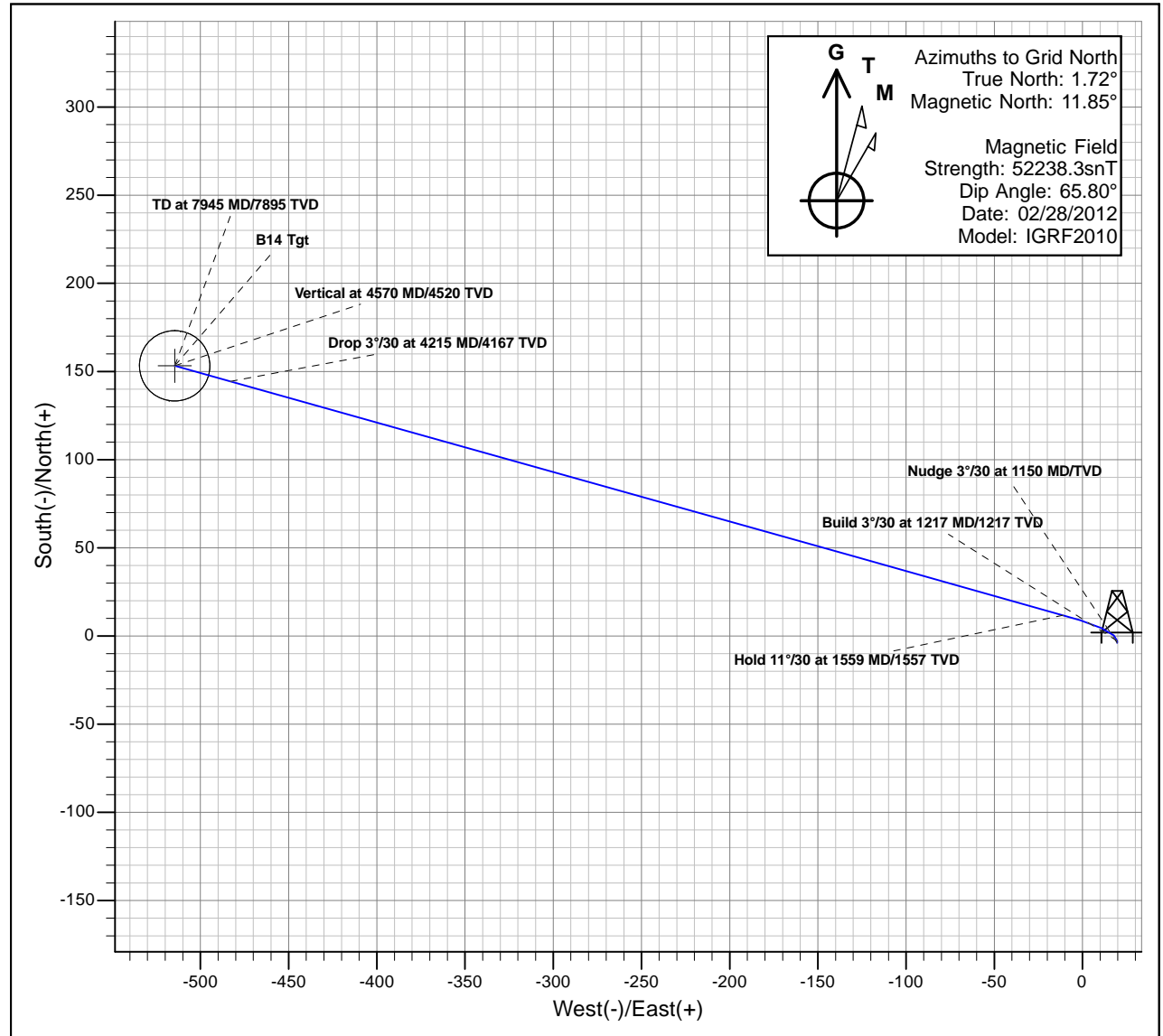
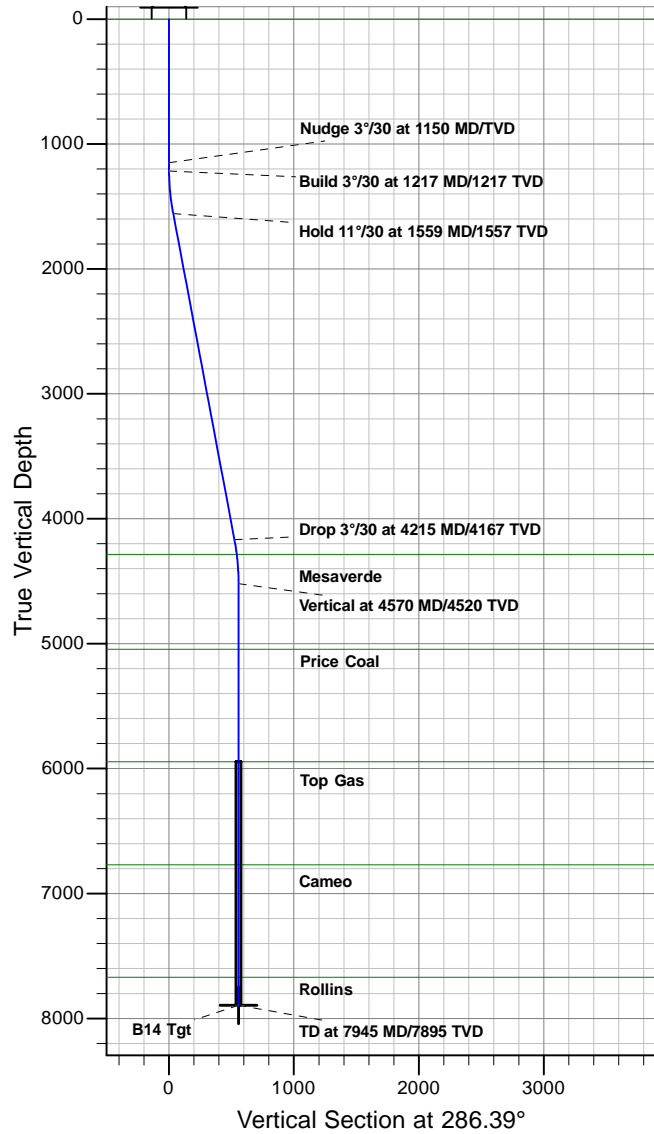




