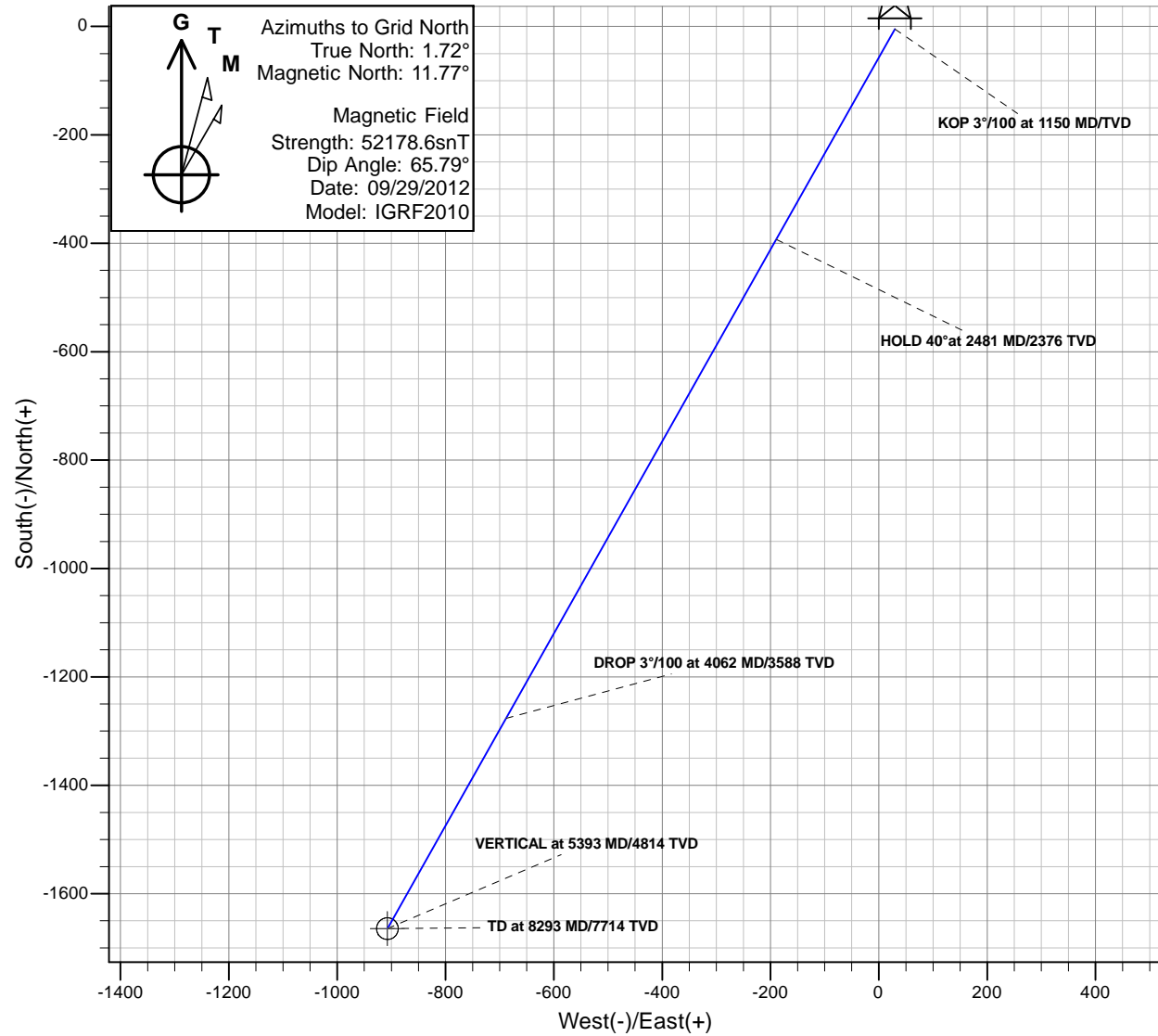
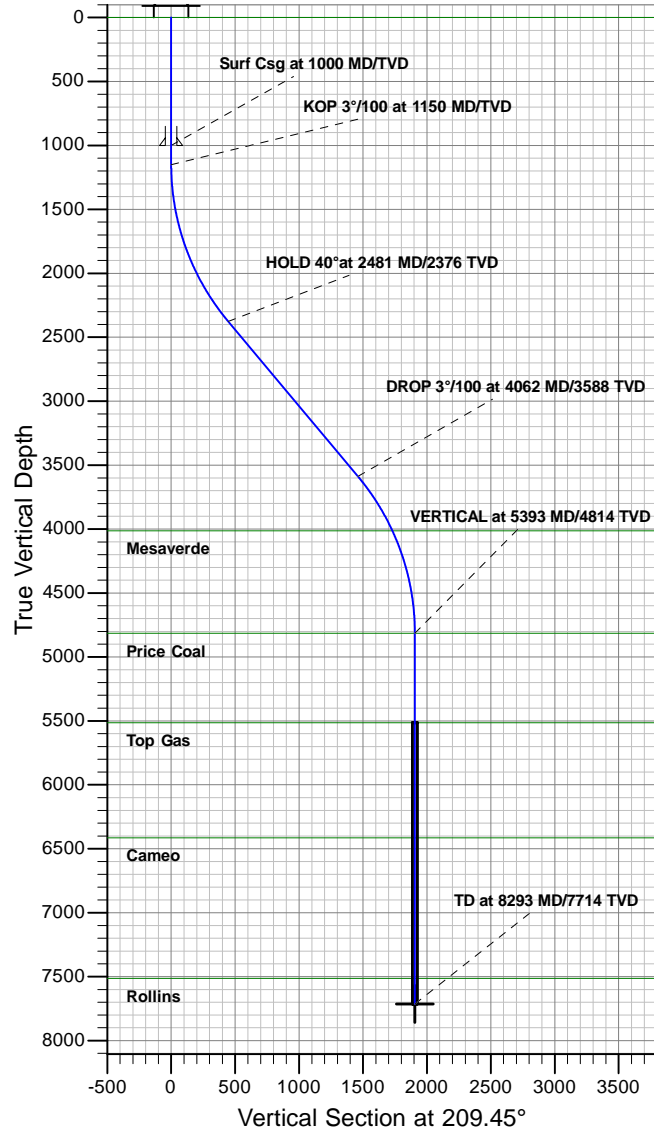




