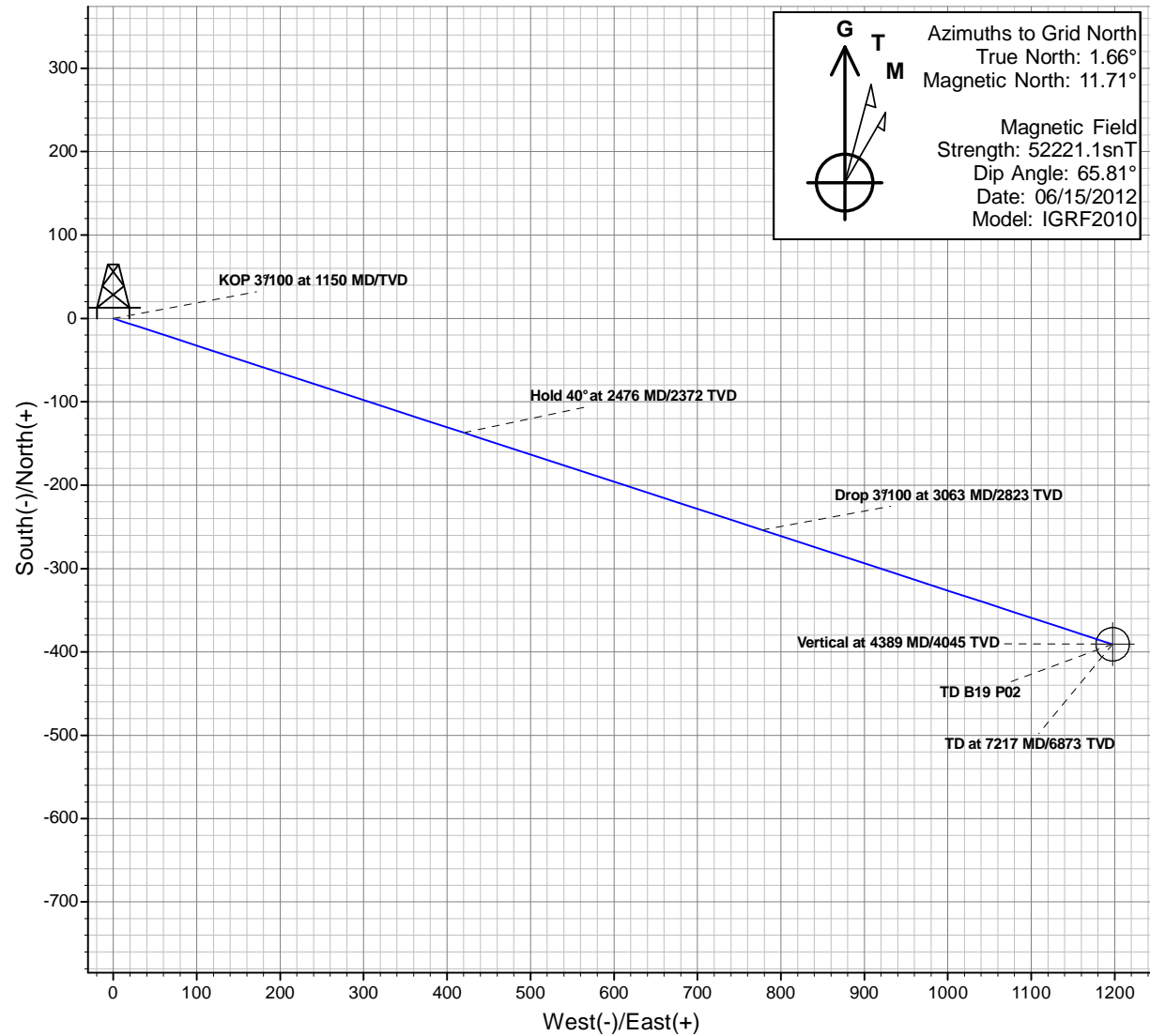
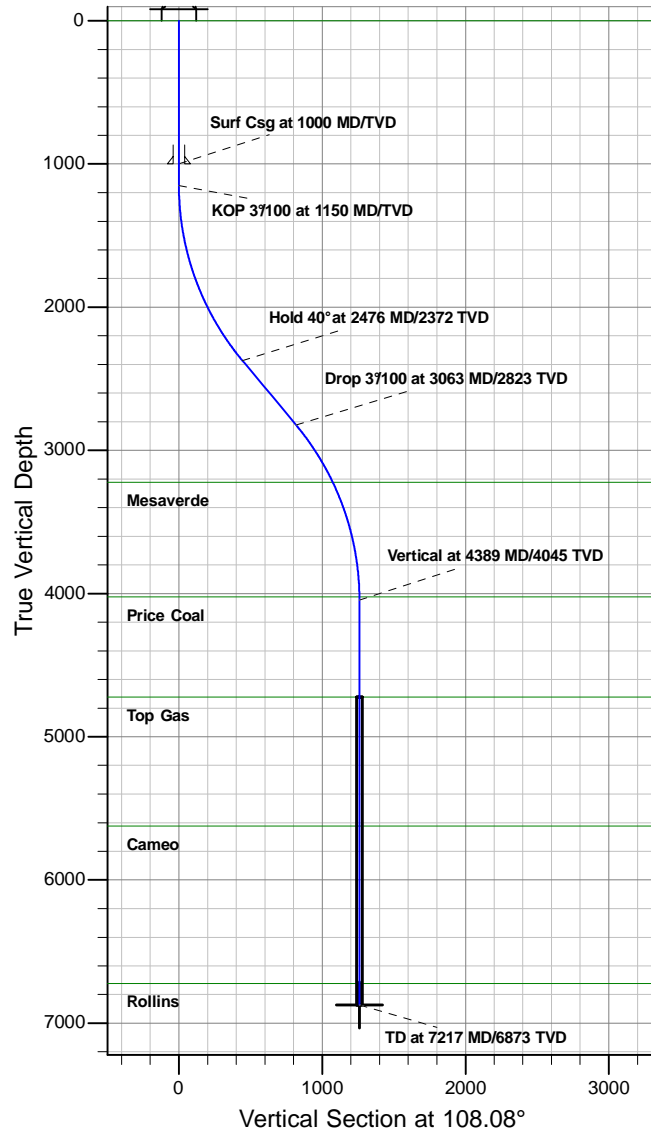




