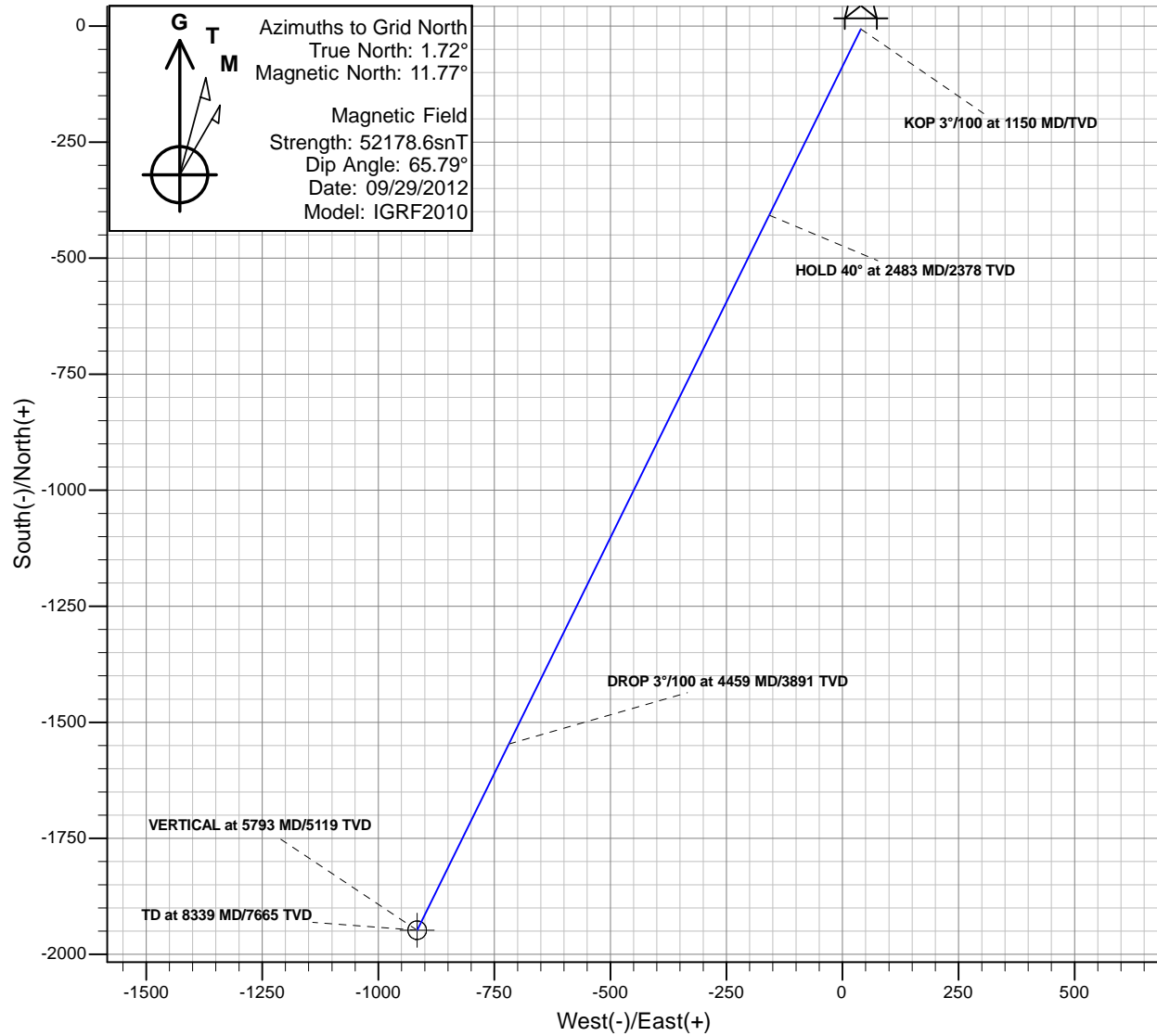
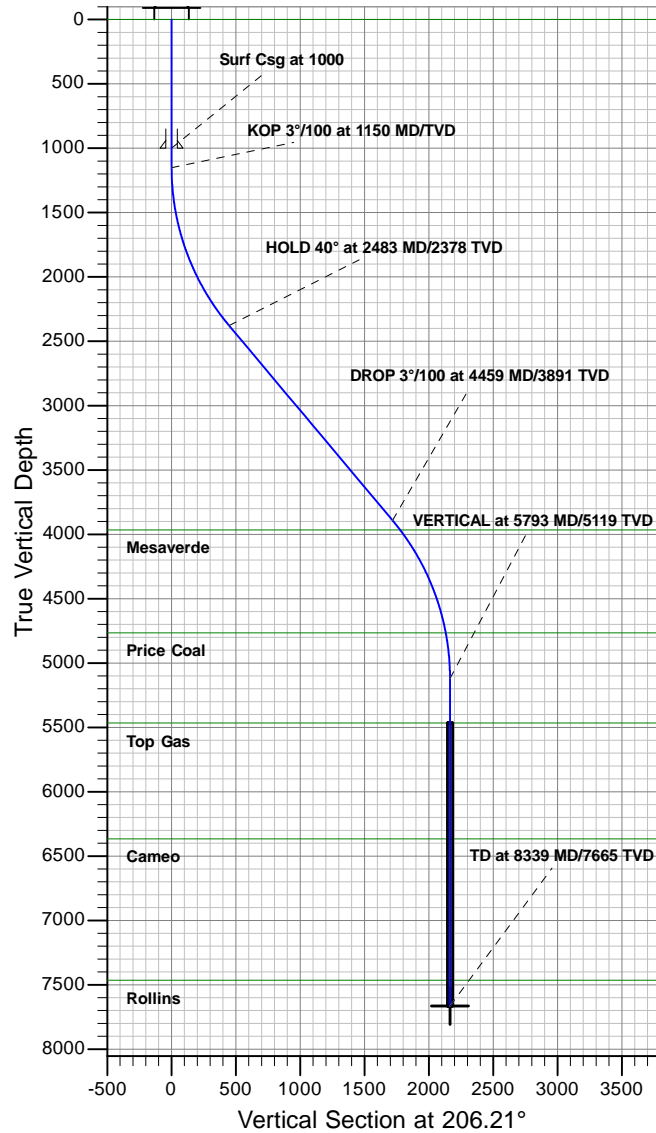




