, October 07 2010

Magnetic Field Details												
Total Correction to Grid N=12.34°												
<table border="0"> <tr> <td>G T M</td> <td>Model: IGRF2010</td> </tr> <tr> <td></td> <td>Date: 07-Jan-11</td> </tr> <tr> <td></td> <td>Grid Conv: -1.93</td> </tr> <tr> <td></td> <td>Mag. Dec: 10.42°</td> </tr> <tr> <td></td> <td>Field Strength: 52258</td> </tr> <tr> <td></td> <td>Dip: 65.69°</td> </tr> </table>	G T M	Model: IGRF2010		Date: 07-Jan-11		Grid Conv: -1.93		Mag. Dec: 10.42°		Field Strength: 52258		Dip: 65.69°
G T M	Model: IGRF2010											
	Date: 07-Jan-11											
	Grid Conv: -1.93											
	Mag. Dec: 10.42°											
	Field Strength: 52258											
	Dip: 65.69°											

FORMATION TOP DETAILS	
TVDPathMDPath	Formation
3210.00 3287.63	Mesaverde
4210.00 4308.01	Top Gas
5410.00 5508.01	Cameo
6110.00 6208.01	Rollins

Vertical Section at 168.79°

Antero Resources

**Monument Ridge
Monument Ridge Pad
BAT 41B-19-07-95 (111275)**

BAT 41B

Plan: BAT 41B P01

Standard Planning Report - Geographic

07 October, 2010

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 41B-19-07-95 (111275)
Company:	Antero Resources	TVD Reference:	KB @ 5465.00ft (Original Well Elev)
Project:	Monument Ridge	MD Reference:	KB @ 5465.00ft (Original Well Elev)
Site:	Monument Ridge Pad	North Reference:	Grid
Well:	BAT 41B-19-07-95 (111275)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 41B		
Design:	BAT 41B P01		

Project	Monument Ridge		
Map System:	Universal Transverse Mercator	System Datum:	Mean Sea Level
Geo Datum:	NAD83 Colorado - HARN		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	Monument Ridge Pad				
Site Position:		Northing:	14,334,067.020 usft	Latitude:	39.431305000°N
From:	Lat/Long	Easting:	783,868.932 usft	Longitude:	108.033251000°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-1.93 °

Well	BAT 41B-19-07-95 (111275)					
Well Position	+N/-S	0.00 ft	Northing:	14,333,991.895 usft	Latitude:	39.431101000°N
	+E/-W	0.00 ft	Easting:	783,891.004 usft	Longitude:	108.033164000°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,441.00 ft

Wellbore	BAT 41B				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2011/01/07	10.42	65.69	52,258

Design	BAT 41B P01				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	4,210.00	0.00	0.00	168.79	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,050.00	0.00	0.00	1,050.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,932.16	17.64	168.79	1,918.28	-132.18	26.20	2.00	2.00	0.00	168.79	
3,425.85	17.64	168.79	3,341.72	-576.26	114.24	0.00	0.00	0.00	0.00	
4,308.01	0.00	0.00	4,210.00	-708.44	140.44	2.00	-2.00	0.00	180.00	BAT 41B Top Gas
6,308.01	0.00	0.00	6,210.00	-708.44	140.44	0.00	0.00	0.00	0.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 41B-19-07-95 (111275)
Company:	Antero Resources	TVD Reference:	KB @ 5465.00ft (Original Well Elev)
Project:	Monument Ridge	MD Reference:	KB @ 5465.00ft (Original Well Elev)
Site:	Monument Ridge Pad	North Reference:	Grid
Well:	BAT 41B-19-07-95 (111275)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 41B		
Design:	BAT 41B P01		

