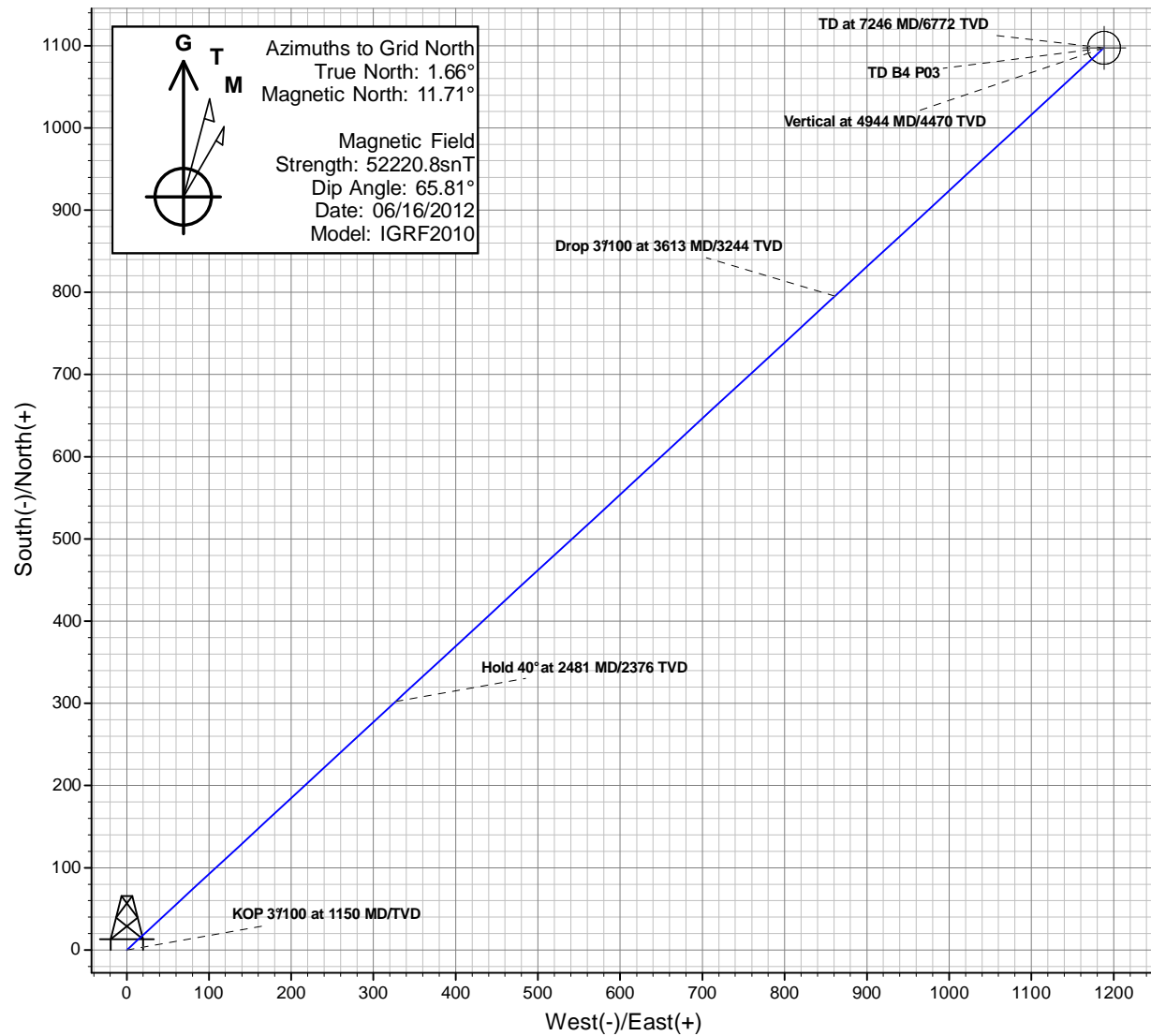
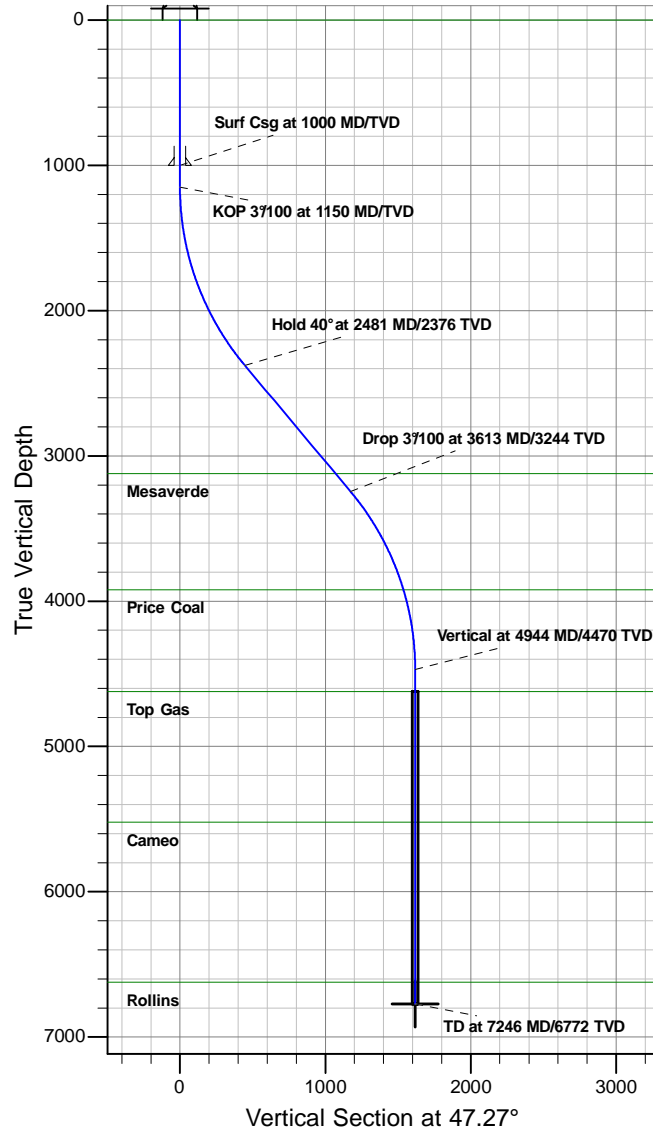