# Antero Resources

McLIN B19 (111163)  
P02



## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well McLIN B19 (111163), Grid North  
Vertical (TVD) Reference: RKB @ 5622.00ft  
Section (VS) Reference: Slot - (0.00N, 0.00E)  
Measured Depth Reference: RKB @ 5622.00ft  
Calculation Method: Minimum Curvature

## PROJECT DETAILS: McLin

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

## SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	0.00	0.00	0.00	0.00	0.00	
2475.79	39.77	108.08	2371.84	-137.14	420.17	3.00	108.08	441.98	
3062.99	39.77	108.08	2823.16	-253.70	777.30	0.00	0.00	817.65	
4388.78	0.00	108.08	4045.00	-390.84	1197.47	3.00	180.00	1259.63	
7216.78	0.00	108.08	6873.00	-390.84	1197.47	0.00	108.08	1259.63	TD B19 P02

# **Antero Resources**

**McLin**

**McLin B**

**McLIN B19 (111163)**

**ANTERO McLIN B19**

**Plan: P02**

## **Standard Planning Report - Geographic**

**20 March, 2012**

# Planning Report - Geographic

<b>Database:</b>	EDM5000-New	<b>Local Co-ordinate Reference:</b>	Well McLIN B19 (111163)
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	RKB @ 5622.00ft
<b>Project:</b>	McLin	<b>MD Reference:</b>	RKB @ 5622.00ft
<b>Site:</b>	McLin B	<b>North Reference:</b>	Grid
<b>Well:</b>	McLIN B19 (111163)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ANTERO McLIN B19		
<b>Design:</b>	P02		