Antero Resources

Dever C11 (112044)
Dever C11



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 - C11(-6.47N, 39.45E)
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	-6.47	39.45	0.00	0.00	0.00	
1150.00	0.00	0.00	1150.00	-6.47	39.45	0.00	0.00	0.00	
2483.45	40.00	206.21	2377.72	-407.42	-157.93	3.00	206.21	446.90	
4459.35	40.00	206.21	3891.28	-1547.00	-718.92	0.00	0.00	1717.08	
5792.81	0.00	206.21	5119.00	-1947.95	-916.30	3.00	180.00	2163.97	
8338.81	0.00	206.21	7665.00	-1947.95	-916.30	0.00	206.21	2163.97	BH C11



Antero Resources

Dever

Dever C

Dever C11 (112044) - Slot C11

Dever C11

Plan: Dever C11

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 C11 (112044)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dever C11		
Design:	Dever C11		

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 C11 (112044) - Slot C11					
Well Position	+N/-S	-6.47 ft	Northing:	14,366,367.62 usft	Latitude:	39.528225498°N
	+E/-W	39.45 ft	Easting:	879,147.65 usft	Longitude:	107.699643552°W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,585.00 ft

Wellbore	Dever C11				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2012/09/29	10.06	65.79	52,179

Design	Dever C11				
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	-6.47	39.45	206.21	

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	-6.47	39.45	0.00	0.00	0.00	0.00	
1,150.00	0.00	0.00	1,150.00	-6.47	39.45	0.00	0.00	0.00	0.00	
2,483.45	40.00	206.21	2,377.72	-407.42	-157.93	3.00	3.00	0.00	206.21	
4,459.36	40.00	206.21	3,891.28	-1,547.00	-718.92	0.00	0.00	0.00	0.00	
5,792.81	0.00	206.21	5,119.00	-1,947.95	-916.30	3.00	-3.00	0.00	180.00	
8,338.81	0.00	206.21	7,665.00	-1,947.95	-916.30	0.00	0.00	0.00	206.21	BH C11