Antero Resources

McLIN B04 (111148)
P02



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well McLIN B04 (111148), 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	
2481.11	39.93	47.27	2375.93	302.20	327.19	3.00	47.27	445.40	
3613.28	39.93	47.27	3244.07	795.28	861.05	0.00	0.00	1172.13	
4944.39	0.00	47.27	4470.00	1097.48	1188.25	3.00	180.00	1617.53	
7246.39	0.00	47.27	6772.00	1097.48	1188.25	0.00	47.27	1617.53	TD B4 P03

Antero Resources

McLin

McLin B

McLIN B04 (111148)

ANTERO McLIN B4

Plan: P02

Standard Planning Report - Geographic

20 March, 2012

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well McLIN B04 (111148)
Company:	Antero Resources	TVD Reference:	RKB @ 5622.00ft
Project:	McLin	MD Reference:	RKB @ 5622.00ft
Site:	McLin B	North Reference:	Grid
Well:	McLIN B04 (111148)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO McLIN B4		
Design:	P02		

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

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

Well	McLIN B04 (111148)		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	
		Latitude:	39.531021166°N
		Longitude:	107.607990148°W
		Ground Level:	5,598.00 ft

Wellbore	ANTERO McLIN B4				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	06/16/12	10.05	65.81	52,221

Design	P02			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	47.27

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	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	
2,481.11	39.93	47.27	2,375.93	302.20	327.19	3.00	3.00	0.00	47.27	
3,613.28	39.93	47.27	3,244.07	795.28	861.05	0.00	0.00	0.00	0.00	
4,944.39	0.00	47.27	4,470.00	1,097.48	1,188.25	3.00	-3.00	0.00	180.00	
7,246.39	0.00	47.27	6,772.00	1,097.48	1,188.25	0.00	0.00	0.00	47.27	TD B4 P03