<b>Project</b>	McLin		
<b>Map System:</b>	Universal Transverse Mercator	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD83 Colorado - HARN		
<b>Map Zone:</b>	Zone 13N (108 W to 102 W)		

Site		McLin B			
Site Position:		Northing:		14,366,636.75 usft	
From:		Easting:		904,982.97 usft	
Position Uncertainty:		Slot Radius:		Grid Convergence:	
Lat/Long		0.00 ft		13.20 in	
				-1.66 °	
				39.531054942°N	
				107.608143570°W	

Well	McLIN B19 (111163)					
Well Position	+N/-S	0.00 ft	Northing:	14,366,606.26 usft	Latitude:	39.530973022°N
	+E/-W	0.00 ft	Easting:	905,004.80 usft	Longitude:	107.608063096°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,598.00 ft

<b>Wellbore</b>	ANTERO McLIN B19				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	06/15/12	10.05	65.81	52,221

<b>Design</b>	P02			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	108.08

<b>Plan Sections</b>										
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	
1,150.00	0.00	0.00	1,150.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,475.79	39.77	108.08	2,371.84	-137.14	420.17	3.00	3.00	0.00	108.08	
3,062.99	39.77	108.08	2,823.16	-253.70	777.30	0.00	0.00	0.00	0.00	
4,388.78	0.00	108.08	4,045.00	-390.84	1,197.47	3.00	-3.00	0.00	180.00	
7,216.78	0.00	108.08	6,873.00	-390.84	1,197.47	0.00	0.00	0.00	108.08	TD B19 P02

# Planning Report - Geographic

<b>Database:</b>	EDM5000-New	<b>Local Co-ordinate Reference:</b>	Well McLIN B19 (111163)
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	RKB @ 5622.00ft
<b>Project:</b>	McLin	<b>MD Reference:</b>	RKB @ 5622.00ft
<b>Site:</b>	McLin B	<b>North Reference:</b>	Grid
<b>Well:</b>	McLIN B19 (111163)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ANTERO McLIN B19		
<b>Design:</b>	P02		

