



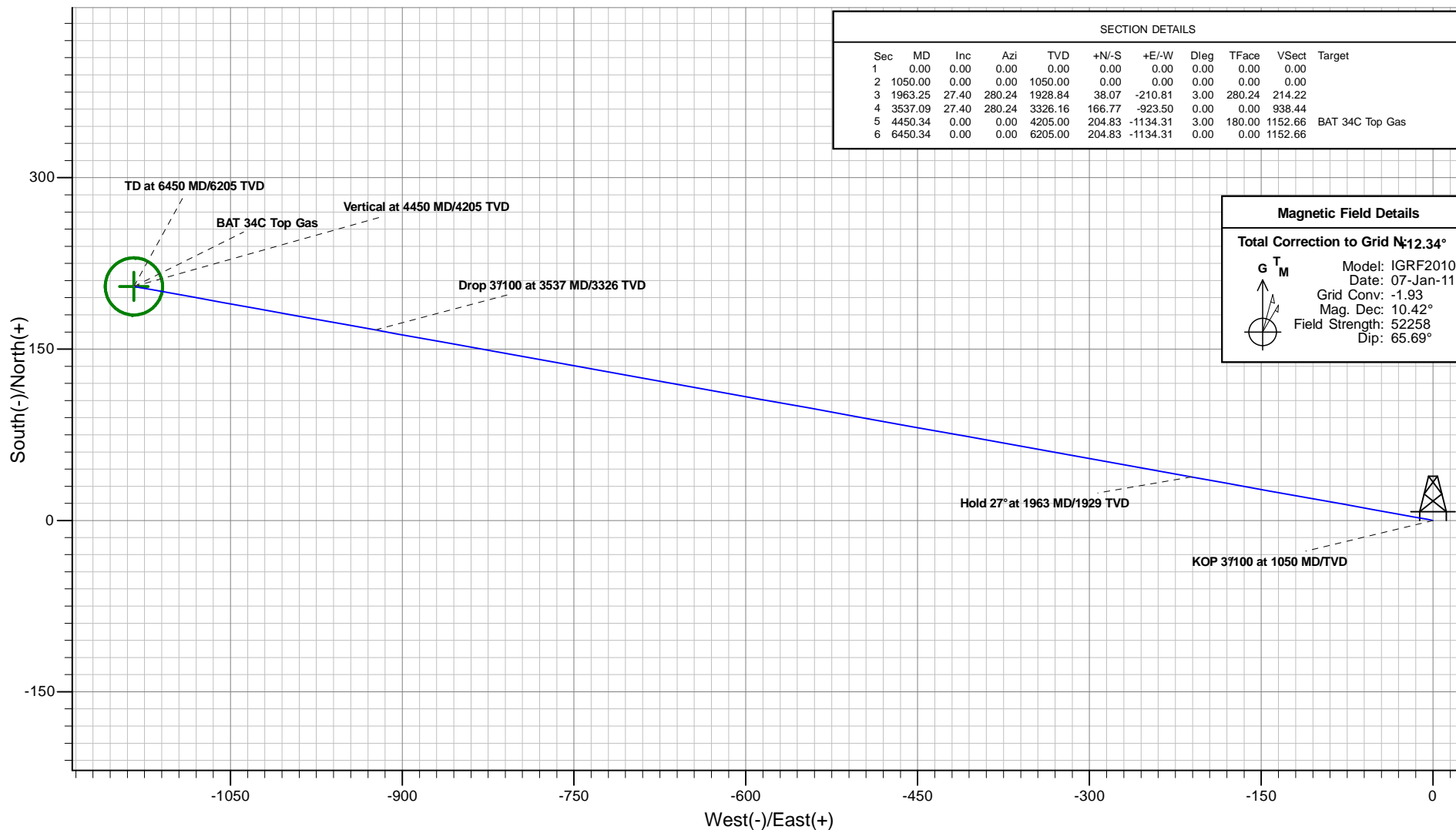
Antero Resources

BAT 34C-18-07-95 (111272)



PLAN VIEW

Project: Monument Ridge
Site: Monument Ridge Pad
Well: BAT 34C-18-07-95 (111272)
Wellbore: BAT 34C
Design: BAT 34C_P01



Plan: BAT 34C_P01
Created By: ARK Directional Services
Date: 10:15, October 15 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 34C-18-07-95 (111272), 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

