



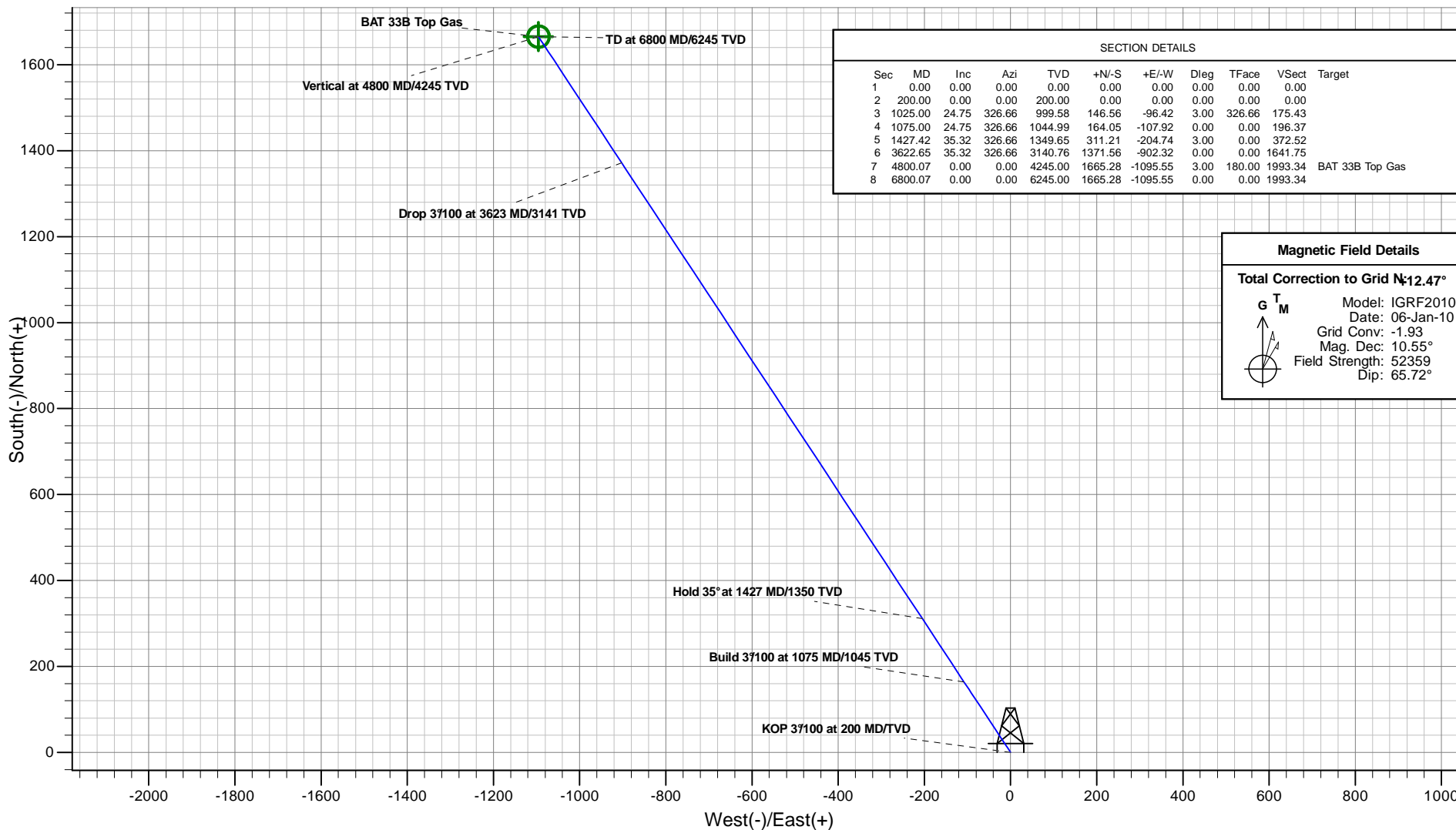
Antero Resources

BAT 33B-18-07-95 (111267)



PLAN VIEW

Project: Monument Ridge
Site: Monument Ridge Pad
Well: BAT 33B-18-07-95 (111267)
Wellbore: BAT 33B
Design: BAT 33B 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	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	1025.00	24.75	326.66	999.58	146.56	-96.42	3.00	326.66	175.43	
4	1075.00	24.75	326.66	1044.99	164.05	-107.92	0.00	0.00	196.37	
5	1427.42	35.32	326.66	1349.65	311.21	-204.74	3.00	0.00	372.52	
6	3622.65	35.32	326.66	3140.76	1371.56	-902.32	0.00	0.00	1641.75	
7	4800.07	0.00	0.00	4245.00	1665.28	-1095.55	3.00	180.00	1993.34	BAT 33B Top Gas
8	6800.07	0.00	0.00	6245.00	1665.28	-1095.55	0.00	0.00	1993.34	

