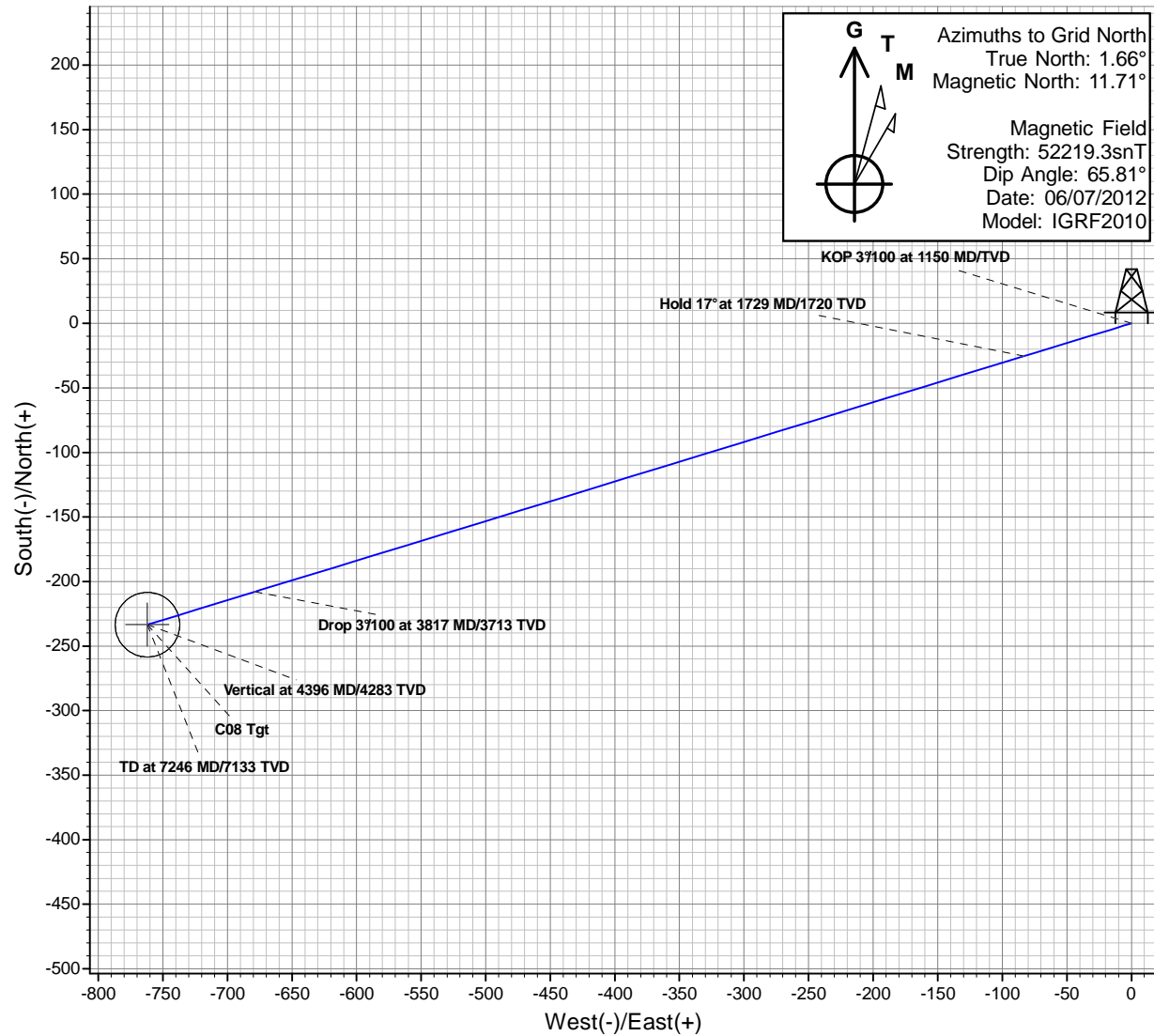
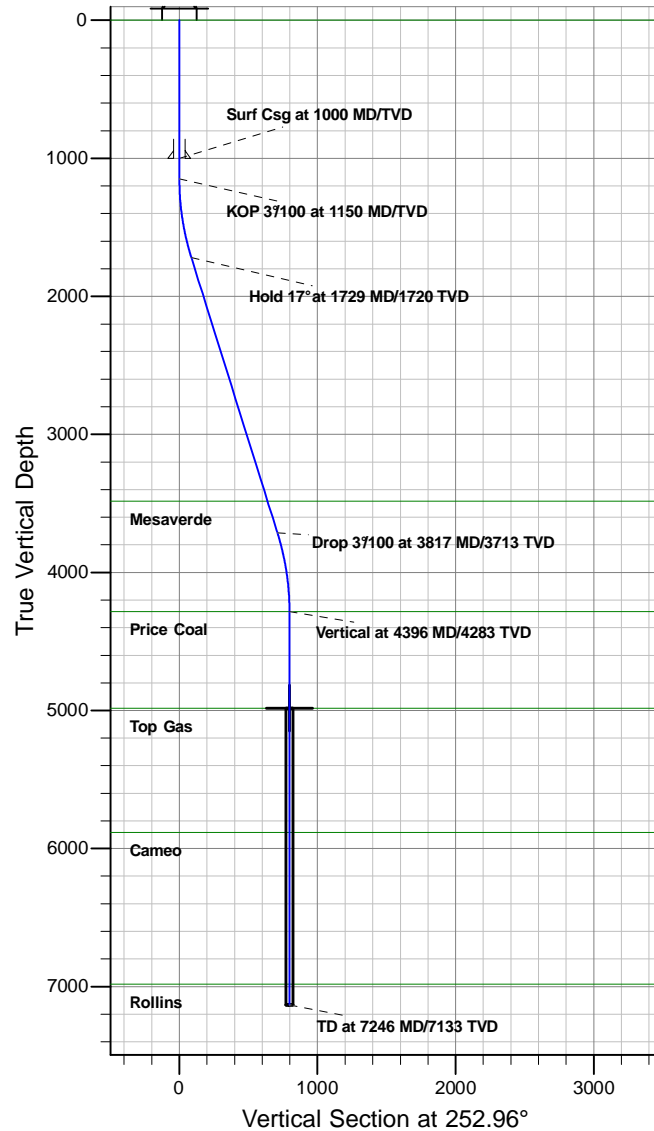