Planned 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	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
100.00	0.00	0.00	100.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
200.00	0.00	0.00	200.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
300.00	0.00	0.00	300.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
400.00	0.00	0.00	400.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
500.00	0.00	0.00	500.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
600.00	0.00	0.00	600.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
700.00	0.00	0.00	700.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
800.00	0.00	0.00	800.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
900.00	0.00	0.00	900.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
Surf Csg at 1000 MD/TVD										
1,050.00	0.00	0.00	1,050.00	0.00	0.00	14,333,991.895	783,891.004	39.431101000°N	108.033164000°W	
KOP 2°/100 at 1050 MD/TVD										
1,100.00	1.00	168.79	1,100.00	-0.43	0.08	14,333,991.467	783,891.089	39.431099834°N	108.033163649°W	
1,200.00	3.00	168.79	1,199.93	-3.85	0.76	14,333,988.044	783,891.767	39.431090509°N	108.033160842°W	
1,300.00	5.00	168.79	1,299.68	-10.69	2.12	14,333,981.202	783,893.124	39.431071868°N	108.033155230°W	
1,400.00	7.00	168.79	1,399.13	-20.95	4.15	14,333,970.949	783,895.156	39.431043937°N	108.033146822°W	
1,500.00	9.00	168.79	1,498.15	-34.60	6.86	14,333,957.298	783,897.863	39.431006747°N	108.033135626°W	
1,600.00	11.00	168.79	1,596.63	-51.63	10.24	14,333,940.266	783,901.239	39.430960346°N	108.033121657°W	
1,700.00	13.00	168.79	1,694.44	-72.02	14.28	14,333,919.873	783,905.282	39.430904789°N	108.033104932°W	
1,800.00	15.00	168.79	1,791.46	-95.75	18.98	14,333,896.143	783,909.986	39.430840143°N	108.033085471°W	
1,900.00	17.00	168.79	1,887.58	-122.79	24.34	14,333,869.107	783,915.346	39.430766488°N	108.033063298°W	
1,932.16	17.64	168.79	1,918.28	-132.18	26.20	14,333,859.716	783,917.208	39.430740903°N	108.033055595°W	
Hold 18° at 1932 MD/1918 TVD										
2,000.00	17.64	168.79	1,982.93	-152.35	30.20	14,333,839.546	783,921.206	39.430685955°N	108.033039054°W	
2,100.00	17.64	168.79	2,078.23	-182.08	36.10	14,333,809.816	783,927.100	39.430604961°N	108.033014671°W	
2,200.00	17.64	168.79	2,173.53	-211.81	41.99	14,333,780.086	783,932.994	39.430523966°N	108.032990288°W	
2,300.00	17.64	168.79	2,268.82	-241.54	47.88	14,333,750.356	783,938.888	39.430442972°N	108.032965906°W	
2,400.00	17.64	168.79	2,364.12	-271.27	53.78	14,333,720.626	783,944.782	39.430361978°N	108.032941524°W	
2,500.00	17.64	168.79	2,459.41	-301.00	59.67	14,333,690.896	783,950.676	39.430280984°N	108.032917141°W	
2,600.00	17.64	168.79	2,554.71	-330.73	65.57	14,333,661.165	783,956.570	39.430199990°N	108.032892759°W	
2,700.00	17.64	168.79	2,650.01	-360.46	71.46	14,333,631.435	783,962.464	39.430118996°N	108.032868377°W	
2,800.00	17.64	168.79	2,745.30	-390.19	77.35	14,333,601.705	783,968.357	39.430038002°N	108.032843995°W	
2,900.00	17.64	168.79	2,840.60	-419.92	83.25	14,333,571.975	783,974.251	39.429957008°N	108.032819613°W	
3,000.00	17.64	168.79	2,935.90	-449.65	89.14	14,333,542.245	783,980.145	39.429876014°N	108.032795231°W	
3,100.00	17.64	168.79	3,031.19	-479.38	95.04	14,333,512.515	783,986.039	39.429795020°N	108.032770849°W	
3,200.00	17.64	168.79	3,126.49	-509.11	100.93	14,333,482.785	783,991.933	39.429714025°N	108.032746467°W	
3,287.63	17.64	168.79	3,210.00	-535.17	106.09	14,333,456.731	783,997.098	39.429643048°N	108.032725100°W	
Mesaverde										
3,300.00	17.64	168.79	3,221.79	-538.84	106.82	14,333,453.055	783,997.827	39.429633031°N	108.032722085°W	
3,400.00	17.64	168.79	3,317.08	-568.57	112.72	14,333,423.324	784,003.721	39.429552037°N	108.032697703°W	
3,425.85	17.64	168.79	3,341.72	-576.26	114.24	14,333,415.638	784,005.244	39.429531098°N	108.032691400°W	
Drop 2°/100 at 3426 MD/3342 TVD										
3,500.00	16.16	168.79	3,412.66	-597.40	118.43	14,333,394.494	784,009.436	39.429473493°N	108.032674059°W	
3,600.00	14.16	168.79	3,509.18	-623.05	123.52	14,333,368.842	784,014.522	39.429403611°N	108.032653023°W	
3,700.00	12.16	168.79	3,606.54	-645.39	127.95	14,333,346.511	784,018.949	39.429342773°N	108.032634709°W	
3,800.00	10.16	168.79	3,704.65	-664.37	131.71	14,333,327.526	784,022.712	39.429291052°N	108.032619139°W	
