



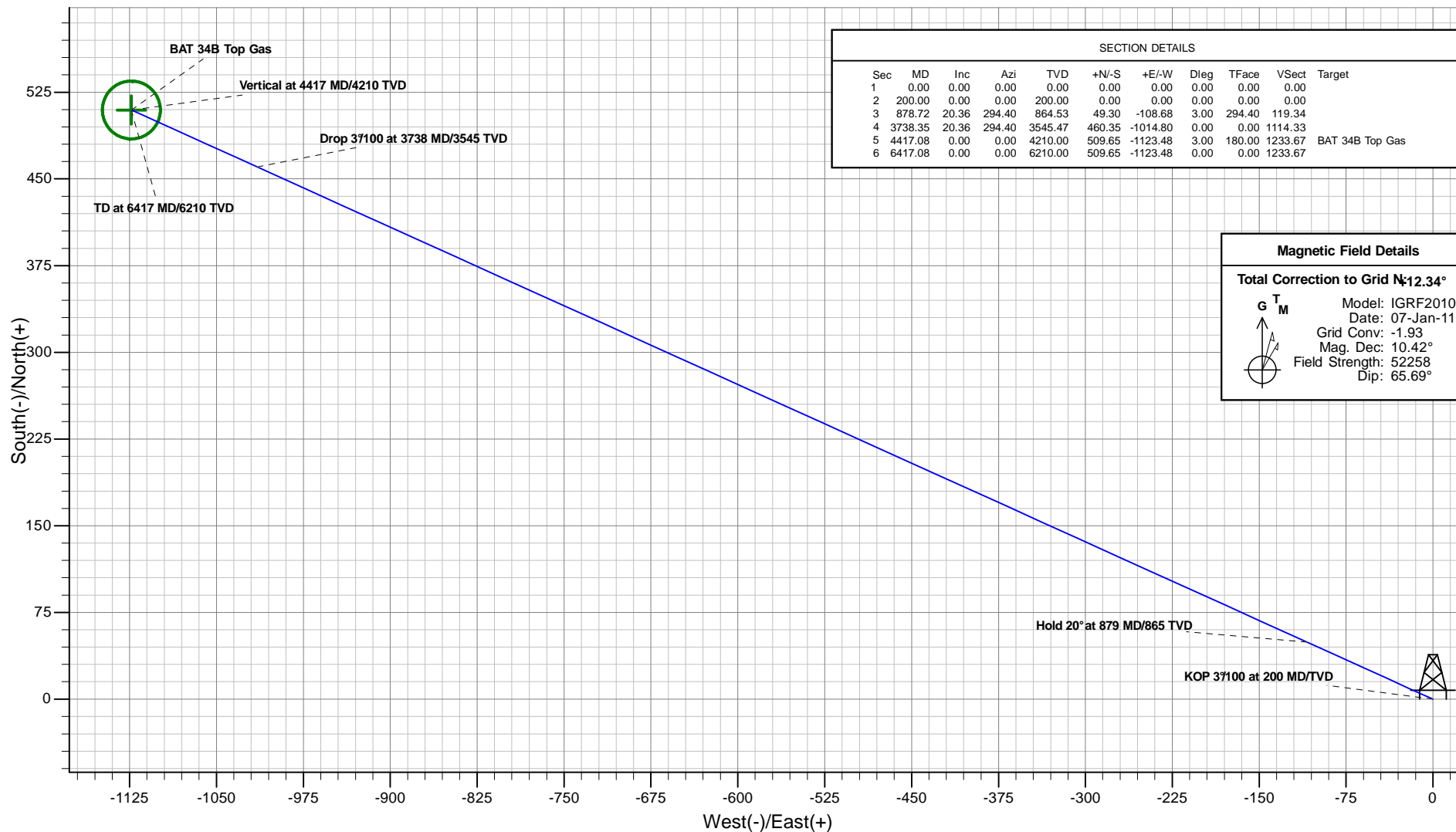
Antero Resources

BAT 34B-18-07-95 (111271)



PLAN VIEW

Project: Monument Ridge
Site: Monument Ridge Pad
Well: BAT 34B-18-07-95 (111271)
Wellbore: BAT 34B
Design: BAT 34B_P01