# Antero Resources

McLin C08 (111227)  
McLin C08 P02



## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well McLin C08 (111227), Grid North  
Vertical (TVD) Reference: KB @ 5750.00ft (Original Well Elev)  
Section (VS) Reference: Slot - (0.00N, 0.00E)  
Measured Depth Reference: KB @ 5750.00ft (Original Well Elev)  
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	
1728.52	17.36	252.96	1719.71	-25.47	-83.14	3.00	252.96	86.95	
3817.19	17.36	252.96	3713.29	-208.01	-678.85	0.00	0.00	710.00	
4395.70	0.00	252.96	4283.00	-233.49	-761.98	3.00	180.00	796.95	
7245.70	0.00	252.96	7133.00	-233.49	-761.98	0.00	252.96	796.95	

# **Antero Resources**

**McLin**

**McLin C**

**McLin C08 (111227)**

**McLin C08**

**Plan: McLin C08 P02**

## **Standard Planning Report - Geographic**

**22 March, 2012**

## Planning Report - Geographic

<b>Database:</b>	EDM5000-New	<b>Local Co-ordinate Reference:</b>	Well McLin C08 (111227)
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Project:</b>	McLin	<b>MD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Site:</b>	McLin C	<b>North Reference:</b>	Grid
<b>Well:</b>	McLin C08 (111227)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	McLin C08		
<b>Design:</b>	McLin C08 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)		

<b>Site</b>	McLin C		
<b>Site Position:</b>		<b>Northing:</b>	14,364,522.75 usft
<b>From:</b>	Map	<b>Easting:</b>	905,235.88 usft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.20 in
		<b>Latitude:</b>	39.525275157°N
		<b>Longitude:</b>	107.607030464°W
		<b>Grid Convergence:</b>	-1.66 °

<b>Well</b>	McLin C08 (111227)		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b>
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	
		<b>Latitude:</b>	39.525206905°N
		<b>Longitude:</b>	107.607157963°W
		<b>Ground Level:</b>	5,726.00 ft

<b>Wellbore</b>	McLin C08				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	06/07/12	10.05	65.81	52,219

<b>Design</b>	McLin C08 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>
	4,983.00	0.00	0.00	252.96

<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	
1,728.52	17.36	252.96	1,719.71	-25.47	-83.14	3.00	3.00	0.00	252.96	
3,817.19	17.36	252.96	3,713.29	-208.01	-678.85	0.00	0.00	0.00	0.00	
4,395.71	0.00	252.96	4,283.00	-233.49	-761.98	3.00	-3.00	0.00	180.00	
7,245.71	0.00	252.96	7,133.00	-233.49	-761.98	0.00	0.00	0.00	252.96	