Antero Resources

Dever C05 (112041)
Dever C05 P01



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Site Dever C, Grid North
Vertical (TVD) Reference: KB @ 5609.00ft (Original Well Elev)
Section (VS) Reference: Slot - C05(-4.85N, 29.59E)
Measured Depth Reference: KB @ 5609.00ft (Original Well Elev)
Calculation Method: Minimum Curvature

PROJECT DETAILS: Dever

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	-4.85	29.59	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	-4.85	29.59	0.00	0.00	0.00	
2481.34	39.94	209.45	2376.10	-392.83	-189.44	3.00	209.45	445.54	
4061.83	39.94	209.45	3587.90	-1276.42	-688.25	0.00	0.00	1460.20	
5393.17	0.00	209.45	4814.00	-1664.40	-907.28	3.00	180.00	1905.74	
8293.17	0.00	209.45	7714.00	-1664.40	-907.28	0.00	209.45	1905.74	BH C05



Antero Resources

Dever

Dever C

Dever C05 (112041) - Slot C05

Dever C05

Plan: Dever C05 P01

Standard Planning Report - Geographic

10 July, 2012



Database:	EDM5000	Local Co-ordinate Reference:	Site Dever C
Company:	Antero Resources	TVD Reference:	KB @ 5609.00ft (Original Well Elev)
Project:	Dever	MD Reference:	KB @ 5609.00ft (Original Well Elev)
Site:	Dever C	North Reference:	Grid
Well:	Dever C05 (112041)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dever C05		
Design:	Dever C05 P01		

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

Site	Dever C					
Site Position:		Northing:	14,366,374.09 usft	Latitude:	39.528240000°N	
From:	Map	Easting:	879,108.20 usft	Longitude:	107.699784000°W	
Position Uncertainty:		0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.72 °

Well	Dever C05 (112041) - Slot C05					
Well Position	+N/-S	-4.85 ft	Northing:	14,366,369.24 usft	Latitude:	39.528229141°N
	+E/-W	29.59 ft	Easting:	879,137.79 usft	Longitude:	107.699678679°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,585.00 ft