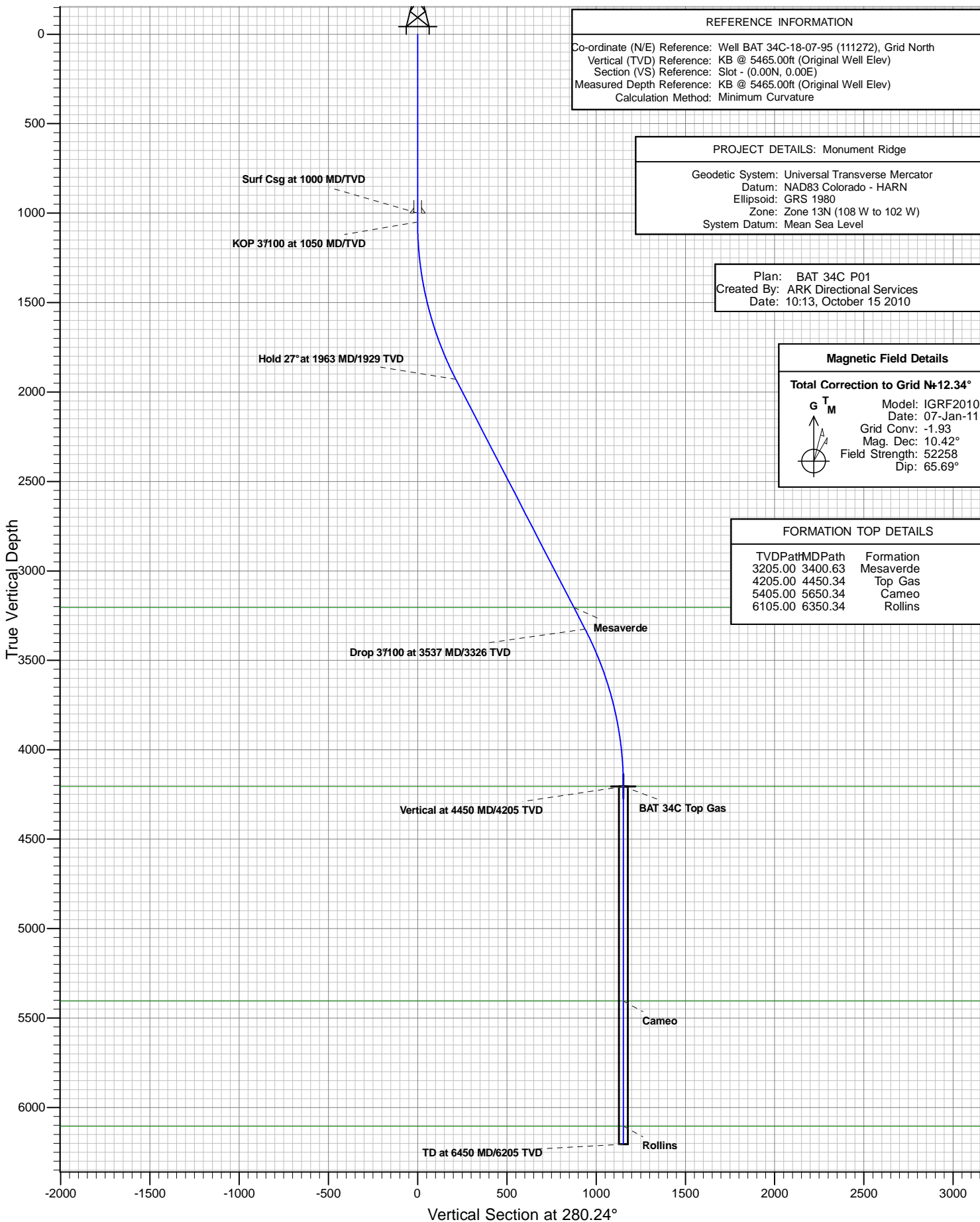


Antero Resources

BAT 34C-18-07-95 (111272)



VERTICAL SECTION VIEW



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well BAT 34C-18-07-95 (111272), 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 34C P01
Created By: ARK Directional Services
Date: 10:13, October 15 2010

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°

FORMATION TOP DETAILS

TVDPathMDPath	Formation
3205.00 3400.63	Mesaverde
4205.00 4450.34	Top Gas
5405.00 5650.34	Cameo
6105.00 6350.34	Rollins

Antero Resources

Monument Ridge

Monument Ridge Pad

BAT 34C-18-07-95 (111272)

BAT 34C

Plan: BAT 34C P01

Standard Planning Report - Geographic

10 November, 2010

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 34C-18-07-95 (111272)
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 34C-18-07-95 (111272)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 34C		
Design:	BAT 34C 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 34C-18-07-95 (111272)				
Well Position	+N/-S	0.00 ft	Northing:	14,333,991.927 usft	Latitude:	39.431099000°N
	+E/-W	0.00 ft	Easting:	783,868.384 usft	Longitude:	108.033244000°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,441.00 ft