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	878.72	20.36	294.40	864.53	49.30	-108.68	3.00	294.40	119.34	
4	3738.35	20.36	294.40	3545.47	460.35	-1014.80	0.00	0.00	1114.33	
5	4417.08	0.00	0.00	4210.00	509.65	-1123.48	3.00	180.00	1233.67	BAT 34B Top Gas
6	6417.08	0.00	0.00	6210.00	509.65	-1123.48	0.00	0.00	1233.67	

Magnetic Field Details	
Total Correction to Grid N: 12.34°	
G	T
M	
Model: IGRF2010	
Date: 07-Jan-11	
Grid Conv: -1.93	
Mag. Dec: 10.42°	
Field Strength: 52258	
Dip: 65.69°	

Plan: BAT 34B_P01
Created By: ARK Directional Services
Date: 11:01, 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 34B-18-07-95 (111271), 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

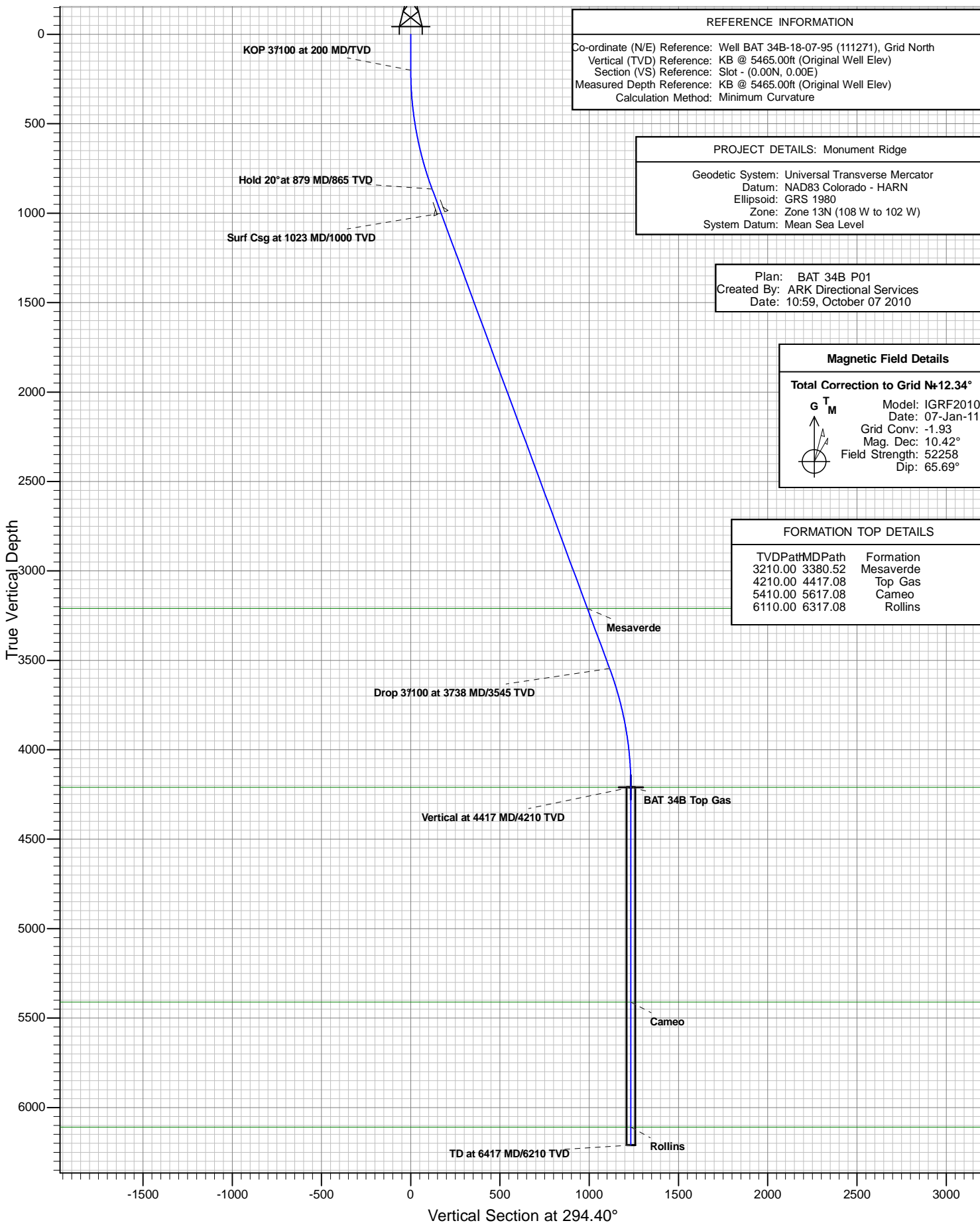


Antero Resources

BAT 34B-18-07-95 (111271)



VERTICAL SECTION VIEW



Antero Resources

Monument Ridge

Monument Ridge Pad

BAT 34B-18-07-95 (111271)

BAT 34B

Plan: BAT 34B P01

Standard Planning Report - Geographic

07 October, 2010

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 34B-18-07-95 (111271)
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 34B-18-07-95 (111271)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 34B		
Design:	BAT 34B 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
From:	Lat/Long	Easting:	783,868.932 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in
		Latitude:	39.431305000°N
		Longitude:	108.033251000°W
		Grid Convergence:	-1.93 °

Well	BAT 34B-18-07-95 (111271)		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	
		Latitude:	39.431134000°N
		Longitude:	108.033245000°W
		Ground Level:	5,441.00 ft

Wellbore	BAT 34B				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2011/01/07	10.42	65.69	52,258