Magnetic Field Details

Total Correction to Grid N: 12.47°

G

T

M

Model: IGRF2010

Date: 06-Jan-10

Grid Conv: -1.93

Mag. Dec: 10.55°

Field Strength: 52359

Dip: 65.72°

Plan: BAT 33B P01
Created By: ARK Directional Services
Date: 15:27, October 06 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 33B-18-07-95 (111267), Grid North
Vertical (TVD) Reference: KBL @ 5465.00ft (Original Well Elev)
Section (VS) Reference: Slot - (0.00N, 0.00E)
Measured Depth Reference: KBL @ 5465.00ft (Original Well Elev)
Calculation Method: Minimum Curvature

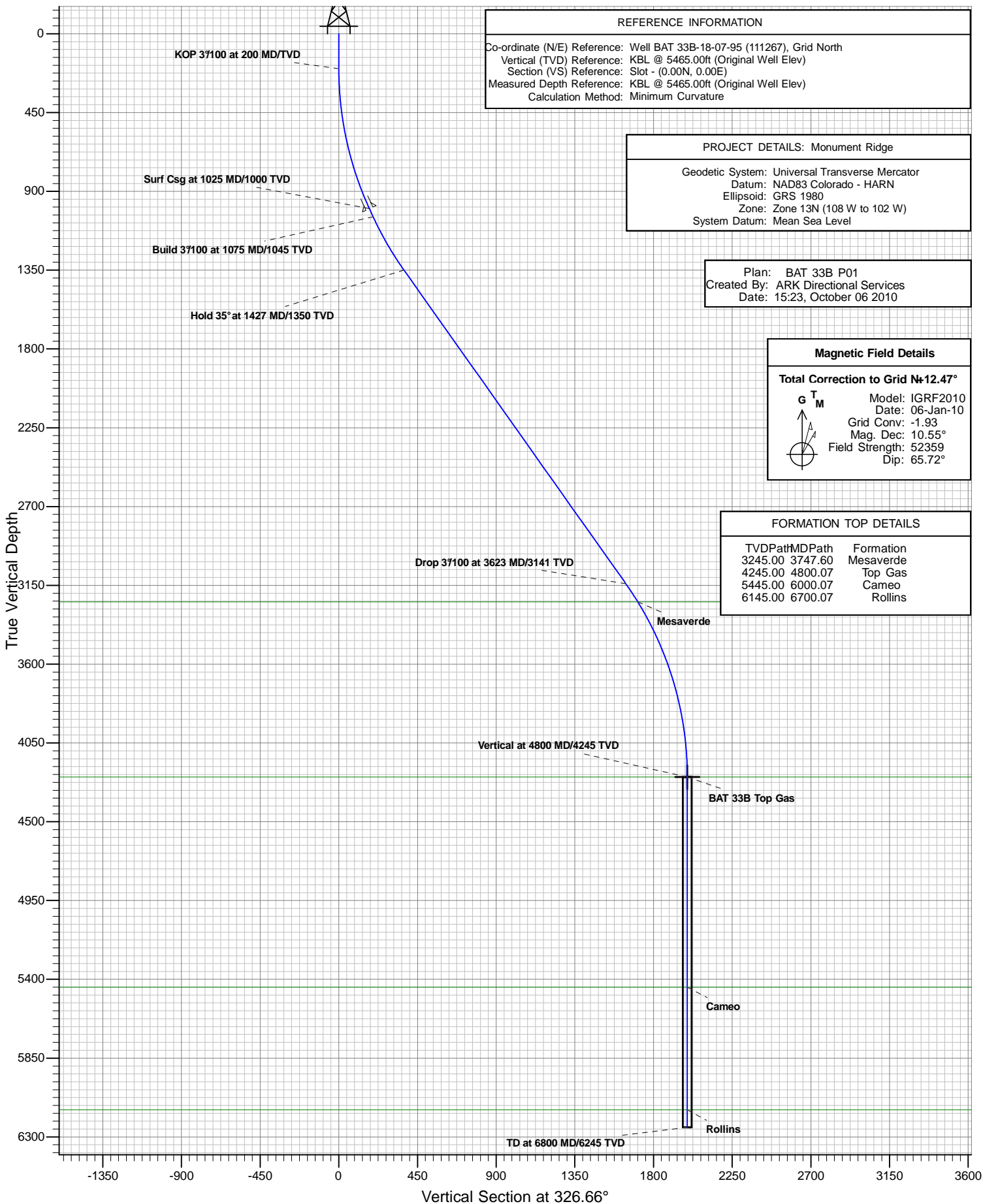


Antero Resources

BAT 33B-18-07-95 (111267)