# Antero Resources

Gentry B14 (111424)  
Gentry B14 P02



## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Site Gentry B, Grid North  
Vertical (TVD) Reference: KB @ 5648.00ft (Original Well Elev)  
Section (VS) Reference: Slot - B14(-3.89N, 19.62E)  
Measured Depth Reference: KB @ 5648.00ft (Original Well Elev)  
Calculation Method: Minimum Curvature

## PROJECT DETAILS: Gentry

Geodetic System: Universal Transverse Mercator  
Datum: North American Datum 1983  
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	VSect	Target
0.00	0.00	0.00	0.00	-3.89	19.62	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	-3.89	19.62	0.00	0.00	0.00	
1216.67	2.00	360.00	1216.65	-2.72	19.62	3.00	360.00	0.33	
1559.27	10.64	285.68	1557.12	11.84	-10.91	3.00	-84.99	33.73	
4215.21	10.64	285.68	4167.40	144.37	-483.00	0.00	0.00	524.03	
4569.84	0.00	285.68	4520.00	153.25	-514.60	3.00	180.00	556.85	
7944.84	0.00	285.68	7895.00	153.25	-514.60	0.00	285.68	556.85	B14 Tgt

# **Antero Resources**

**Gentry**

**Gentry B**

**Gentry B14 (111424) - Slot B14**

**Gentry B14**

**Plan: Gentry B14 P02**

## **Standard Planning Report - Geographic**

**30 December, 2011**

## Planning Report - Geographic

<b>Database:</b>	EDM5000	<b>Local Co-ordinate Reference:</b>	Site Gentry B
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	KB @ 5648.00ft (Original Well Elev)
<b>Project:</b>	Gentry	<b>MD Reference:</b>	KB @ 5648.00ft (Original Well Elev)
<b>Site:</b>	Gentry B	<b>North Reference:</b>	Grid
<b>Well:</b>	Gentry B14 (111424)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Gentry B14		
<b>Design:</b>	Gentry B14 P02		

<b>Project</b>	Gentry		
<b>Map System:</b>	Universal Transverse Mercator	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Zone 13N (108 W to 102 W)		

Site	Gentry B					
Site Position:		Northing:	14,366,383.28 usft	Latitude:	39.528393199°N	
From:	Map	Easting:	880,664.23 usft	Longitude:	107.694272643°W	
Position Uncertainty:		0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	-1.72 °

