



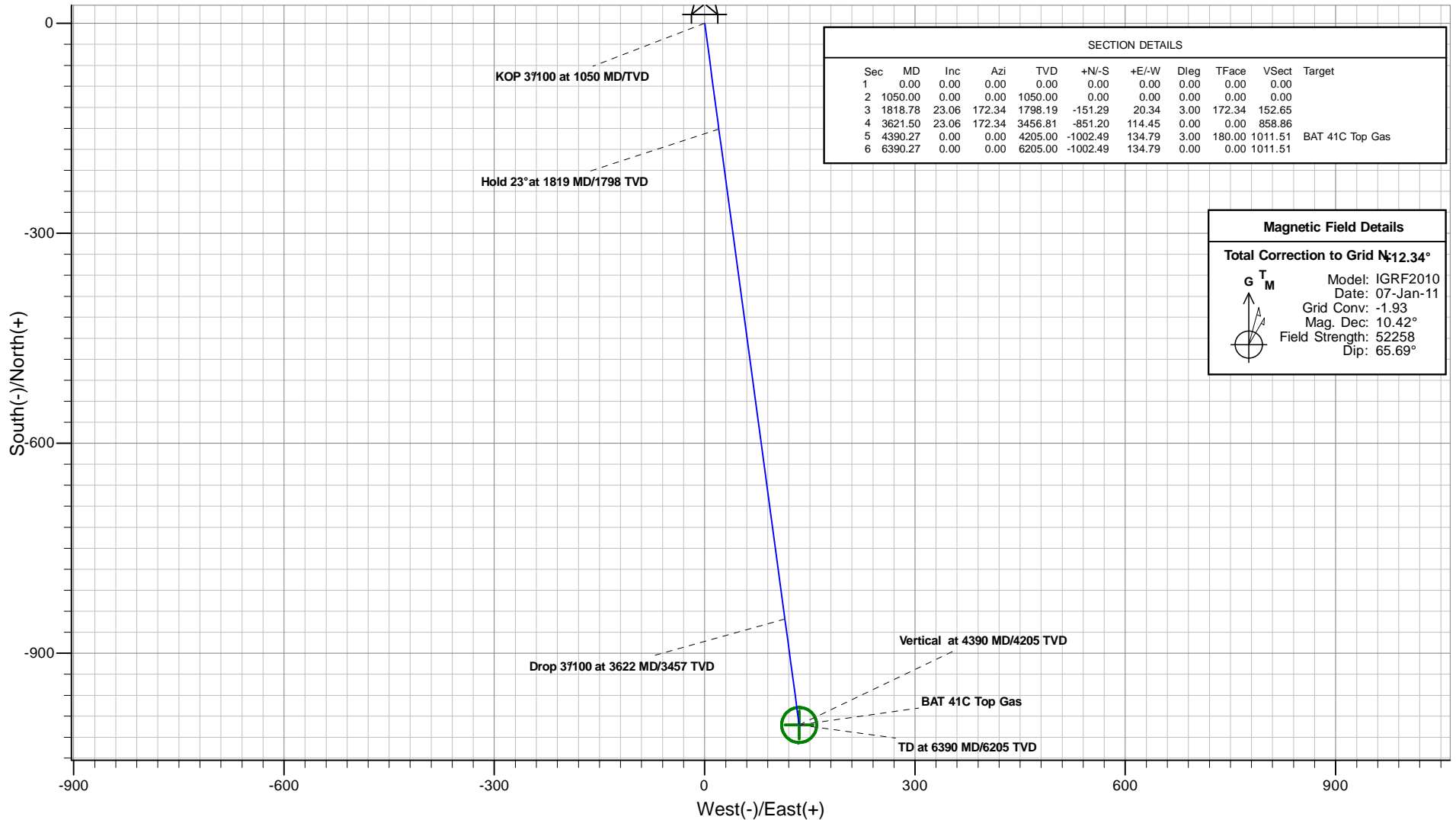
Antero Resources

BAT 41C-19-07-95 (111276)