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	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
<b>Wasatch</b>									
100.00	0.00	0.00	100.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
200.00	0.00	0.00	200.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
300.00	0.00	0.00	300.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
400.00	0.00	0.00	400.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
500.00	0.00	0.00	500.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
600.00	0.00	0.00	600.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
700.00	0.00	0.00	700.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
800.00	0.00	0.00	800.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
900.00	0.00	0.00	900.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
<b>Surf Csg at 1000 MD/TVD</b>									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
1,150.00	0.00	0.00	1,150.00	0.00	0.00	14,366,606.26	905,004.80	39.530973022°N	107.608063096°W
<b>KOP 3°/100 at 1150 MD/TVD</b>									
1,200.00	1.50	108.08	1,199.99	-0.20	0.62	14,366,606.06	905,005.42	39.530972514°N	107.608060871°W
1,300.00	4.50	108.08	1,299.85	-1.83	5.60	14,366,604.43	905,010.40	39.530968455°N	107.608043079°W
1,400.00	7.50	108.08	1,399.29	-5.07	15.53	14,366,601.19	905,020.33	39.530960349°N	107.608007544°W
1,500.00	10.50	108.08	1,498.04	-9.92	30.40	14,366,596.34	905,035.20	39.530948216°N	107.607954363°W
1,600.00	13.50	108.08	1,595.85	-16.37	50.17	14,366,589.89	905,054.96	39.530932091°N	107.607883682°W
1,700.00	16.50	108.08	1,692.43	-24.40	74.77	14,366,581.86	905,079.57	39.530912018°N	107.607795695°W
1,800.00	19.50	108.08	1,787.52	-33.99	104.14	14,366,572.27	905,108.94	39.530888052°N	107.607690643°W
1,900.00	22.50	108.08	1,880.87	-45.11	138.20	14,366,561.15	905,143.00	39.530860258°N	107.607568813°W
2,000.00	25.50	108.08	1,972.22	-57.73	176.87	14,366,548.53	905,181.66	39.530828713°N	107.607430541°W
2,100.00	28.50	108.08	2,061.31	-71.81	220.02	14,366,534.45	905,224.82	39.530793502°N	107.607276204°W
2,200.00	31.50	108.08	2,147.90	-87.32	267.55	14,366,518.94	905,272.34	39.530754723°N	107.607106227°W
2,300.00	34.50	108.08	2,231.76	-104.22	319.32	14,366,502.04	905,324.11	39.530712482°N	107.606921074°W
2,400.00	37.50	108.08	2,312.65	-122.46	375.19	14,366,483.80	905,379.99	39.530666894°N	107.606721254°W
2,475.79	39.77	108.08	2,371.84	-137.14	420.17	14,366,469.12	905,424.97	39.530630190°N	107.606560377°W
<b>Hold 40° at 2476 MD/2372 TVD</b>									
2,500.00	39.77	108.08	2,390.45	-141.94	434.90	14,366,464.32	905,439.69	39.530618175°N	107.606507714°W
2,600.00	39.77	108.08	2,467.31	-161.79	495.71	14,366,444.47	905,500.51	39.530568549°N	107.606290201°W
2,700.00	39.77	108.08	2,544.17	-181.64	556.53	14,366,424.62	905,561.33	39.530518923°N	107.606072689°W
2,800.00	39.77	108.08	2,621.03	-201.49	617.35	14,366,404.77	905,622.15	39.530469297°N	107.605855178°W
2,900.00	39.77	108.08	2,697.88	-221.34	678.17	14,366,384.92	905,682.97	39.530419670°N	107.605637666°W
3,000.00	39.77	108.08	2,774.74	-241.19	738.99	14,366,365.07	905,743.78	39.530370043°N	107.605420155°W
3,062.99	39.77	108.08	2,823.16	-253.70	777.30	14,366,352.56	905,782.09	39.530338782°N	107.605283143°W
<b>Drop 3°/100 at 3063 MD/2823 TVD</b>									
3,100.00	38.66	108.08	2,851.83	-260.96	799.54	14,366,345.30	905,804.34	39.530320630°N	107.605203587°W
3,200.00	35.66	108.08	2,931.51	-279.70	856.96	14,366,326.56	905,861.76	39.530273774°N	107.604998226°W
3,300.00	32.66	108.08	3,014.24	-297.12	910.34	14,366,309.14	905,915.14	39.530230217°N	107.604807325°W
3,400.00	29.66	108.08	3,099.80	-313.18	959.53	14,366,293.09	905,964.33	39.530190079°N	107.604631408°W
3,500.00	26.66	108.08	3,187.95	-327.82	1,004.39	14,366,278.44	906,009.19	39.530153468°N	107.604470956°W
3,539.02	25.49	108.08	3,223.00	-333.14	1,020.70	14,366,273.12	906,025.49	39.530140163°N	107.604412641°W
<b>Mesaverde</b>									
3,600.00	23.66	108.08	3,278.45	-341.01	1,044.81	14,366,265.25	906,049.61	39.530120487°N	107.604326409°W
3,700.00	20.66	108.08	3,371.05	-352.71	1,080.67	14,366,253.55	906,085.47	39.530091225°N	107.604198164°W
3,800.00	17.66	108.08	3,465.50	-362.90	1,111.87	14,366,243.36	906,116.67	39.530065763°N	107.604086571°W
3,900.00	14.66	108.08	3,561.54	-371.53	1,138.33	14,366,234.73	906,143.13	39.530044169°N	107.603991937°W
4,000.00	11.66	108.08	3,658.90	-378.60	1,159.98	14,366,227.66	906,164.77	39.530026505°N	107.603914521°W
4,100.00	8.66	108.08	3,757.32	-384.07	1,176.75	14,366,222.19	906,181.55	39.530012818°N	107.603854535°W
4,200.00	5.66	108.08	3,856.53	-387.94	1,188.60	14,366,218.32	906,193.40	39.530003145°N	107.603812144°W
4,300.00	2.66	108.08	3,956.25	-390.20	1,195.51	14,366,216.07	906,200.30	39.529997513°N	107.603787463°W