Well	Gentry B14 (111424) - Slot B14					
Well Position	+N/-S	-3.89 ft	Northing:	14,366,379.39 usft	Latitude:	39.528384148°N
	+E/-W	19.62 ft	Easting:	880,683.85 usft	Longitude:	107.694202729°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,624.00 ft

<b>Wellbore</b>	Gentry B14				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	02/28/12	10.13	65.80	52,238

<b>Design</b>	Gentry B14 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	-3.89	19.62	286.39

<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	-3.89	19.62	0.00	0.00	0.00	0.00	
1,150.00	0.00	0.00	1,150.00	-3.89	19.62	0.00	0.00	0.00	0.00	
1,216.67	2.00	360.00	1,216.65	-2.72	19.62	3.00	3.00	0.00	360.00	
1,559.27	10.64	285.68	1,557.12	11.84	-10.91	3.00	2.52	-21.69	-84.99	
4,215.21	10.64	285.68	4,167.40	144.37	-483.00	0.00	0.00	0.00	0.00	
4,569.84	0.00	285.68	4,520.00	153.25	-514.60	3.00	-3.00	0.00	180.00	
7,944.84	0.00	285.68	7,895.00	153.25	-514.60	0.00	0.00	0.00	285.68	B14 Tgt

# Planning Report - Geographic

<b>Database:</b>	EDM5000	<b>Local Co-ordinate Reference:</b>	Site Gentry B
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	KB @ 5648.00ft (Original Well Elev)
<b>Project:</b>	Gentry	<b>MD Reference:</b>	KB @ 5648.00ft (Original Well Elev)
<b>Site:</b>	Gentry B	<b>North Reference:</b>	Grid
<b>Well:</b>	Gentry B14 (111424)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Gentry B14		
<b>Design:</b>	Gentry B14 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	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
<b>Wasatch</b>									
100.00	0.00	0.00	100.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
200.00	0.00	0.00	200.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
300.00	0.00	0.00	300.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
400.00	0.00	0.00	400.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
500.00	0.00	0.00	500.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
600.00	0.00	0.00	600.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
700.00	0.00	0.00	700.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
800.00	0.00	0.00	800.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
900.00	0.00	0.00	900.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
1,000.00	0.00	0.00	1,000.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
<b>Surf Csg at 1000</b>									
1,100.00	0.00	0.00	1,100.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
1,150.00	0.00	0.00	1,150.00	-3.89	19.62	14,366,379.39	880,683.85	39.528384148°N	107.694202729°W
<b>Nudge 3°/30 at 1150 MD/TVD</b>									
1,200.00	1.50	360.00	1,199.99	-3.23	19.62	14,366,380.04	880,683.85	39.528385943°N	107.694202799°W
1,216.67	2.00	360.00	1,216.65	-2.72	19.62	14,366,380.55	880,683.85	39.528387339°N	107.694202853°W
<b>Build 3°/30 at 1217 MD/1217 TVD</b>									
1,300.00	3.33	311.67	1,299.90	0.34	17.81	14,366,383.62	880,682.04	39.528395601°N	107.694209593°W
1,400.00	6.01	294.29	1,399.57	4.43	10.86	14,366,387.71	880,675.09	39.528406249°N	107.694234641°W
1,500.00	8.90	287.85	1,498.71	8.96	-1.28	14,366,392.23	880,662.95	39.528417669°N	107.694278125°W