VERTICAL SECTION VIEW



Antero Resources

Monument Ridge

Monument Ridge Pad

BAT 33B-18-07-95 (111267)

BAT 33B

Plan: BAT 33B P01

Standard Planning Report - Geographic

06 October, 2010

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 33B-18-07-95 (111267)
Company:	Antero Resources	TVD Reference:	KBL @ 5465.00ft (Original Well Elev)
Project:	Monument Ridge	MD Reference:	KBL @ 5465.00ft (Original Well Elev)
Site:	Monument Ridge Pad	North Reference:	Grid
Well:	BAT 33B-18-07-95 (111267)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 33B		
Design:	BAT 33B 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 33B-18-07-95 (111267)		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	Ground Level:
			5,441.00 ft

Wellbore	BAT 33B				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	2010/01/06	10.55	65.72	52,359

Design	BAT 33B P01				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	4,245.00	0.00	0.00	326.66	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
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	
1,025.00	24.75	326.66	999.58	146.56	-96.42	3.00	3.00	0.00	326.66	
1,075.00	24.75	326.66	1,044.99	164.05	-107.92	0.00	0.00	0.00	0.00	
1,427.42	35.32	326.66	1,349.65	311.21	-204.74	3.00	3.00	0.00	0.00	
3,622.65	35.32	326.66	3,140.76	1,371.56	-902.32	0.00	0.00	0.00	0.00	
4,800.07	0.00	0.00	4,245.00	1,665.28	-1,095.55	3.00	-3.00	0.00	180.00	BAT 33B Top Gas
6,800.07	0.00	0.00	6,245.00	1,665.28	-1,095.55	0.00	0.00	0.00	0.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 33B-18-07-95 (111267)
Company:	Antero Resources	TVD Reference:	KBL @ 5465.00ft (Original Well Elev)
Project:	Monument Ridge	MD Reference:	KBL @ 5465.00ft (Original Well Elev)
Site:	Monument Ridge Pad	North Reference:	Grid
Well:	BAT 33B-18-07-95 (111267)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 33B		
Design:	BAT 33B 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	14,334,054.627	783,868.798	39.431271000°N	108.033250000°W
100.00	0.00	0.00	100.00	0.00	0.00	14,334,054.627	783,868.798	39.431271000°N	108.033250000°W
200.00	0.00	0.00	200.00	0.00	0.00	14,334,054.627	783,868.798	39.431271000°N	108.033250000°W
KOP 3°/100 at 200 MD/TVD									
300.00	3.00	326.66	299.95	2.19	-1.44	14,334,056.814	783,867.360	39.431276864°N	108.033255348°W
400.00	6.00	326.66	399.63	8.74	-5.75	14,334,063.368	783,863.048	39.431294441°N	108.033271377°W
500.00	9.00	326.66	498.77	19.64	-12.92	14,334,074.271	783,855.875	39.431323682°N	108.033298043°W
600.00	12.00	326.66	597.08	34.87	-22.94	14,334,089.494	783,845.860	39.431364508°N	108.033335272°W
700.00	15.00	326.66	694.31	54.37	-35.77	14,334,108.994	783,833.031	39.431416805°N	108.033382964°W
800.00	18.00	326.66	790.18	78.09	-51.37	14,334,132.719	783,817.424	39.431480431°N	108.033440987°W
900.00	21.00	326.66	884.43	105.98	-69.72	14,334,160.602	783,799.080	39.431555212°N	108.033509182°W
1,000.00	24.00	326.66	976.81	137.94	-90.75	14,334,192.569	783,778.049	39.431640942°N	108.033587363°W
1,025.00	24.75	326.66	999.58	146.56	-96.42	14,334,201.188	783,772.379	39.431664059°N	108.033608444°W
Surf Csg at 1025 MD/1000 TVD									
1,075.00	24.75	326.66	1,044.99	164.05	-107.92	14,334,218.676	783,760.874	39.431710959°N	108.033651214°W
Build 3°/100 at 1075 MD/1045 TVD									
1,100.00	25.50	326.66	1,067.62	172.92	-113.76	14,334,227.544	783,755.040	39.431734741°N	108.033672902°W
1,200.00	28.50	326.66	1,156.71	210.84	-138.71	14,334,265.467	783,730.091	39.431836446°N	108.033765651°W
1,300.00	31.50	326.66	1,243.31	252.61	-166.18	14,334,307.234	783,702.614	39.431948458°N	108.033867800°W