Wellbore	Dever C05				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2012/09/29	10.06	65.79	52,179

Design	Dever C05 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	-4.85	29.59	209.45

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	-4.85	29.59	0.00	0.00	0.00	0.00	
1,150.00	0.00	0.00	1,150.00	-4.85	29.59	0.00	0.00	0.00	0.00	
2,481.34	39.94	209.45	2,376.10	-392.83	-189.44	3.00	3.00	0.00	209.45	
4,061.83	39.94	209.45	3,587.90	-1,276.42	-688.25	0.00	0.00	0.00	0.00	
5,393.17	0.00	209.45	4,814.00	-1,664.40	-907.28	3.00	-3.00	0.00	180.00	
8,293.17	0.00	209.45	7,714.00	-1,664.40	-907.28	0.00	0.00	0.00	209.45	BH C05



Database:	EDM5000	Local Co-ordinate Reference:	Site Dever C
Company:	Antero Resources	TVD Reference:	KB @ 5609.00ft (Original Well Elev)
Project:	Dever	MD Reference:	KB @ 5609.00ft (Original Well Elev)
Site:	Dever C	North Reference:	Grid
Well:	Dever C05 (112041)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dever C05		
Design:	Dever C05 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	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
Wasatch									
100.00	0.00	0.00	100.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
200.00	0.00	0.00	200.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
300.00	0.00	0.00	300.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
400.00	0.00	0.00	400.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
500.00	0.00	0.00	500.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
600.00	0.00	0.00	600.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
700.00	0.00	0.00	700.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
800.00	0.00	0.00	800.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
900.00	0.00	0.00	900.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
1,000.00	0.00	0.00	1,000.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
Surf Csg at 1000 MD/TVD									
1,100.00	0.00	0.00	1,100.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
1,150.00	0.00	0.00	1,150.00	-4.85	29.59	14,366,369.24	879,137.79	39.528229141°N	107.699678679°W
KOP 3°/100 at 1150 MD/TVD									
1,200.00	1.50	209.45	1,199.99	-5.42	29.26	14,366,368.67	879,137.47	39.528227551°N	107.699679758°W
1,300.00	4.50	209.45	1,299.85	-9.97	26.69	14,366,364.11	879,134.89	39.528214838°N	107.699688387°W
1,400.00	7.50	209.45	1,399.29	-19.07	21.55	14,366,355.01	879,129.76	39.528189446°N	107.699705621°W
1,500.00	10.50	209.45	1,498.04	-32.70	13.86	14,366,341.39	879,122.07	39.528151446°N	107.699731413°W
1,600.00	13.50	209.45	1,595.85	-50.80	3.64	14,366,323.29	879,111.85	39.528100940°N	107.699765692°W
1,700.00	16.50	209.45	1,692.43	-73.33	-9.08	14,366,300.75	879,099.12	39.528038069°N	107.699808364°W
1,800.00	19.50	209.45	1,787.52	-100.24	-24.27	14,366,273.84	879,083.93	39.527963003°N	107.699859313°W
1,900.00	22.50	209.45	1,880.87	-131.45	-41.88	14,366,242.64	879,066.32	39.527875950°N	107.699918398°W
2,000.00	25.50	209.45	1,972.22	-166.86	-61.88	14,366,207.22	879,046.33	39.527777146°N	107.699985458°W
2,100.00	28.50	209.45	2,061.31	-206.39	-84.19	14,366,167.69	879,024.01	39.527666864°N	107.700060308°W
2,200.00	31.50	209.45	2,147.90	-249.93	-108.77	14,366,124.16	878,999.43	39.527545405°N	107.700142744°W
2,300.00	34.50	209.45	2,231.76	-297.35	-135.54	14,366,076.74	878,972.66	39.527413103°N	107.700232539°W
2,400.00	37.50	209.45	2,312.65	-348.53	-164.43	14,366,025.56	878,943.77	39.527270320°N	107.700329447°W
2,481.34	39.94	209.45	2,376.10	-392.83	-189.44	14,365,981.25	878,918.76	39.527146723°N	107.700413333°W
HOLD 40° at 2481 MD/2376 TVD									
2,500.00	39.94	209.45	2,390.41	-403.27	-195.33	14,365,970.82	878,912.87	39.527117616°N	107.700433088°W
2,600.00	39.94	209.45	2,467.08	-459.17	-226.89	14,365,914.92	878,881.31	39.526961648°N	107.700538944°W
2,700.00	39.94	209.45	2,543.76	-515.08	-258.45	14,365,859.01	878,849.75	39.526805680°N	107.700644799°W
2,800.00	39.94	209.45	2,620.43	-570.98	-290.01	14,365,803.10	878,818.19	39.526649712°N	107.700750654°W
2,900.00	39.94	209.45	2,697.10	-626.89	-321.57	14,365,747.20	878,786.63	39.526493744°N	107.700856508°W
3,000.00	39.94	209.45	2,773.77	-682.79	-353.13	14,365,691.29	878,755.07	39.526337775°N	107.700962362°W
3,100.00	39.94	209.45	2,850.44	-738.70	-384.69	14,365,635.39	878,723.51	39.526181807°N	107.701068216°W
3,200.00	39.94	209.45	2,927.11	-794.60	-416.25	14,365,579.48	878,691.95	39.526025838°N	107.701174069°W
3,300.00	39.94	209.45	3,003.79	-850.51	-447.81	14,365,523.58	878,660.39	39.525869870°N	107.701279921°W
3,400.00	39.94	209.45	3,080.46	-906.42	-479.37	14,365,467.67	878,628.83	39.525713901°N	107.701385773°W
3,500.00	39.94	209.45	3,157.13	-962.32	-510.93	14,365,411.77	878,597.27	39.525557933°N	107.701491625°W
3,600.00	39.94	209.45	3,233.80	-1,018.23	-542.49	14,365,355.86	878,565.71	39.525401964°N	107.701597476°W
3,700.00	39.94	209.45	3,310.47	-1,074.13	-574.05	14,365,299.96	878,534.15	39.525245995°N	107.701703327°W
3,800.00	39.94	209.45	3,387.14	-1,130.04	-605.61	14,365,244.05	878,502.59	39.525090026°N	107.701809177°W
3,900.00	39.94	209.45	3,463.82	-1,185.94	-637.17	14,365,188.14	878,471.03	39.524934057°N	107.701915027°W
4,000.00	39.94	209.45	3,540.49	-1,241.85	-668.73	14,365,132.24	878,439.47	39.524778088°N	107.702020876°W
4,061.83	39.94	209.45	3,587.90	-1,276.42	-688.25	14,365,097.67	878,419.96	39.524681647°N	107.702086326°W
DROP 3°/100 at 4062 MD/3588 TVD									
4,100.00	38.80	209.45	3,617.40	-1,297.50	-700.15	14,365,076.59	878,408.05	39.524622833°N	107.702126240°W
4,200.00	35.80	209.45	3,696.94	-1,350.26	-729.93	14,365,023.83	878,378.27	39.524475643°N	107.702226131°W
4,300.00	32.80	209.45	3,779.55	-1,399.32	-757.63	14,364,974.77	878,350.57	39.524338768°N	107.702319020°W
4,400.00	29.80	209.45	3,864.99	-1,444.55	-783.16	14,364,929.54	878,325.04	39.524212584°N	107.702404654°W
4,500.00	26.80	209.45	3,953.03	-1,485.82	-806.46	14,364,888.27	878,301.74	39.524097436°N	107.702482798°W