PLAN VIEW

Project: Monument Ridge
 Site: Monument Ridge Pad
 Well: BAT 41C-19-07-95 (111276)
 Wellbore: BAT 41C
 Design: BAT 41C 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	1818.78	23.06	172.34	1798.19	-151.29	20.34	3.00	172.34	152.65	
4	3621.50	23.06	172.34	3456.81	-851.20	114.45	0.00	0.00	858.86	
5	4390.27	0.00	0.00	4205.00	-1002.49	134.79	3.00	180.00	1011.51	BAT 41C Top Gas
6	6390.27	0.00	0.00	6205.00	-1002.49	134.79	0.00	0.00	1011.51	

Magnetic Field Details

Total Correction to Grid North: 12.34°

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

Plan: BAT 41C P01
 Created By: ARK Directional Services
 Date: 15:19, October 07 2010

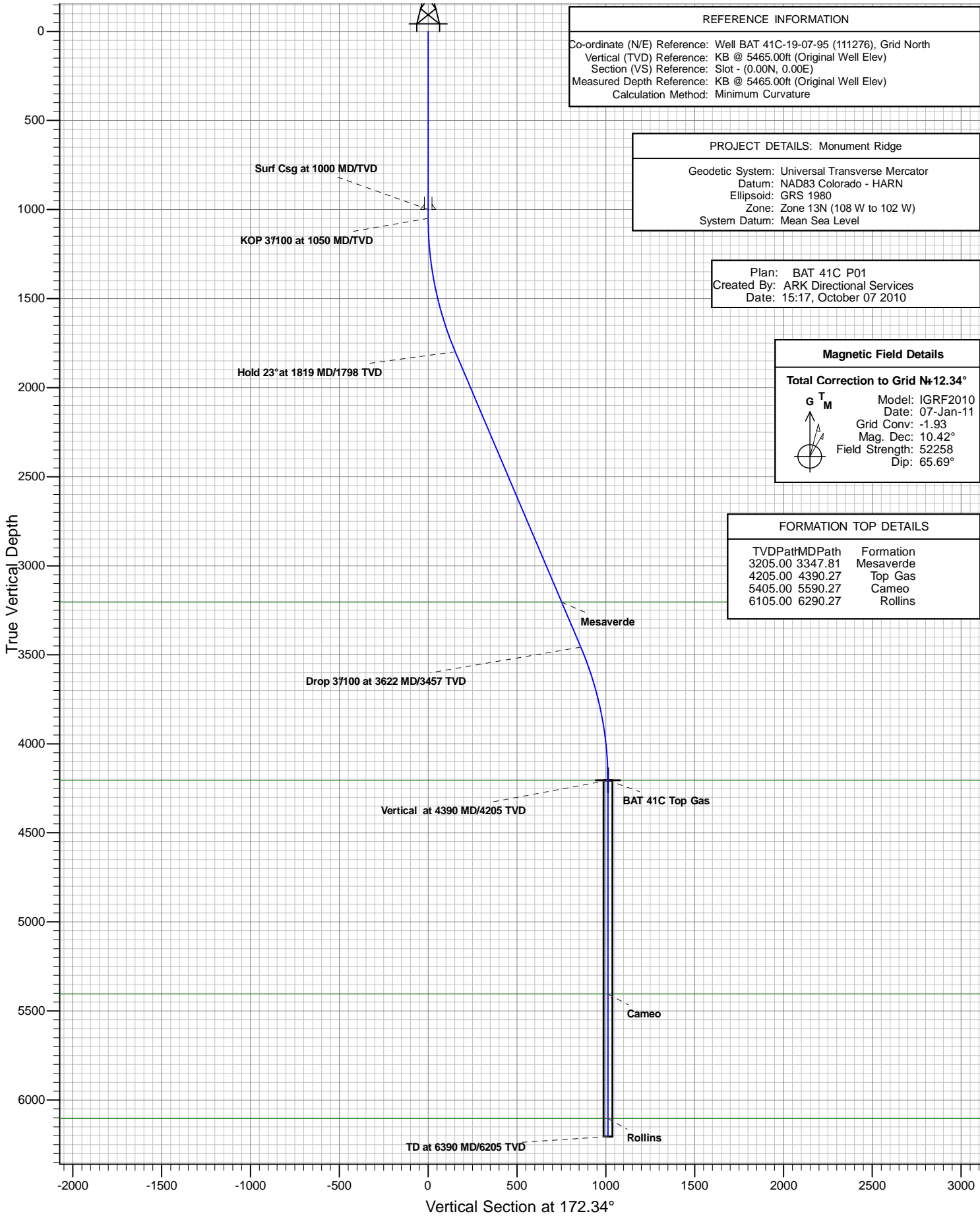
PROJECT DETAILS: Monument Ridge

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 41C-19-07-95 (111276), 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 41C-19-07-95 (111276), 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 41C P01
Created By: ARK Directional Services
Date: 15:17, October 07 2010

Magnetic Field Details					
Total Correction to Grid N=12.34°					