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

Design	BAT 34C P01				
Audit Notes:					
Version:	Phase:	PROTOTYPE		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	280.24	

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	
1,963.25	27.40	280.24	1,928.84	38.07	-210.81	3.00	3.00	0.00	280.24	
3,537.09	27.40	280.24	3,326.16	166.77	-923.50	0.00	0.00	0.00	0.00	
4,450.34	0.00	0.00	4,205.00	204.83	-1,134.31	3.00	-3.00	0.00	180.00	BAT 34C Top Gas
6,450.34	0.00	0.00	6,205.00	204.83	-1,134.31	0.00	0.00	0.00	0.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 34C-18-07-95 (111272)
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 34C-18-07-95 (111272)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 34C		
Design:	BAT 34C 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	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
100.00	0.00	0.00	100.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
200.00	0.00	0.00	200.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
300.00	0.00	0.00	300.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
400.00	0.00	0.00	400.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
500.00	0.00	0.00	500.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
600.00	0.00	0.00	600.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
700.00	0.00	0.00	700.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
800.00	0.00	0.00	800.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
900.00	0.00	0.00	900.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
Surf Csg at 1000 MD/TVD									
1,050.00	0.00	0.00	1,050.00	0.00	0.00	14,333,991.927	783,868.384	39.431099000°N	108.033244000°W
KOP 3°/100 at 1050 MD/TVD									
1,100.00	1.50	280.24	1,099.99	0.12	-0.64	14,333,992.043	783,867.740	39.431099260°N	108.033246292°W
1,200.00	4.50	280.24	1,199.85	1.05	-5.79	14,333,992.973	783,862.591	39.431101335°N	108.033264615°W
1,300.00	7.50	280.24	1,299.29	2.90	-16.08	14,333,994.831	783,852.305	39.431105479°N	108.033301211°W
1,400.00	10.50	280.24	1,398.04	5.68	-31.47	14,333,997.610	783,836.913	39.431111682°N	108.033355979°W
1,500.00	13.50	280.24	1,495.85	9.38	-51.93	14,334,001.305	783,816.455	39.431119925°N	108.033428770°W
1,600.00	16.50	280.24	1,592.43	13.98	-77.40	14,334,005.903	783,790.988	39.431130187°N	108.033519384°W
1,700.00	19.50	280.24	1,687.52	19.47	-107.80	14,334,011.394	783,760.581	39.431142439°N	108.033627572°W
1,800.00	22.50	280.24	1,780.87	25.83	-143.07	14,334,017.762	783,725.319	39.431156647°N	108.033753039°W
1,900.00	25.50	280.24	1,872.22	33.06	-183.09	14,334,024.989	783,685.297	39.431172773°N	108.033895440°W
1,963.25	27.40	280.24	1,928.84	38.07	-210.81	14,334,029.995	783,657.576	39.431183943°N	108.033994076°W
Hold 27° at 1963 MD/1929 TVD									
2,000.00	27.40	280.24	1,961.47	41.07	-227.45	14,334,033.000	783,640.934	39.431190648°N	108.034053289°W
2,100.00	27.40	280.24	2,050.25	49.25	-272.73	14,334,041.177	783,595.650	39.431208894°N	108.034214412°W
2,200.00	27.40	280.24	2,139.04	57.43	-318.02	14,334,049.354	783,550.367	39.431227140°N	108.034375536°W
2,300.00	27.40	280.24	2,227.82	65.60	-363.30	14,334,057.532	783,505.083	39.431245385°N	108.034536660°W
2,400.00	27.40	280.24	2,316.60	73.78	-408.59	14,334,065.709	783,459.799	39.431263630°N	108.034697784°W
2,500.00	27.40	280.24	2,405.39	81.96	-453.87	14,334,073.886	783,414.516	39.431281875°N	108.034858907°W
2,600.00	27.40	280.24	2,494.17	90.14	-499.15	14,334,082.064	783,369.232	39.431300120°N	108.035020031°W
2,700.00	27.40	280.24	2,582.96	98.31	-544.44	14,334,090.241	783,323.948	39.431318364°N	108.035181155°W
2,800.00	27.40	280.24	2,671.74	106.49	-589.72	14,334,098.418	783,278.665	39.431336609°N	108.035342280°W
2,900.00	27.40	280.24	2,760.52	114.67	-635.00	14,334,106.595	783,233.381	39.431354853°N	108.035503404°W
3,000.00	27.40	280.24	2,849.31	122.85	-680.29	14,334,114.773	783,188.097	39.431373096°N	108.035664528°W
3,100.00	27.40	280.24	2,938.09	131.02	-725.57	14,334,122.950	783,142.813	39.431391340°N	108.035825652°W
3,200.00	27.40	280.24	3,026.87	139.20	-770.86	14,334,131.127	783,097.530	39.431409583°N	108.035986777°W
3,300.00	27.40	280.24	3,115.66	147.38	-816.14	14,334,139.305	783,052.246	39.431427826°N	108.036147901°W
3,400.00	27.40	280.24	3,204.44	155.55	-861.42	14,334,147.482	783,006.962	39.431446069°N	108.036309026°W
3,400.63	27.40	280.24	3,205.00	155.61	-861.71	14,334,147.533	783,006.677	39.431446184°N	108.036310042°W
Mesaverde									
3,500.00	27.40	280.24	3,293.22	163.73	-906.71	14,334,155.659	782,961.679	39.431464312°N	108.036470150°W
3,537.09	27.40	280.24	3,326.15	166.77	-923.50	14,334,158.692	782,944.883	39.431471078°N	108.036529911°W
Drop 3°/100 at 3537 MD/3326 TVD									
3,600.00	25.51	280.24	3,382.47	171.75	-951.08	14,334,163.672	782,917.305	39.431482188°N	108.036628036°W
3,700.00	22.51	280.24	3,473.81	178.98	-991.12	14,334,170.902	782,877.267	39.431498317°N	108.036770495°W
3,800.00	19.51	280.24	3,567.15	185.35	-1,026.40	14,334,177.273	782,841.988	39.431512528°N	108.036896022°W
3,900.00	16.51	280.24	3,662.24	190.84	-1,056.82	14,334,182.766	782,811.565	39.431524784°N	108.037004271°W
4,000.00	13.51	280.24	3,758.82	195.44	-1,082.31	14,334,187.368	782,786.081	39.431535050°N	108.037094947°W
4,100.00	10.51	280.24	3,856.62	199.14	-1,102.78	14,334,191.066	782,765.606	39.431543298°N	108.037167800°W
4,200.00	7.51	280.24	3,955.37	201.92	-1,118.19	14,334,193.848	782,750.196	39.431549505°N	108.037222631°W
4,300.00	4.51	280.24	4,054.81	203.78	-1,128.49	14,334,195.709	782,739.893	39.431553656°N	108.037259290°W
4,400.00	1.51	280.24	4,154.66	204.72	-1,133.66	14,334,196.642	782,734.725	39.431555737°N	108.037277676°W