1,400.00	34.50	326.66	1,327.16	298.10	-196.11	14,334,352.729	783,672.684	39.432070470°N	108.033979068°W
1,427.42	35.32	326.66	1,349.65	311.21	-204.74	14,334,365.839	783,664.059	39.432105629°N	108.034011132°W
Hold 35° at 1427 MD/1350 TVD									
1,500.00	35.32	326.66	1,408.87	346.27	-227.80	14,334,400.896	783,640.996	39.432199649°N	108.034096874°W
1,600.00	35.32	326.66	1,490.46	394.57	-259.58	14,334,449.199	783,609.219	39.432329189°N	108.034215009°W
1,700.00	35.32	326.66	1,572.05	442.87	-291.36	14,334,497.501	783,577.442	39.432458729°N	108.034333145°W
1,800.00	35.32	326.66	1,653.64	491.18	-323.13	14,334,545.803	783,545.665	39.432588268°N	108.034451281°W
1,900.00	35.32	326.66	1,735.23	539.48	-354.91	14,334,594.106	783,513.888	39.432717808°N	108.034569417°W
2,000.00	35.32	326.66	1,816.82	587.78	-386.69	14,334,642.408	783,482.111	39.432847347°N	108.034687554°W
2,100.00	35.32	326.66	1,898.41	636.08	-418.46	14,334,690.710	783,450.334	39.432976886°N	108.034805692°W
2,200.00	35.32	326.66	1,980.00	684.39	-450.24	14,334,739.013	783,418.557	39.433106425°N	108.034923829°W
2,300.00	35.32	326.66	2,061.60	732.69	-482.02	14,334,787.315	783,386.780	39.433235964°N	108.035041968°W
2,400.00	35.32	326.66	2,143.19	780.99	-513.80	14,334,835.617	783,355.003	39.433365503°N	108.035160106°W
2,500.00	35.32	326.66	2,224.78	829.29	-545.57	14,334,883.920	783,323.226	39.433495042°N	108.035278245°W
2,600.00	35.32	326.66	2,306.37	877.60	-577.35	14,334,932.222	783,291.450	39.433624580°N	108.035396385°W
2,700.00	35.32	326.66	2,387.96	925.90	-609.13	14,334,980.524	783,259.673	39.433754119°N	108.035514525°W
2,800.00	35.32	326.66	2,469.55	974.20	-640.90	14,335,028.827	783,227.896	39.433883657°N	108.035632666°W
2,900.00	35.32	326.66	2,551.14	1,022.50	-672.68	14,335,077.129	783,196.119	39.434013195°N	108.035750807°W
3,000.00	35.32	326.66	2,632.73	1,070.81	-704.46	14,335,125.431	783,164.342	39.434142733°N	108.035868948°W
3,100.00	35.32	326.66	2,714.32	1,119.11	-736.23	14,335,173.733	783,132.565	39.434272271°N	108.035987090°W
3,200.00	35.32	326.66	2,795.92	1,167.41	-768.01	14,335,222.036	783,100.788	39.434401809°N	108.036105232°W
3,300.00	35.32	326.66	2,877.51	1,215.71	-799.79	14,335,270.338	783,069.011	39.434531346°N	108.036223375°W
3,400.00	35.32	326.66	2,959.10	1,264.02	-831.57	14,335,318.640	783,037.234	39.434660884°N	108.036341518°W
3,500.00	35.32	326.66	3,040.69	1,312.32	-863.34	14,335,366.943	783,005.457	39.434790421°N	108.036459661°W
3,600.00	35.32	326.66	3,122.28	1,360.62	-895.12	14,335,415.245	782,973.680	39.434919958°N	108.036577806°W
3,622.65	35.32	326.66	3,140.76	1,371.56	-902.32	14,335,426.186	782,966.483	39.434949298°N	108.036604565°W
Drop 3°/100 at 3623 MD/3141 TVD									
3,700.00	33.00	326.66	3,204.76	1,407.85	-926.19	14,335,462.470	782,942.612	39.435046605°N	108.036693314°W
3,747.60	31.57	326.66	3,245.00	1,429.09	-940.16	14,335,483.712	782,928.637	39.435103574°N	108.036745273°W
Mesaverde									
3,800.00	30.00	326.66	3,290.01	1,451.49	-954.90	14,335,506.118	782,913.897	39.435163660°N	108.036800075°W
3,900.00	27.00	326.66	3,377.88	1,491.35	-981.13	14,335,545.979	782,887.674	39.435270559°N	108.036897574°W
4,000.00	24.00	326.66	3,468.13	1,527.32	-1,004.79	14,335,581.943	782,864.013	39.435367008°N	108.036985541°W
4,100.00	21.00	326.66	3,560.50	1,559.29	-1,025.82	14,335,613.913	782,842.982	39.435452743°N	108.037063737°W
4,200.00	18.00	326.66	3,654.76	1,587.18	-1,044.16	14,335,641.799	782,824.636	39.435527529°N	108.037131947°W