Design	BAT 34B 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	294.40	

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
878.72	20.36	294.40	864.53	49.30	-108.68	3.00	3.00	0.00	294.40	
3,738.35	20.36	294.40	3,545.47	460.35	-1,014.80	0.00	0.00	0.00	0.00	
4,417.08	0.00	0.00	4,210.00	509.65	-1,123.48	3.00	-3.00	0.00	180.00	BAT 34B Top Gas
6,417.08	0.00	0.00	6,210.00	509.65	-1,123.48	0.00	0.00	0.00	0.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 34B-18-07-95 (111271)
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 34B-18-07-95 (111271)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 34B		
Design:	BAT 34B 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	14,334,004.684	783,868.531	39.431134000°N	108.033245000°W
100.00	0.00	0.00	100.00	0.00	0.00	14,334,004.684	783,868.531	39.431134000°N	108.033245000°W
200.00	0.00	0.00	200.00	0.00	0.00	14,334,004.684	783,868.531	39.431134000°N	108.033245000°W
KOP 3°/100 at 200 MD/TVD									
300.00	3.00	294.40	299.95	1.08	-2.38	14,334,005.765	783,866.147	39.431136746°N	108.033253559°W
400.00	6.00	294.40	399.63	4.32	-9.53	14,334,009.006	783,859.003	39.431144975°N	108.033279211°W
500.00	9.00	294.40	498.77	9.71	-21.41	14,334,014.398	783,847.118	39.431158665°N	108.033321886°W
600.00	12.00	294.40	597.08	17.24	-38.01	14,334,021.925	783,830.524	39.431177779°N	108.033381468°W
700.00	15.00	294.40	694.31	26.88	-59.26	14,334,031.568	783,809.267	39.431202263°N	108.033457793°W
800.00	18.00	294.40	790.18	38.62	-85.13	14,334,043.300	783,783.405	39.431232052°N	108.033550651°W
878.72	20.36	294.40	864.53	49.30	-108.68	14,334,053.985	783,759.853	39.431259180°N	108.033635219°W
Hold 20° at 879 MD/865 TVD									
900.00	20.36	294.40	884.47	52.36	-115.42	14,334,057.043	783,753.111	39.431266946°N	108.033659427°W
1,000.00	20.36	294.40	978.23	66.73	-147.11	14,334,071.417	783,721.425	39.431303444°N	108.033773200°W
1,023.00	20.36	294.40	999.79	70.04	-154.39	14,334,074.723	783,714.137	39.431311838°N	108.033799368°W
Surf Csg at 1023 MD/1000 TVD									
1,100.00	20.36	294.40	1,071.98	81.11	-178.79	14,334,085.792	783,689.738	39.431339941°N	108.033886974°W
1,200.00	20.36	294.40	1,165.73	95.48	-210.48	14,334,100.166	783,658.052	39.431376438°N	108.034000748°W
1,300.00	20.36	294.40	1,259.48	109.86	-242.17	14,334,114.540	783,626.365	39.431412936°N	108.034114522°W
1,400.00	20.36	294.40	1,353.23	124.23	-273.85	14,334,128.914	783,594.679	39.431449433°N	108.034228296°W
1,500.00	20.36	294.40	1,446.98	138.61	-305.54	14,334,143.289	783,562.992	39.431485930°N	108.034342070°W
1,600.00	20.36	294.40	1,540.73	152.98	-337.23	14,334,157.663	783,531.306	39.431522427°N	108.034455844°W
1,700.00	20.36	294.40	1,634.49	167.35	-368.91	14,334,172.037	783,499.619	39.431558924°N	108.034569619°W
1,800.00	20.36	294.40	1,728.24	181.73	-400.60	14,334,186.411	783,467.933	39.431595420°N	108.034683393°W
1,900.00	20.36	294.40	1,821.99	196.10	-432.29	14,334,200.786	783,436.246	39.431631917°N	108.034797168°W