1,559.27	10.64	285.68	1,557.12	11.84	-10.91	14,366,395.12	880,653.32	39.528424790°N	107.694312555°W
<b>Hold 11°/30 at 1559 MD/1557 TVD</b>									
1,600.00	10.64	285.68	1,597.15	13.87	-18.15	14,366,397.15	880,646.08	39.528429770°N	107.694338415°W
1,700.00	10.64	285.68	1,695.43	18.86	-35.93	14,366,402.14	880,628.31	39.528441999°N	107.694401913°W
1,800.00	10.64	285.68	1,793.71	23.85	-53.70	14,366,407.13	880,610.53	39.528454228°N	107.694465410°W
1,900.00	10.64	285.68	1,891.99	28.84	-71.47	14,366,412.12	880,592.76	39.528466457°N	107.694528908°W
2,000.00	10.64	285.68	1,990.28	33.83	-89.25	14,366,417.11	880,574.98	39.528478686°N	107.694592405°W
2,100.00	10.64	285.68	2,088.56	38.82	-107.02	14,366,422.10	880,557.21	39.528490915°N	107.694655903°W
2,200.00	10.64	285.68	2,186.84	43.81	-124.80	14,366,427.09	880,539.44	39.528503144°N	107.694719401°W
2,300.00	10.64	285.68	2,285.12	48.80	-142.57	14,366,432.08	880,521.66	39.528515373°N	107.694782899°W
2,400.00	10.64	285.68	2,383.40	53.79	-160.35	14,366,437.07	880,503.89	39.528527601°N	107.694846396°W
2,500.00	10.64	285.68	2,481.68	58.78	-178.12	14,366,442.06	880,486.11	39.528539830°N	107.694909894°W
2,600.00	10.64	285.68	2,579.96	63.77	-195.90	14,366,447.05	880,468.34	39.528552059°N	107.694973392°W
2,700.00	10.64	285.68	2,678.24	68.77	-213.67	14,366,452.04	880,450.56	39.528564288°N	107.695036890°W
2,800.00	10.64	285.68	2,776.52	73.76	-231.45	14,366,457.03	880,432.79	39.528576516°N	107.695100387°W
2,900.00	10.64	285.68	2,874.80	78.75	-249.22	14,366,462.02	880,415.01	39.528588745°N	107.695163885°W
3,000.00	10.64	285.68	2,973.09	83.74	-267.00	14,366,467.01	880,397.24	39.528600973°N	107.695227383°W
3,100.00	10.64	285.68	3,071.37	88.73	-284.77	14,366,472.00	880,379.46	39.528613202°N	107.695290881°W
3,200.00	10.64	285.68	3,169.65	93.72	-302.55	14,366,476.99	880,361.69	39.528625430°N	107.695354379°W
3,300.00	10.64	285.68	3,267.93	98.71	-320.32	14,366,481.98	880,343.91	39.528637659°N	107.695417877°W
3,400.00	10.64	285.68	3,366.21	103.70	-338.10	14,366,486.97	880,326.14	39.528649887°N	107.695481375°W
3,500.00	10.64	285.68	3,464.49	108.69	-355.87	14,366,491.96	880,308.36	39.528662116°N	107.695544872°W
3,600.00	10.64	285.68	3,562.77	113.68	-373.64	14,366,496.95	880,290.59	39.528674344°N	107.695608370°W
3,700.00	10.64	285.68	3,661.05	118.67	-391.42	14,366,501.94	880,272.81	39.528686572°N	107.695671868°W
3,800.00	10.64	285.68	3,759.33	123.66	-409.19	14,366,506.93	880,255.04	39.528698801°N	107.695735366°W
3,900.00	10.64	285.68	3,857.61	128.65	-426.97	14,366,511.92	880,237.27	39.528711029°N	107.695798864°W
4,000.00	10.64	285.68	3,955.90	133.64	-444.74	14,366,516.91	880,219.49	39.528723257°N	107.695862362°W
4,100.00	10.64	285.68	4,054.18	138.63	-462.52	14,366,521.90	880,201.72	39.528735485°N	107.695925861°W
4,200.00	10.64	285.68	4,152.46	143.62	-480.29	14,366,526.89	880,183.94	39.528747714°N	107.695989359°W
4,215.21	10.64	285.68	4,167.40	144.37	-483.00	14,366,527.65	880,181.24	39.528749573°N	107.695999015°W
<b>Drop 3°/30 at 4215 MD/4167 TVD</b>									
4,300.00	8.10	285.68	4,251.06	148.10	-496.28	14,366,531.38	880,167.95	39.528758713°N	107.696046477°W