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 C11 (112044)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dever C11		
Design:	Dever C11		

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	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
Wasatch										
100.00	0.00	0.00	100.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
200.00	0.00	0.00	200.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
300.00	0.00	0.00	300.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
400.00	0.00	0.00	400.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
500.00	0.00	0.00	500.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
600.00	0.00	0.00	600.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
700.00	0.00	0.00	700.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
800.00	0.00	0.00	800.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
900.00	0.00	0.00	900.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
1,000.00	0.00	0.00	1,000.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
Surf Csg at 1000										
1,100.00	0.00	0.00	1,100.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
1,150.00	0.00	0.00	1,150.00	-6.47	39.45	14,366,367.62	879,147.65	39.528225498°N	107.699643552°W	
KOP 3°/100 at 1150 MD/TVD										
1,200.00	1.50	206.21	1,199.99	-7.06	39.16	14,366,367.03	879,147.37	39.528223864°N	107.699644513°W	
1,300.00	4.50	206.21	1,299.85	-11.75	36.85	14,366,362.33	879,145.05	39.528210794°N	107.699652202°W	
1,400.00	7.50	206.21	1,399.29	-21.13	32.24	14,366,352.96	879,140.44	39.528184689°N	107.699667558°W	
1,500.00	10.50	206.21	1,498.04	-35.16	25.33	14,366,338.92	879,133.53	39.528145622°N	107.699690539°W	
1,600.00	13.50	206.21	1,595.85	-53.81	16.15	14,366,320.27	879,124.35	39.528093699°N	107.699721082°W	
1,700.00	16.50	206.21	1,692.43	-77.03	4.72	14,366,297.05	879,112.92	39.528029062°N	107.699759104°W	
1,800.00	19.50	206.21	1,787.52	-104.75	-8.93	14,366,269.33	879,099.27	39.527951889°N	107.699804501°W	
1,900.00	22.50	206.21	1,880.87	-136.90	-24.76	14,366,237.18	879,083.45	39.527862392°N	107.699857147°W	
2,000.00	25.50	206.21	1,972.22	-173.39	-42.72	14,366,200.70	879,065.48	39.527760815°N	107.699916898°W	
2,100.00	28.50	206.21	2,061.31	-214.12	-62.77	14,366,159.97	879,045.43	39.527647437°N	107.699983592°W	
2,200.00	31.50	206.21	2,147.90	-258.97	-84.85	14,366,115.12	879,023.35	39.527522568°N	107.700057044°W	
2,300.00	34.50	206.21	2,231.76	-307.83	-108.90	14,366,066.26	878,999.30	39.527386552°N	107.700137053°W	
2,400.00	37.50	206.21	2,312.65	-360.56	-134.86	14,366,013.53	878,973.34	39.527239761°N	107.700223400°W	
2,483.45	40.00	206.21	2,377.72	-407.42	-157.93	14,365,966.67	878,950.28	39.527109304°N	107.700300138°W	
HOLD 40° at 2483 MD/2378 TVD										
2,500.00	40.00	206.21	2,390.40	-416.96	-162.63	14,365,957.12	878,945.58	39.527082733°N	107.700315768°W	
2,600.00	40.00	206.21	2,467.00	-474.64	-191.02	14,365,899.45	878,917.19	39.526922175°N	107.700410212°W	
2,700.00	40.00	206.21	2,543.60	-532.31	-219.41	14,365,841.78	878,888.79	39.526761617°N	107.700504656°W	
2,800.00	40.00	206.21	2,620.20	-589.98	-247.80	14,365,784.10	878,860.40	39.526601059°N	107.700599099°W	
2,900.00	40.00	206.21	2,696.80	-647.66	-276.19	14,365,726.43	878,832.01	39.526440501°N	107.700693542°W	
3,000.00	40.00	206.21	2,773.40	-705.33	-304.58	14,365,668.75	878,803.62	39.526279943°N	107.700787985°W	
3,100.00	40.00	206.21	2,850.00	-763.01	-332.98	14,365,611.08	878,775.23	39.526119384°N	107.700882427°W	
3,200.00	40.00	206.21	2,926.60	-820.68	-361.37	14,365,553.41	878,746.84	39.525958826°N	107.700976869°W	
3,300.00	40.00	206.21	3,003.20	-878.35	-389.76	14,365,495.73	878,718.44	39.525798268°N	107.701071310°W	
3,400.00	40.00	206.21	3,079.81	-936.03	-418.15	14,365,438.06	878,690.05	39.525637709°N	107.701165751°W	
3,500.00	40.00	206.21	3,156.41	-993.70	-446.54	14,365,380.39	878,661.66	39.525477151°N	107.701260191°W	
3,600.00	40.00	206.21	3,233.01	-1,051.37	-474.93	14,365,322.71	878,633.27	39.525316592°N	107.701354631°W	
3,700.00	40.00	206.21	3,309.61	-1,109.05	-503.33	14,365,265.04	878,604.88	39.525156033°N	107.701449071°W	
3,800.00	40.00	206.21	3,386.21	-1,166.72	-531.72	14,365,207.37	878,576.49	39.524995475°N	107.701543510°W	
3,900.00	40.00	206.21	3,462.81	-1,224.40	-560.11	14,365,149.69	878,548.09	39.524834916°N	107.701637948°W	
4,000.00	40.00	206.21	3,539.41	-1,282.07	-588.50	14,365,092.02	878,519.70	39.524674357°N	107.701732387°W	
4,100.00	40.00	206.21	3,616.01	-1,339.74	-616.89	14,365,034.34	878,491.31	39.524513798°N	107.701826825°W	
4,200.00	40.00	206.21	3,692.61	-1,397.42	-645.29	14,364,976.67	878,462.92	39.524353239°N	107.701921262°W	
4,300.00	40.00	206.21	3,769.21	-1,455.09	-673.68	14,364,919.00	878,434.53	39.524192680°N	107.702015699°W	