2,000.00	20.36	294.40	1,915.74	210.48	-463.97	14,334,215.160	783,404.560	39.431668413°N	108.034910943°W
2,100.00	20.36	294.40	2,009.49	224.85	-495.66	14,334,229.534	783,372.873	39.431704910°N	108.035024718°W
2,200.00	20.36	294.40	2,103.24	239.23	-527.35	14,334,243.909	783,341.187	39.431741406°N	108.035138493°W
2,300.00	20.36	294.40	2,196.99	253.60	-559.03	14,334,258.283	783,309.500	39.431777902°N	108.035252268°W
2,400.00	20.36	294.40	2,290.75	267.97	-590.72	14,334,272.657	783,277.814	39.431814398°N	108.035366043°W
2,500.00	20.36	294.40	2,384.50	282.35	-622.41	14,334,287.031	783,246.127	39.431850894°N	108.035479818°W
2,600.00	20.36	294.40	2,478.25	296.72	-654.09	14,334,301.406	783,214.441	39.431887390°N	108.035593594°W
2,700.00	20.36	294.40	2,572.00	311.10	-685.78	14,334,315.780	783,182.754	39.431923886°N	108.035707369°W
2,800.00	20.36	294.40	2,665.75	325.47	-717.46	14,334,330.154	783,151.068	39.431960381°N	108.035821145°W
2,900.00	20.36	294.40	2,759.50	339.85	-749.15	14,334,344.529	783,119.381	39.431996876°N	108.035934921°W
3,000.00	20.36	294.40	2,853.26	354.22	-780.84	14,334,358.903	783,087.695	39.432033372°N	108.036048697°W
3,100.00	20.36	294.40	2,947.01	368.59	-812.52	14,334,373.277	783,056.008	39.432069867°N	108.036162473°W
3,200.00	20.36	294.40	3,040.76	382.97	-844.21	14,334,387.651	783,024.322	39.432106362°N	108.036276249°W
3,300.00	20.36	294.40	3,134.51	397.34	-875.90	14,334,402.026	782,992.635	39.432142857°N	108.036390025°W
3,380.52	20.36	294.40	3,210.00	408.92	-901.41	14,334,413.600	782,967.121	39.432172243°N	108.036481640°W
Mesaverde									
3,400.00	20.36	294.40	3,228.26	411.72	-907.58	14,334,416.400	782,960.949	39.432179352°N	108.036503801°W
3,500.00	20.36	294.40	3,322.01	426.09	-939.27	14,334,430.774	782,929.262	39.432215847°N	108.036617578°W
3,600.00	20.36	294.40	3,415.76	440.47	-970.96	14,334,445.148	782,897.576	39.432252341°N	108.036731354°W
3,700.00	20.36	294.40	3,509.52	454.84	-1,002.64	14,334,459.523	782,865.889	39.432288836°N	108.036845131°W
3,738.35	20.36	294.40	3,545.47	460.35	-1,014.80	14,334,465.036	782,853.736	39.432302833°N	108.036888770°W
Drop 3°/100 at 3738 MD/3545 TVD									
3,800.00	18.51	294.40	3,603.60	468.83	-1,033.48	14,334,473.510	782,835.056	39.432324348°N	108.036955846°W
3,900.00	15.51	294.40	3,699.22	480.91	-1,060.12	14,334,485.596	782,808.414	39.432355031°N	108.037051507°W
4,000.00	12.51	294.40	3,796.23	490.91	-1,082.17	14,334,495.598	782,786.367	39.432380424°N	108.037130674°W
4,100.00	9.51	294.40	3,894.38	498.81	-1,099.56	14,334,503.488	782,768.973	39.432400457°N	108.037193129°W
4,200.00	6.51	294.40	3,993.39	504.56	-1,112.25	14,334,509.246	782,756.281	39.432415075°N	108.037238702°W
4,300.00	3.51	294.40	4,093.00	508.17	-1,120.21	14,334,512.855	782,748.325	39.432424238°N	108.037267269°W
4,400.00	0.51	294.40	4,192.92	509.62	-1,123.41	14,334,514.305	782,745.128	39.432427920°N	108.037278750°W