<table border="0"> <tr> <td rowspan="4" style="text-align: center;"> </td> <td>Model: IGRF2010</td> </tr> <tr> <td>Date: 07-Jan-11</td> </tr> <tr> <td>Grid Conv: -1.93</td> </tr> <tr> <td>Mag. Dec: 10.42°</td> </tr> </table>		Model: IGRF2010	Date: 07-Jan-11	Grid Conv: -1.93	Mag. Dec: 10.42°
		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
3205.00 3347.81	Mesaverde
4205.00 4390.27	Top Gas
5405.00 5590.27	Cameo
6105.00 6290.27	Rollins

Antero Resources

**Monument Ridge
Monument Ridge Pad
BAT 41C-19-07-95 (111276)**

BAT 41C

Plan: BAT 41C P01

Standard Planning Report - Geographic

07 October, 2010

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 41C-19-07-95 (111276)
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 41C-19-07-95 (111276)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 41C		
Design:	BAT 41C 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 41C-19-07-95 (111276)					
Well Position	+N/-S	0.00 ft	Northing:	14,333,979.503 usft	Latitude:	39.431067000°N
	+E/-W	0.00 ft	Easting:	783,890.870 usft	Longitude:	108.033163000°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,441.00 ft

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

Design	BAT 41C P01				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	4,205.00	0.00	0.00	172.34	