4,400.00	40.00	206.21	3,845.81	-1,512.77	-702.07	14,364,861.32	878,406.14	39.524032121°N	107.702110136°W	
4,459.36	40.00	206.21	3,891.28	-1,547.00	-718.92	14,364,827.09	878,389.28	39.523936821°N	107.702166188°W	
DROP 3°/100 at 4459 MD/3891 TVD										
4,500.00	38.78	206.21	3,922.69	-1,570.14	-730.31	14,364,803.95	878,377.89	39.523872394°N	107.702204082°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 C11 (112044)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dever C11		
Design:	Dever C11		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,553.68	37.17	206.21	3,965.00	-1,599.78	-744.90	14,364,774.31	878,363.30	39.523789886°N	107.702252611°W	
Mesaverde										
4,600.00	35.78	206.21	4,002.24	-1,624.48	-757.06	14,364,749.61	878,351.14	39.523721110°N	107.702293063°W	
4,700.00	32.78	206.21	4,084.86	-1,675.01	-781.94	14,364,699.07	878,326.26	39.523580433°N	107.702375805°W	
4,800.00	29.78	206.21	4,170.31	-1,721.60	-804.87	14,364,652.49	878,303.33	39.523450747°N	107.702452081°W	
4,900.00	26.78	206.21	4,258.36	-1,764.11	-825.80	14,364,609.98	878,282.41	39.523332410°N	107.702521682°W	
5,000.00	23.78	206.21	4,348.77	-1,802.42	-844.66	14,364,571.67	878,263.54	39.523225744°N	107.702584419°W	
5,100.00	20.78	206.21	4,441.29	-1,836.44	-861.41	14,364,537.65	878,246.80	39.523131043°N	107.702640118°W	
5,200.00	17.78	206.21	4,535.67	-1,866.06	-875.99	14,364,508.02	878,232.21	39.523048565°N	107.702688627°W	
5,300.00	14.78	206.21	4,631.64	-1,891.22	-888.37	14,364,482.87	878,219.83	39.522978538°N	107.702729814°W	
5,400.00	11.78	206.21	4,728.96	-1,911.83	-898.52	14,364,462.26	878,209.68	39.522921153°N	107.702763566°W	
5,436.75	10.68	206.21	4,765.00	-1,918.25	-901.68	14,364,455.84	878,206.52	39.522903274°N	107.702774081°W	
Price Coal										
5,500.00	8.78	206.21	4,827.34	-1,927.85	-906.41	14,364,446.24	878,201.80	39.522876567°N	107.702789789°W	
5,600.00	5.78	206.21	4,926.52	-1,939.22	-912.00	14,364,434.87	878,196.20	39.522844902°N	107.702808413°W	
5,700.00	2.78	206.21	5,026.23	-1,945.92	-915.30	14,364,428.17	878,192.90	39.522826246°N	107.702819385°W	
5,792.81	0.00	206.21	5,119.00	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
VERTICAL at 5793 MD/5119 TVD										
5,800.00	0.00	206.21	5,126.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
5,900.00	0.00	206.21	5,226.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,000.00	0.00	206.21	5,326.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,100.00	0.00	206.21	5,426.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,138.81	0.00	206.21	5,465.00	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
Top Gas										
6,200.00	0.00	206.21	5,526.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,300.00	0.00	206.21	5,626.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,400.00	0.00	206.21	5,726.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,500.00	0.00	206.21	5,826.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,600.00	0.00	206.21	5,926.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,700.00	0.00	206.21	6,026.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,800.00	0.00	206.21	6,126.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
6,900.00	0.00	206.21	6,226.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,000.00	0.00	206.21	6,326.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,038.81	0.00	206.21	6,365.00	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
Cameo										
7,100.00	0.00	206.21	6,426.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,200.00	0.00	206.21	6,526.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,300.00	0.00	206.21	6,626.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,400.00	0.00	206.21	6,726.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,500.00	0.00	206.21	6,826.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,600.00	0.00	206.21	6,926.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,700.00	0.00	206.21	7,026.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,800.00	0.00	206.21	7,126.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
7,900.00	0.00	206.21	7,226.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
8,000.00	0.00	206.21	7,326.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
8,100.00	0.00	206.21	7,426.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
8,138.81	0.00	206.21	7,465.00	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
Rollins										
8,200.00	0.00	206.21	7,526.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
8,300.00	0.00	206.21	7,626.19	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
8,338.81	0.00	206.21	7,665.00	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W	
TD at 8339 MD/7665 TVD - BH C11										