# Planning Report - Geographic

<b>Database:</b>	EDM5000-New	<b>Local Co-ordinate Reference:</b>	Well McLin C08 (111227)
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Project:</b>	McLin	<b>MD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Site:</b>	McLin C	<b>North Reference:</b>	Grid
<b>Well:</b>	McLin C08 (111227)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	McLin C08		
<b>Design:</b>	McLin C08 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	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
<b>Wasatch</b>									
100.00	0.00	0.00	100.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
200.00	0.00	0.00	200.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
300.00	0.00	0.00	300.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
400.00	0.00	0.00	400.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
500.00	0.00	0.00	500.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
600.00	0.00	0.00	600.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
700.00	0.00	0.00	700.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
800.00	0.00	0.00	800.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
900.00	0.00	0.00	900.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
<b>Surf Csg at 1000 MD/TVD</b>									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
1,150.00	0.00	0.00	1,150.00	0.00	0.00	14,364,498.94	905,199.20	39.525206905°N	107.607157963°W
<b>KOP 3°/100 at 1150 MD/TVD</b>									
1,200.00	1.50	252.96	1,199.99	-0.19	-0.63	14,364,498.75	905,198.57	39.525206330°N	107.607160160°W
1,300.00	4.50	252.96	1,299.85	-1.72	-5.63	14,364,497.21	905,193.57	39.525201726°N	107.607177728°W
1,400.00	7.50	252.96	1,399.29	-4.79	-15.62	14,364,494.15	905,183.58	39.525192530°N	107.607212815°W
1,500.00	10.50	252.96	1,498.04	-9.37	-30.58	14,364,489.57	905,168.62	39.525178768°N	107.607265326°W
1,600.00	13.50	252.96	1,595.85	-15.46	-50.45	14,364,483.48	905,148.75	39.525160478°N	107.607335117°W
1,700.00	16.50	252.96	1,692.43	-23.04	-75.20	14,364,475.90	905,124.00	39.525137709°N	107.607421995°W
1,728.52	17.36	252.96	1,719.71	-25.47	-83.14	14,364,473.46	905,116.07	39.525130405°N	107.607449868°W
<b>Hold 17° at 1729 MD/1720 TVD</b>									
1,800.00	17.36	252.96	1,787.94	-31.72	-103.52	14,364,467.22	905,095.68	39.525111644°N	107.607521455°W
1,900.00	17.36	252.96	1,883.39	-40.46	-132.04	14,364,458.48	905,067.16	39.525085399°N	107.607621597°W
2,000.00	17.36	252.96	1,978.83	-49.20	-160.57	14,364,449.74	905,038.64	39.525059154°N	107.607721739°W
2,100.00	17.36	252.96	2,074.28	-57.94	-189.09	14,364,441.00	905,010.11	39.525032908°N	107.607821882°W
2,200.00	17.36	252.96	2,169.73	-66.68	-217.61	14,364,432.26	904,981.59	39.525006663°N	107.607922024°W
2,300.00	17.36	252.96	2,265.18	-75.42	-246.13	14,364,423.52	904,953.07	39.524980418°N	107.608022166°W
2,400.00	17.36	252.96	2,360.62	-84.16	-274.65	14,364,414.78	904,924.55	39.524954172°N	107.608122308°W
2,500.00	17.36	252.96	2,456.07	-92.90	-303.17	14,364,406.04	904,896.03	39.524927927°N	107.608222450°W
2,600.00	17.36	252.96	2,551.52	-101.64	-331.69	14,364,397.30	904,867.51	39.524901681°N	107.608322591°W
2,700.00	17.36	252.96	2,646.96	-110.38	-360.21	14,364,388.56	904,838.99	39.524875436°N	107.608422733°W
2,800.00	17.36	252.96	2,742.41	-119.12	-388.73	14,364,379.82	904,810.47	39.524849190°N	107.608522875°W
2,900.00	17.36	252.96	2,837.86	-127.85	-417.25	14,364,371.08	904,781.95	39.524822944°N	107.608623016°W
3,000.00	17.36	252.96	2,933.31	-136.59	-445.78	14,364,362.35	904,753.43	39.524796698°N	107.608723158°W
3,100.00	17.36	252.96	3,028.75	-145.33	-474.30	14,364,353.61	904,724.91	39.524770452°N	107.608823299°W
3,200.00	17.36	252.96	3,124.20	-154.07	-502.82	14,364,344.87	904,696.38	39.524744206°N	107.608923440°W
3,300.00	17.36	252.96	3,219.65	-162.81	-531.34	14,364,336.13	904,667.86	39.524717960°N	107.609023582°W
3,400.00	17.36	252.96	3,315.10	-171.55	-559.86	14,364,327.39	904,639.34	39.524691714°N	107.609123723°W
3,500.00	17.36	252.96	3,410.54	-180.29	-588.38	14,364,318.65	904,610.82	39.524665468°N	107.609223864°W
3,575.91	17.36	252.96	3,483.00	-186.93	-610.03	14,364,312.01	904,589.17	39.524645543°N	107.609299885°W
<b>Mesaverde</b>									
3,600.00	17.36	252.96	3,505.99	-189.03	-616.90	14,364,309.91	904,582.30	39.524639221°N	107.609324005°W
3,700.00	17.36	252.96	3,601.44	-197.77	-645.42	14,364,301.17	904,553.78	39.524612975°N	107.609424146°W
3,800.00	17.36	252.96	3,696.88	-206.51	-673.94	14,364,292.43	904,525.26	39.524586728°N	107.609524287°W
3,817.19	17.36	252.96	3,713.29	-208.01	-678.85	14,364,290.93	904,520.36	39.524582216°N	107.609541500°W
<b>Drop 3°/100 at 3817 MD/3713 TVD</b>									
3,900.00	14.87	252.96	3,792.84	-214.74	-700.82	14,364,284.20	904,498.38	39.524561996°N	107.609618650°W
4,000.00	11.87	252.96	3,890.12	-221.52	-722.93	14,364,277.42	904,476.27	39.524541650°N	107.609696276°W
4,100.00	8.87	252.96	3,988.48	-226.79	-740.14	14,364,272.15	904,459.06	39.524525812°N	107.609756704°W
4,200.00	5.87	252.96	4,087.64	-230.55	-752.40	14,364,268.39	904,446.80	39.524514525°N	107.609799769°W
4,300.00	2.87	252.96	4,187.34	-232.78	-759.69	14,364,266.16	904,439.51	39.524507819°N	107.609825352°W