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	
1,818.78	23.06	172.34	1,798.19	-151.29	20.34	3.00	3.00	0.00	172.34	
3,621.50	23.06	172.34	3,456.81	-851.20	114.45	0.00	0.00	0.00	0.00	
4,390.27	0.00	0.00	4,205.00	-1,002.49	134.79	3.00	-3.00	0.00	180.00	BAT 41C Top Gas
6,390.27	0.00	0.00	6,205.00	-1,002.49	134.79	0.00	0.00	0.00	0.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 41C-19-07-95 (111276)
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 41C-19-07-95 (111276)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 41C		
Design:	BAT 41C 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	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
100.00	0.00	0.00	100.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
200.00	0.00	0.00	200.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
300.00	0.00	0.00	300.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
400.00	0.00	0.00	400.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
500.00	0.00	0.00	500.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
600.00	0.00	0.00	600.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
700.00	0.00	0.00	700.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
800.00	0.00	0.00	800.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
900.00	0.00	0.00	900.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
Surf Csg at 1000 MD/TVD										
1,050.00	0.00	0.00	1,050.00	0.00	0.00	14,333,979.503	783,890.870	39.431067000°N	108.033163000°W	
KOP 3°/100 at 1050 MD/TVD										
1,100.00	1.50	172.34	1,099.99	-0.65	0.09	14,333,978.854	783,890.957	39.431065229°N	108.033162615°W	
1,200.00	4.50	172.34	1,199.85	-5.83	0.78	14,333,973.668	783,891.654	39.431051070°N	108.033159531°W	
1,300.00	7.50	172.34	1,299.29	-16.19	2.18	14,333,963.309	783,893.047	39.431022789°N	108.033153373°W	
1,400.00	10.50	172.34	1,398.04	-31.70	4.26	14,333,947.807	783,895.131	39.430980465°N	108.033144156°W	
1,500.00	13.50	172.34	1,495.85	-52.30	7.03	14,333,927.204	783,897.902	39.430924214°N	108.033131906°W	
1,600.00	16.50	172.34	1,592.43	-77.95	10.48	14,333,901.556	783,901.350	39.430854190°N	108.033116658°W	
1,700.00	19.50	172.34	1,687.52	-108.57	14.60	14,333,870.933	783,905.468	39.430770584°N	108.033098451°W	
1,800.00	22.50	172.34	1,780.87	-144.08	19.37	14,333,835.420	783,910.242	39.430673627°N	108.033077337°W	
1,818.78	23.06	172.34	1,798.19	-151.29	20.34	14,333,828.213	783,911.211	39.430653951°N	108.033073053°W	
Hold 23° at 1819 MD/1798 TVD										
1,900.00	23.06	172.34	1,872.91	-182.82	24.58	14,333,796.679	783,915.452	39.430567856°N	108.033054304°W	
2,000.00	23.06	172.34	1,964.92	-221.65	29.80	14,333,757.854	783,920.672	39.430461855°N	108.033031221°W	
2,100.00	23.06	172.34	2,056.93	-260.48	35.02	14,333,719.028	783,925.892	39.430355854°N	108.033008138°W	
2,200.00	23.06	172.34	2,148.94	-299.30	40.24	14,333,680.203	783,931.113	39.430249852°N	108.032985055°W	
2,300.00	23.06	172.34	2,240.94	-338.13	45.46	14,333,641.377	783,936.333	39.430143851°N	108.032961972°W	
2,400.00	23.06	172.34	2,332.95	-376.95	50.68	14,333,602.552	783,941.553	39.430037850°N	108.032938890°W	
2,500.00	23.06	172.34	2,424.96	-415.78	55.90	14,333,563.726	783,946.774	39.429931849°N	108.032915807°W	
2,600.00	23.06	172.34	2,516.97	-454.60	61.12	14,333,524.901	783,951.994	39.429825848°N	108.032892724°W	
2,700.00	23.06	172.34	2,608.97	-493.43	66.34	14,333,486.075	783,957.214	39.429719847°N	108.032869642°W	
2,800.00	23.06	172.34	2,700.98	-532.25	71.57	14,333,447.250	783,962.435	39.429613845°N	108.032846559°W	
2,900.00	23.06	172.34	2,792.99	-571.08	76.79	14,333,408.425	783,967.655	39.429507844°N	108.032823477°W	
3,000.00	23.06	172.34	2,884.99	-609.90	82.01	14,333,369.599	783,972.875	39.429401843°N	108.032800395°W	
3,100.00	23.06	172.34	2,977.00	-648.73	87.23	14,333,330.774	783,978.096	39.429295842°N	108.032777313°W	
3,200.00	23.06	172.34	3,069.01	-687.56	92.45	14,333,291.948	783,983.316	39.429189841°N	108.032754230°W	
3,300.00	23.06	172.34	3,161.02	-726.38	97.67	14,333,253.123	783,988.536	39.429083839°N	108.032731148°W	
3,347.81	23.06	172.34	3,205.00	-744.94	100.16	14,333,234.562	783,991.032	39.429033165°N	108.032720114°W	
Mesaverde										
3,400.00	23.06	172.34	3,253.02	-765.21	102.89	14,333,214.297	783,993.757	39.428977838°N	108.032708066°W	