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 34B-18-07-95 (111271)
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 34B-18-07-95 (111271)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 34B		
Design:	BAT 34B 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	
4,417.08	0.00	0.00	4,210.00	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
Vertical at 4417 MD/4210 TVD - Top Gas - BAT 34B Top Gas										
4,500.00	0.00	0.00	4,292.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
4,600.00	0.00	0.00	4,392.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
4,700.00	0.00	0.00	4,492.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
4,800.00	0.00	0.00	4,592.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
4,900.00	0.00	0.00	4,692.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,000.00	0.00	0.00	4,792.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,100.00	0.00	0.00	4,892.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,200.00	0.00	0.00	4,992.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,300.00	0.00	0.00	5,092.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,400.00	0.00	0.00	5,192.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,500.00	0.00	0.00	5,292.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,600.00	0.00	0.00	5,392.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,617.08	0.00	0.00	5,410.00	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
Cameo										
5,700.00	0.00	0.00	5,492.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,800.00	0.00	0.00	5,592.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
5,900.00	0.00	0.00	5,692.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
6,000.00	0.00	0.00	5,792.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
6,100.00	0.00	0.00	5,892.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
6,200.00	0.00	0.00	5,992.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
6,300.00	0.00	0.00	6,092.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
6,317.08	0.00	0.00	6,110.00	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
Rollins										
6,400.00	0.00	0.00	6,192.92	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
6,417.08	0.00	0.00	6,210.00	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
TD at 6417 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	
- hit/miss target										
- Shape										
BAT 34B Top Gas	0.00	0.00	4,210.00	509.65	-1,123.48	14,334,514.337	782,745.058	39.432428000°N	108.037279000°W	
- plan hits target center										
- Circle (radius 25.00)										

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,023.00	999.79	Surf Csg at 1023 MD/1000 TVD	5.50	6.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 34B-18-07-95 (111271)
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 34B-18-07-95 (111271)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 34B		
Design:	BAT 34B P01		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,380.52	3,210.00	Mesaverde				
4,417.08	4,210.00	Top Gas				
5,617.08	5,410.00	Cameo				
6,317.08	6,110.00	Rollins				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.00	200.00	0.00	0.00	KOP 3°/100 at 200 MD/TVD	
878.72	864.53	49.30	-108.68	Hold 20° at 879 MD/865 TVD	
3,738.35	3,545.47	460.35	-1,014.80	Drop 3°/100 at 3738 MD/3545 TVD	
4,417.08	4,210.00	509.65	-1,123.48	Vertical at 4417 MD/4210 TVD	
6,417.08	6,210.00	509.65	-1,123.48	TD at 6417 MD/6210 TVD	