Database:	EDM5000	Local Co-ordinate Reference:	Site Dever C
Company:	Antero Resources	TVD Reference:	KB @ 5609.00ft (Original Well Elev)
Project:	Dever	MD Reference:	KB @ 5609.00ft (Original Well Elev)
Site:	Dever C	North Reference:	Grid
Well:	Dever C05 (112041)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dever C05		
Design:	Dever C05 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
4,567.71	24.76	209.45	4,014.00	-1,511.46	-820.94	14,364,862.62	878,287.27	39.524025897°N	107.702531347°W
Mesaverde									
4,600.00	23.80	209.45	4,043.43	-1,523.03	-827.46	14,364,851.06	878,280.74	39.523993641°N	107.702553237°W
4,700.00	20.80	209.45	4,135.95	-1,556.06	-846.11	14,364,818.03	878,262.09	39.523901482°N	107.702615780°W
4,800.00	17.80	209.45	4,230.32	-1,584.83	-862.36	14,364,789.26	878,245.85	39.523821213°N	107.702670253°W
4,900.00	14.80	209.45	4,326.29	-1,609.26	-876.15	14,364,764.83	878,232.06	39.523753053°N	107.702716509°W
5,000.00	11.80	209.45	4,423.60	-1,629.29	-887.45	14,364,744.80	878,220.75	39.523697189°N	107.702754420°W
5,100.00	8.80	209.45	4,521.98	-1,644.85	-896.24	14,364,729.24	878,211.97	39.523653775°N	107.702783882°W
5,200.00	5.80	209.45	4,621.16	-1,655.90	-902.48	14,364,718.19	878,205.73	39.523622928°N	107.702804815°W
5,300.00	2.80	209.45	4,720.87	-1,662.42	-906.16	14,364,711.66	878,202.05	39.523604735°N	107.702817162°W
5,393.17	0.00	209.45	4,814.00	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
VERTICAL at 5393 MD/4814 TVD - Price Coal									
5,400.00	0.00	209.45	4,820.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
5,500.00	0.00	209.45	4,920.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
5,600.00	0.00	209.45	5,020.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
5,700.00	0.00	209.45	5,120.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
5,800.00	0.00	209.45	5,220.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
5,900.00	0.00	209.45	5,320.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,000.00	0.00	209.45	5,420.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,093.17	0.00	209.45	5,514.00	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
Top Gas									
6,100.00	0.00	209.45	5,520.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,200.00	0.00	209.45	5,620.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,300.00	0.00	209.45	5,720.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,400.00	0.00	209.45	5,820.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,500.00	0.00	209.45	5,920.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,600.00	0.00	209.45	6,020.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,700.00	0.00	209.45	6,120.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,800.00	0.00	209.45	6,220.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,900.00	0.00	209.45	6,320.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
6,993.17	0.00	209.45	6,414.00	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
Cameo									
7,000.00	0.00	209.45	6,420.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,100.00	0.00	209.45	6,520.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,200.00	0.00	209.45	6,620.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,300.00	0.00	209.45	6,720.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,400.00	0.00	209.45	6,820.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,500.00	0.00	209.45	6,920.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,600.00	0.00	209.45	7,020.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,700.00	0.00	209.45	7,120.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,800.00	0.00	209.45	7,220.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
7,900.00	0.00	209.45	7,320.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
8,000.00	0.00	209.45	7,420.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
8,093.17	0.00	209.45	7,514.00	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
Rollins									
8,100.00	0.00	209.45	7,520.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
8,200.00	0.00	209.45	7,620.83	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
8,293.17	0.00	209.45	7,714.00	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
TD at 8293 MD/7714 TVD - BH C05									