3,500.00	23.06	172.34	3,345.03	-804.03	108.11	14,333,175.472	783,998.977	39.428871837°N	108.032684985°W	
3,600.00	23.06	172.34	3,437.04	-842.86	113.33	14,333,136.646	784,004.198	39.428765836°N	108.032661903°W	
3,621.50	23.06	172.34	3,456.81	-851.20	114.45	14,333,128.301	784,005.320	39.428743050°N	108.032656941°W	
Drop 3°/100 at 3622 MD/3457 TVD										
3,700.00	20.71	172.34	3,529.66	-880.20	118.35	14,333,099.301	784,009.219	39.428663874°N	108.032639701°W	
3,800.00	17.71	172.34	3,624.08	-912.81	122.73	14,333,066.698	784,013.603	39.428574861°N	108.032620318°W	
3,900.00	14.71	172.34	3,720.09	-940.47	126.45	14,333,039.037	784,017.322	39.428499342°N	108.032603874°W	
4,000.00	11.71	172.34	3,817.44	-963.11	129.50	14,333,016.394	784,020.366	39.428437523°N	108.032590413°W	
4,100.00	8.71	172.34	3,915.84	-980.67	131.86	14,332,998.832	784,022.728	39.428389574°N	108.032579972°W	
4,200.00	5.71	172.34	4,015.04	-993.11	133.53	14,332,986.397	784,024.400	39.428355626°N	108.032572580°W	
4,300.00	2.71	172.34	4,114.76	-1,000.38	134.51	14,332,979.126	784,025.377	39.428335772°N	108.032568257°W	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 41C-19-07-95 (111276)
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 41C-19-07-95 (111276)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 41C		
Design:	BAT 41C 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	
4,390.27	0.00	0.00	4,205.00	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
Vertical at 4390 MD/4205 TVD - Top Gas - BAT 41C Top Gas										
4,400.00	0.00	0.00	4,214.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
4,500.00	0.00	0.00	4,314.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
4,600.00	0.00	0.00	4,414.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
4,700.00	0.00	0.00	4,514.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
4,800.00	0.00	0.00	4,614.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
4,900.00	0.00	0.00	4,714.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,000.00	0.00	0.00	4,814.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,100.00	0.00	0.00	4,914.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,200.00	0.00	0.00	5,014.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,300.00	0.00	0.00	5,114.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,400.00	0.00	0.00	5,214.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,500.00	0.00	0.00	5,314.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,590.27	0.00	0.00	5,405.00	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
Cameo										
5,600.00	0.00	0.00	5,414.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,700.00	0.00	0.00	5,514.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,800.00	0.00	0.00	5,614.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
5,900.00	0.00	0.00	5,714.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
6,000.00	0.00	0.00	5,814.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
6,100.00	0.00	0.00	5,914.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
6,200.00	0.00	0.00	6,014.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
6,290.27	0.00	0.00	6,105.00	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
Rollins										
6,300.00	0.00	0.00	6,114.73	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
6,390.27	0.00	0.00	6,205.00	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°W	
TD at 6390 MD/6205 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
BAT 41C Top Gas	0.00	0.00	4,205.00	-1,002.49	134.79	14,332,977.012	784,025.662	39.428330000°N	108.032567000°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 41C-19-07-95 (111276)
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 41C-19-07-95 (111276)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 41C		
Design:	BAT 41C P01		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,347.81	3,205.00	Mesaverde			
4,390.27	4,205.00	Top Gas			
5,590.27	5,405.00	Cameo			
6,290.27	6,105.00	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 3°/100 at 1050 MD/TVD
1,818.78	1,798.19	-151.29	20.34		Hold 23° at 1819 MD/1798 TVD
3,621.50	3,456.81	-851.20	114.45		Drop 3°/100 at 3622 MD/3457 TVD
4,390.27	4,205.00	-1,002.49	134.79		Vertical at 4390 MD/4205 TVD
6,390.27	6,205.00	-1,002.49	134.79		TD at 6390 MD/6205 TVD