# Planning Report - Geographic

<b>Database:</b>	EDM5000-New	<b>Local Co-ordinate Reference:</b>	Well McLin C08 (111227)
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Project:</b>	McLin	<b>MD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Site:</b>	McLin C	<b>North Reference:</b>	Grid
<b>Well:</b>	McLin C08 (111227)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	McLin C08		
<b>Design:</b>	McLin C08 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	
4,395.71	0.00	252.96	4,283.00	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
Vertical at 4396 MD/4283 TVD - Price Coal										
4,400.00	0.00	252.96	4,287.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
4,500.00	0.00	252.96	4,387.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
4,600.00	0.00	252.96	4,487.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
4,700.00	0.00	252.96	4,587.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
4,800.00	0.00	252.96	4,687.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
4,900.00	0.00	252.96	4,787.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,000.00	0.00	252.96	4,887.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,095.71	0.00	252.96	4,983.00	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
Top Gas										
5,100.00	0.00	252.96	4,987.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,200.00	0.00	252.96	5,087.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,300.00	0.00	252.96	5,187.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,400.00	0.00	252.96	5,287.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,500.00	0.00	252.96	5,387.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,600.00	0.00	252.96	5,487.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,700.00	0.00	252.96	5,587.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,800.00	0.00	252.96	5,687.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,900.00	0.00	252.96	5,787.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
5,995.71	0.00	252.96	5,883.00	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
Cameo										
6,000.00	0.00	252.96	5,887.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,100.00	0.00	252.96	5,987.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,200.00	0.00	252.96	6,087.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,300.00	0.00	252.96	6,187.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,400.00	0.00	252.96	6,287.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,500.00	0.00	252.96	6,387.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,600.00	0.00	252.96	6,487.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,700.00	0.00	252.96	6,587.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,800.00	0.00	252.96	6,687.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
6,900.00	0.00	252.96	6,787.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
7,000.00	0.00	252.96	6,887.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
7,095.71	0.00	252.96	6,983.00	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
Rollins										
7,100.00	0.00	252.96	6,987.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
7,200.00	0.00	252.96	7,087.30	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
7,245.70	0.00	252.96	7,133.00	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
TD at 7246 MD/7133 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
C08 Tgt	0.00	360.00	4,983.00	-233.49	-761.98	14,364,265.45	904,437.22	39.524505710°N	107.609833400°W	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 25.00)										

## Planning Report - Geographic

<b>Database:</b>	EDM5000-New	<b>Local Co-ordinate Reference:</b>	Well McLin C08 (111227)
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Project:</b>	McLin	<b>MD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Site:</b>	McLin C	<b>North Reference:</b>	Grid
<b>Well:</b>	McLin C08 (111227)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	McLin C08		
<b>Design:</b>	McLin C08 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	5.50	6.00	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
0.00	0.00	Wasatch			
3,575.91	3,483.00	Mesaverde			
4,395.71	4,283.00	Price Coal			
5,095.71	4,983.00	Top Gas			
5,995.71	5,883.00	Cameo			
7,095.71	6,983.00	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	
1,728.52	1,719.71	-25.47	-83.14	Hold 17° at 1729 MD/1720 TVD	
3,817.19	3,713.29	-208.01	-678.85	Drop 3°/100 at 3817 MD/3713 TVD	
4,395.71	4,283.00	-233.49	-761.98	Vertical at 4396 MD/4283 TVD	
7,245.70	7,133.00	-233.49	-761.98	TD at 7246 MD/7133 TVD	