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 C11 (112044)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Dever C11		
Design:	Dever C11		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
BH C11	0.00	0.00	7,665.00	-1,947.95	-916.30	14,364,426.14	878,191.90	39.522820615°N	107.702822697°W
- plan hits target center									
- Circle (radius 20.00)									

Casing Points					
Measured Depth	Vertical Depth			Casing Diameter	Hole Diameter
(ft)	(ft)	Name		(in)	(in)
1,000.00	1,000.00	Surf Csg at 1000		5.500	6.000

Formations						
Measured Depth	Vertical Depth				Dip	Dip Direction
(ft)	(ft)	Name	Lithology		(°)	(°)
0.00	0.00	Wasatch				
4,553.68	3,965.00	Mesaverde				
5,436.75	4,765.00	Price Coal				
6,138.81	5,465.00	Top Gas				
7,038.81	6,365.00	Cameo				
8,138.81	7,465.00	Rollins				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
1,150.00	1,150.00	-6.47	39.45	KOP 3°/100 at 1150 MD/TVD	
2,483.45	2,377.72	-407.42	-157.93	HOLD 40° at 2483 MD/2378 TVD	
4,459.36	3,891.28	-1,547.00	-718.92	DROP 3°/100 at 4459 MD/3891 TVD	
5,792.81	5,119.00	-1,947.95	-916.30	VERTICAL at 5793 MD/5119 TVD	
8,338.81	7,665.00	-1,947.95	-916.30	TD at 8339 MD/7665 TVD	