3,900.00	8.16	168.79	3,803.37	-679.99	134.80	14,333,311.911	784,025.808	39.429248512°N	108.032606334°W	
4,000.00	6.16	168.79	3,902.58	-692.21	137.23	14,333,299.685	784,028.232	39.429215205°N	108.032596307°W	
4,100.00	4.16	168.79	4,002.17	-701.03	138.98	14,333,290.863	784,029.981	39.429191172°N	108.032589073°W	
4,200.00	2.16	168.79	4,102.02	-706.44	140.05	14,333,285.456	784,031.053	39.429176441°N	108.032584638°W	
4,300.00	0.16	168.79	4,201.99	-708.43	140.44	14,333,283.470	784,031.446	39.429171030°N	108.032583009°W	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 41B-19-07-95 (111275)
Company:	Antero Resources	TVD Reference:	KB @ 5465.00ft (Original Well Elev)
Project:	Monument Ridge	MD Reference:	KB @ 5465.00ft (Original Well Elev)
Site:	Monument Ridge Pad	North Reference:	Grid
Well:	BAT 41B-19-07-95 (111275)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 41B		
Design:	BAT 41B P01		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,308.01	0.00	0.00	4,210.00	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
Vertical at 4308 MD/4210 TVD - Top Gas - BAT 41B Top Gas										
4,400.00	0.00	0.00	4,301.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
4,500.00	0.00	0.00	4,401.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
4,600.00	0.00	0.00	4,501.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
4,700.00	0.00	0.00	4,601.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
4,800.00	0.00	0.00	4,701.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
4,900.00	0.00	0.00	4,801.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,000.00	0.00	0.00	4,901.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,100.00	0.00	0.00	5,001.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,200.00	0.00	0.00	5,101.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,300.00	0.00	0.00	5,201.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,400.00	0.00	0.00	5,301.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,500.00	0.00	0.00	5,401.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,508.01	0.00	0.00	5,410.00	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
Cameo										
5,600.00	0.00	0.00	5,501.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,700.00	0.00	0.00	5,601.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,800.00	0.00	0.00	5,701.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
5,900.00	0.00	0.00	5,801.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
6,000.00	0.00	0.00	5,901.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
6,100.00	0.00	0.00	6,001.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
6,200.00	0.00	0.00	6,101.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
6,208.01	0.00	0.00	6,110.00	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
Rollins										
6,300.00	0.00	0.00	6,201.99	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
6,308.01	0.00	0.00	6,210.00	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
TD at 6308 MD/6210 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
BAT 41B Top Gas	0.00	0.00	4,210.00	-708.44	140.44	14,333,283.459	784,031.449	39.429171000°N	108.032583000°W	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 25.00)										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,000.00	1,000.00	Surf Csg at 1000 MD/TVD	5.50	6.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 41B-19-07-95 (111275)
Company:	Antero Resources	TVD Reference:	KB @ 5465.00ft (Original Well Elev)
Project:	Monument Ridge	MD Reference:	KB @ 5465.00ft (Original Well Elev)
Site:	Monument Ridge Pad	North Reference:	Grid
Well:	BAT 41B-19-07-95 (111275)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 41B		
Design:	BAT 41B P01		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,287.63	3,210.00	Mesaverde			
4,308.01	4,210.00	Top Gas			
5,508.01	5,410.00	Cameo			
6,208.01	6,110.00	Rollins			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,050.00	1,050.00	0.00	0.00		KOP 2°/100 at 1050 MD/TVD
1,932.16	1,918.28	-132.18	26.20		Hold 18° at 1932 MD/1918 TVD
3,425.85	3,341.72	-576.26	114.24		Drop 2°/100 at 3426 MD/3342 TVD
4,308.01	4,210.00	-708.44	140.44		Vertical at 4308 MD/4210 TVD
6,308.01	6,210.00	-708.44	140.44		TD at 6308 MD/6210 TVD