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 33B-18-07-95 (111267)
Company:	Antero Resources	TVD Reference:	KBL @ 5465.00ft (Original Well Elev)
Project:	Monument Ridge	MD Reference:	KBL @ 5465.00ft (Original Well Elev)
Site:	Monument Ridge Pad	North Reference:	Grid
Well:	BAT 33B-18-07-95 (111267)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 33B		
Design:	BAT 33B 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	
4,300.00	15.00	326.66	3,750.63	1,610.90	-1,059.77	14,335,665.527	782,809.026	39.435591161°N	108.037189983°W	
4,400.00	12.00	326.66	3,847.85	1,630.41	-1,072.61	14,335,685.030	782,796.195	39.435643465°N	108.037237688°W	
4,500.00	9.00	326.66	3,946.16	1,645.63	-1,082.62	14,335,700.256	782,786.179	39.435684296°N	108.037274929°W	
4,600.00	6.00	326.66	4,045.30	1,656.54	-1,089.80	14,335,711.162	782,779.004	39.435713544°N	108.037301606°W	
4,700.00	3.00	326.66	4,144.98	1,663.09	-1,094.11	14,335,717.719	782,774.690	39.435731128°N	108.037317644°W	
4,800.00	0.00	326.66	4,244.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
4,800.07	0.00	0.00	4,245.00	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
Vertical at 4800 MD/4245 TVD - Top Gas - BAT 33B Top Gas										
4,900.00	0.00	0.00	4,344.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,000.00	0.00	0.00	4,444.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,100.00	0.00	0.00	4,544.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,200.00	0.00	0.00	4,644.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,300.00	0.00	0.00	4,744.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,400.00	0.00	0.00	4,844.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,500.00	0.00	0.00	4,944.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,600.00	0.00	0.00	5,044.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,700.00	0.00	0.00	5,144.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,800.00	0.00	0.00	5,244.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
5,900.00	0.00	0.00	5,344.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,000.00	0.00	0.00	5,444.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,000.07	0.00	0.00	5,445.00	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
Cameo										
6,100.00	0.00	0.00	5,544.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,200.00	0.00	0.00	5,644.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,300.00	0.00	0.00	5,744.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,400.00	0.00	0.00	5,844.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,500.00	0.00	0.00	5,944.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,600.00	0.00	0.00	6,044.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,700.00	0.00	0.00	6,144.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,700.07	0.00	0.00	6,145.00	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
Rollins										
6,800.00	0.00	0.00	6,244.93	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	
6,800.07	0.00	0.00	6,245.00	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
BAT 33B Top Gas - plan hits target center - Circle (radius 25.00)	0.00	0.00	4,245.00	1,665.28	-1,095.55	14,335,719.908	782,773.250	39.435737000°N	108.037323000°W	

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,025.00	999.58	Surf Csg at 1025 MD/1000 TVD	5.50	6.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well BAT 33B-18-07-95 (111267)
Company:	Antero Resources	TVD Reference:	KBL @ 5465.00ft (Original Well Elev)
Project:	Monument Ridge	MD Reference:	KBL @ 5465.00ft (Original Well Elev)
Site:	Monument Ridge Pad	North Reference:	Grid
Well:	BAT 33B-18-07-95 (111267)	Survey Calculation Method:	Minimum Curvature
Wellbore:	BAT 33B		
Design:	BAT 33B P01		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,747.60	3,245.00	Mesaverde			
4,800.07	4,245.00	Top Gas			
6,000.07	5,445.00	Cameo			
6,700.07	6,145.00	Rollins			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.00	200.00	0.00	0.00	KOP 3°/100 at 200 MD/TVD
1,075.00	1,044.99	146.56	-96.42	Build 3°/100 at 1075 MD/1045 TVD
1,427.42	1,349.65	164.05	-107.92	Hold 35° at 1427 MD/1350 TVD
3,622.65	3,140.76	311.21	-204.74	Drop 3°/100 at 3623 MD/3141 TVD
4,800.07	4,245.00	1,371.56	-902.32	Vertical at 4800 MD/4245 TVD
6,800.07	6,245.00	1,665.28	-1,095.55	TD at 6800 MD/6245 TVD