Database:	EDM5000	Local Co-ordinate Reference:	Site Dever C
Company:	Antero Resources	TVD Reference:	KB @ 5609.00ft (Original Well Elev)
Project:	Dever	MD Reference:	KB @ 5609.00ft (Original Well Elev)
Site:	Dever C	North Reference:	Grid
Well:	Dever C05 (112041)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dever C05		
Design:	Dever C05 P01		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
BH C05	0.00	360.00	7,714.00	-1,664.40	-907.28	14,364,709.69	878,200.93	39.523599215°N	107.702820908°W
- plan hits target center									
- Circle (radius 20.00)									

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	5.500	6.000	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
0.00	0.00	Wasatch				
4,567.71	4,014.00	Mesaverde				
5,393.17	4,814.00	Price Coal				
6,093.17	5,514.00	Top Gas				
6,993.17	6,414.00	Cameo				
8,093.17	7,514.00	Rollins				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,150.00	1,150.00	-4.85	29.59	KOP 3°/100 at 1150 MD/TVD	
2,481.34	2,376.10	-392.83	-189.44	HOLD 40° at 2481 MD/2376 TVD	
4,061.83	3,587.90	-1,276.42	-688.25	DROP 3°/100 at 4062 MD/3588 TVD	
5,393.17	4,814.00	-1,664.40	-907.28	VERTICAL at 5393 MD/4814 TVD	
8,293.17	7,714.00	-1,664.40	-907.28	TD at 8293 MD/7714 TVD	