# Planning Report - Geographic

<b>Database:</b>	EDM5000	<b>Local Co-ordinate Reference:</b>	Site Gentry B
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	KB @ 5648.00ft (Original Well Elev)
<b>Project:</b>	Gentry	<b>MD Reference:</b>	KB @ 5648.00ft (Original Well Elev)
<b>Site:</b>	Gentry B	<b>North Reference:</b>	Grid
<b>Well:</b>	Gentry B14 (111424)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Gentry B14		
<b>Design:</b>	Gentry B14 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	
4,334.24	7.07	285.68	4,285.00	149.33	-500.63	14,366,532.60	880,163.60	39.528761705°N	107.696062016°W	
Mesaverde										
4,400.00	5.10	285.68	4,350.39	151.21	-507.34	14,366,534.48	880,156.90	39.528766319°N	107.696085976°W	
4,500.00	2.10	285.68	4,450.18	152.90	-513.38	14,366,536.18	880,150.86	39.528770472°N	107.696107541°W	
4,569.84	0.00	285.68	4,520.00	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
Vertical at 4570 MD/4520 TVD										
4,600.00	0.00	285.68	4,550.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
4,700.00	0.00	285.68	4,650.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
4,800.00	0.00	285.68	4,750.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
4,900.00	0.00	285.68	4,850.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,000.00	0.00	285.68	4,950.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,094.84	0.00	285.68	5,045.00	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
Price Coal										
5,100.00	0.00	285.68	5,050.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,200.00	0.00	285.68	5,150.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,300.00	0.00	285.68	5,250.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,400.00	0.00	285.68	5,350.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,500.00	0.00	285.68	5,450.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,600.00	0.00	285.68	5,550.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,700.00	0.00	285.68	5,650.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,800.00	0.00	285.68	5,750.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,900.00	0.00	285.68	5,850.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
5,994.84	0.00	285.68	5,945.00	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
Top Gas										
6,000.00	0.00	285.68	5,950.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,100.00	0.00	285.68	6,050.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,200.00	0.00	285.68	6,150.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,300.00	0.00	285.68	6,250.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,400.00	0.00	285.68	6,350.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,500.00	0.00	285.68	6,450.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,600.00	0.00	285.68	6,550.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,700.00	0.00	285.68	6,650.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,800.00	0.00	285.68	6,750.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
6,819.84	0.00	285.68	6,770.00	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
Cameo										
6,900.00	0.00	285.68	6,850.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,000.00	0.00	285.68	6,950.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,100.00	0.00	285.68	7,050.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,200.00	0.00	285.68	7,150.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,300.00	0.00	285.68	7,250.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,400.00	0.00	285.68	7,350.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,500.00	0.00	285.68	7,450.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,600.00	0.00	285.68	7,550.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,700.00	0.00	285.68	7,650.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,719.84	0.00	285.68	7,670.00	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
Rollins										
7,800.00	0.00	285.68	7,750.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,900.00	0.00	285.68	7,850.16	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
7,944.84	0.00	285.68	7,895.00	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W	
TD at 7945 MD/7895 TVD - B14 Tgt										

## Planning Report - Geographic

<b>Database:</b>	EDM5000	<b>Local Co-ordinate Reference:</b>	Site Gentry B
<b>Company:</b>	Antero Resources	<b>TVD Reference:</b>	KB @ 5648.00ft (Original Well Elev)
<b>Project:</b>	Gentry	<b>MD Reference:</b>	KB @ 5648.00ft (Original Well Elev)
<b>Site:</b>	Gentry B	<b>North Reference:</b>	Grid
<b>Well:</b>	Gentry B14 (111424)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Gentry B14		
<b>Design:</b>	Gentry B14 P02		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
B14 Tgt	0.00	0.00	7,895.00	153.25	-514.60	14,366,536.52	880,149.63	39.528771318°N	107.696111932°W
- plan hits target center									
- Circle (radius 20.00)									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
1,000.00	1,000.00	Surf Csg at 1000		5.50	6.00

Formations						
Measured Depth	Vertical Depth	Name		Lithology	Dip	Dip Direction
(ft)	(ft)				(°)	(°)
0.00	0.00	Wasatch				
4,334.24	4,285.00	Mesaverde				
5,094.84	5,045.00	Price Coal				
5,994.84	5,945.00	Top Gas				
6,819.84	6,770.00	Cameo				
7,719.84	7,670.00	Rollins				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)		
1,150.00	1,150.00	-3.89	19.62	Nudge 3°/30 at 1150 MD/TVD	
1,216.67	1,216.65	-2.72	19.62	Build 3°/30 at 1217 MD/1217 TVD	
1,559.27	1,557.12	11.84	-10.91	Hold 11°/30 at 1559 MD/1557 TVD	
4,215.21	4,167.40	144.37	-483.00	Drop 3°/30 at 4215 MD/4167 TVD	
4,569.84	4,520.00	153.25	-514.60	Vertical at 4570 MD/4520 TVD	
7,944.84	7,895.00	153.25	-514.60	TD at 7945 MD/7895 TVD	