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 34C-18-07-95 (111272)
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 34C-18-07-95 (111272)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 34C		
Design:	BAT 34C 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	
4,450.34	0.00	0.00	4,205.00	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
Vertical at 4450 MD/4205 TVD - Top Gas										
4,500.00	0.00	0.00	4,254.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
4,600.00	0.00	0.00	4,354.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
4,700.00	0.00	0.00	4,454.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
4,800.00	0.00	0.00	4,554.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
4,900.00	0.00	0.00	4,654.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,000.00	0.00	0.00	4,754.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,100.00	0.00	0.00	4,854.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,200.00	0.00	0.00	4,954.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,300.00	0.00	0.00	5,054.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,400.00	0.00	0.00	5,154.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,500.00	0.00	0.00	5,254.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,600.00	0.00	0.00	5,354.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,650.34	0.00	0.00	5,405.00	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
Cameo										
5,700.00	0.00	0.00	5,454.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,800.00	0.00	0.00	5,554.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
5,900.00	0.00	0.00	5,654.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
6,000.00	0.00	0.00	5,754.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
6,100.00	0.00	0.00	5,854.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
6,200.00	0.00	0.00	5,954.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
6,300.00	0.00	0.00	6,054.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
6,350.34	0.00	0.00	6,105.00	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
Rollins										
6,400.00	0.00	0.00	6,154.66	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
6,450.34	0.00	0.00	6,205.00	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°W	
TD at 6450 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 34C Top Gas	0.00	0.00	4,205.00	204.83	-1,134.31	14,334,196.760	782,734.072	39.431556000°N	108.037280000°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

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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 34C-18-07-95 (111272)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 34C		
Design:	BAT 34C P01		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,400.63	3,205.00	Mesaverde				
4,450.34	4,205.00	Top Gas				
5,650.34	5,405.00	Cameo				
6,350.34	6,105.00	Rollins				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,050.00	1,050.00	0.00	0.00	KOP 3°/100 at 1050 MD/TVD	
1,963.25	1,928.84	38.07	-210.81	Hold 27° at 1963 MD/1929 TVD	
3,537.09	3,326.15	166.77	-923.50	Drop 3°/100 at 3537 MD/3326 TVD	
4,450.34	4,205.00	204.83	-1,134.31	Vertical at 4450 MD/4205 TVD	
6,450.34	6,205.00	204.83	-1,134.31	TD at 6450 MD/6205 TVD	