# Planning Report - Geographic

<b>Database:</b>	EDM5000-New	<b>Local Co-ordinate Reference:</b>	Well McLIN B19 (111163)
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	RKB @ 5622.00ft
<b>Project:</b>	McLin	<b>MD Reference:</b>	RKB @ 5622.00ft
<b>Site:</b>	McLin B	<b>North Reference:</b>	Grid
<b>Well:</b>	McLIN B19 (111163)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ANTERO McLIN B19		
<b>Design:</b>	P02		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,366.78	0.66	108.08	4,023.00	-390.80	1,197.35	14,366,215.47	906,202.14	39.529996011°N	107.603780880°W	
Price Coal										
4,388.78	0.00	108.08	4,045.00	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
Vertical at 4389 MD/4045 TVD										
4,400.00	0.00	108.08	4,056.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
4,500.00	0.00	108.08	4,156.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
4,600.00	0.00	108.08	4,256.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
4,700.00	0.00	108.08	4,356.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
4,800.00	0.00	108.08	4,456.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
4,900.00	0.00	108.08	4,556.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,000.00	0.00	108.08	4,656.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,066.78	0.00	108.08	4,723.00	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
Top Gas										
5,100.00	0.00	108.08	4,756.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,200.00	0.00	108.08	4,856.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,300.00	0.00	108.08	4,956.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,400.00	0.00	108.08	5,056.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,500.00	0.00	108.08	5,156.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,600.00	0.00	108.08	5,256.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,700.00	0.00	108.08	5,356.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,800.00	0.00	108.08	5,456.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,900.00	0.00	108.08	5,556.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
5,966.78	0.00	108.08	5,623.00	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
Cameo										
6,000.00	0.00	108.08	5,656.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,100.00	0.00	108.08	5,756.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,200.00	0.00	108.08	5,856.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,300.00	0.00	108.08	5,956.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,400.00	0.00	108.08	6,056.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,500.00	0.00	108.08	6,156.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,600.00	0.00	108.08	6,256.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,700.00	0.00	108.08	6,356.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,800.00	0.00	108.08	6,456.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
6,900.00	0.00	108.08	6,556.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
7,000.00	0.00	108.08	6,656.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
7,066.78	0.00	108.08	6,723.00	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
Rollins										
7,100.00	0.00	108.08	6,756.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
7,200.00	0.00	108.08	6,856.22	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
7,216.78	0.00	108.08	6,873.00	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W	
TD at 7217 MD/6873 TVD										

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude
TD B19 P02	0.00	360.00	6,873.00	-390.84	1,197.47	14,366,215.43	906,202.26	39.529995913°N	107.603780449°W
- plan hits target center									
- Circle (radius 20.00)									

## Planning Report - Geographic

<b>Database:</b>	EDM5000-New	<b>Local Co-ordinate Reference:</b>	Well McLIN B19 (111163)
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	RKB @ 5622.00ft
<b>Project:</b>	McLin	<b>MD Reference:</b>	RKB @ 5622.00ft
<b>Site:</b>	McLin B	<b>North Reference:</b>	Grid
<b>Well:</b>	McLIN B19 (111163)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ANTERO McLIN B19		
<b>Design:</b>	P02		

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	9.62	12.25	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
0.00	0.00	Wasatch			
3,539.02	3,223.00	Mesaverde			
4,366.78	4,023.00	Price Coal			
5,066.78	4,723.00	Top Gas			
5,966.78	5,623.00	Cameo			
7,066.78	6,723.00	Rollins			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,150.00	1,150.00	0.00	0.00	KOP 3°/100 at 1150 MD/TVD	
2,475.79	2,371.84	-137.14	420.17	Hold 40° at 2476 MD/2372 TVD	
3,062.99	2,823.16	-253.70	777.30	Drop 3°/100 at 3063 MD/2823 TVD	
4,388.78	4,045.00	-390.84	1,197.47	Vertical at 4389 MD/4045 TVD	
7,216.78	6,873.00	-390.84	1,197.47	TD at 7217 MD/6873 TVD	