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well McLIN B04 (111148)
Company:	Antero Resources	TVD Reference:	RKB @ 5622.00ft
Project:	McLin	MD Reference:	RKB @ 5622.00ft
Site:	McLin B	North Reference:	Grid
Well:	McLIN B04 (111148)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO McLIN B4		
Design:	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	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
Wasatch									
100.00	0.00	0.00	100.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
200.00	0.00	0.00	200.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
300.00	0.00	0.00	300.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
400.00	0.00	0.00	400.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
500.00	0.00	0.00	500.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
600.00	0.00	0.00	600.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
700.00	0.00	0.00	700.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
800.00	0.00	0.00	800.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
900.00	0.00	0.00	900.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
Surf Csg at 1000 MD/TVD									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
1,150.00	0.00	0.00	1,150.00	0.00	0.00	14,366,623.20	905,025.88	39.531021166°N	107.607990148°W
KOP 3°/100 at 1150 MD/TVD									
1,200.00	1.50	47.27	1,199.99	0.44	0.48	14,366,623.64	905,026.36	39.531022423°N	107.607988491°W
1,300.00	4.50	47.27	1,299.85	3.99	4.32	14,366,627.19	905,030.20	39.531032469°N	107.607975236°W
1,400.00	7.50	47.27	1,399.29	11.09	12.00	14,366,634.28	905,037.88	39.531052536°N	107.607948762°W
1,500.00	10.50	47.27	1,498.04	21.70	23.49	14,366,644.90	905,049.37	39.531082566°N	107.607909142°W
1,600.00	13.50	47.27	1,595.85	35.80	38.76	14,366,659.00	905,064.64	39.531122479°N	107.607856484°W
1,700.00	16.50	47.27	1,692.43	53.36	57.78	14,366,676.56	905,083.66	39.531172164°N	107.607790933°W
1,800.00	19.50	47.27	1,787.52	74.33	80.47	14,366,697.52	905,106.35	39.531231486°N	107.607712668°W
1,900.00	22.50	47.27	1,880.87	98.64	106.80	14,366,721.84	905,132.68	39.531300282°N	107.607621904°W
2,000.00	25.50	47.27	1,972.22	126.23	136.67	14,366,749.43	905,162.55	39.531378363°N	107.607518889°W
2,100.00	28.50	47.27	2,061.31	157.03	170.02	14,366,780.23	905,195.90	39.531465515°N	107.607403906°W
2,200.00	31.50	47.27	2,147.90	190.95	206.75	14,366,814.15	905,232.62	39.531561499°N	107.607277270°W
2,300.00	34.50	47.27	2,231.76	227.90	246.75	14,366,851.10	905,272.63	39.531666052°N	107.607139327°W
2,400.00	37.50	47.27	2,312.65	267.78	289.92	14,366,890.97	905,315.80	39.531778888°N	107.606990456°W
2,481.11	39.93	47.27	2,375.93	302.20	327.19	14,366,925.39	905,353.07	39.531876283°N	107.606861957°W
Hold 40° at 2481 MD/2376 TVD									
2,500.00	39.93	47.27	2,390.41	310.42	336.10	14,366,933.62	905,361.98	39.531899560°N	107.606831246°W
2,600.00	39.93	47.27	2,467.09	353.98	383.25	14,366,977.17	905,409.13	39.532022797°N	107.606668651°W
2,700.00	39.93	47.27	2,543.77	397.53	430.41	14,367,020.72	905,456.28	39.532146034°N	107.606506055°W
2,800.00	39.93	47.27	2,620.45	441.08	477.56	14,367,064.28	905,503.44	39.532269271°N	107.606343458°W
2,900.00	39.93	47.27	2,697.13	484.63	524.71	14,367,107.83	905,550.59	39.532392508°N	107.606180861°W
3,000.00	39.93	47.27	2,773.81	528.18	571.87	14,367,151.38	905,597.75	39.532515744°N	107.606018263°W
3,100.00	39.93	47.27	2,850.49	571.74	619.02	14,367,194.93	905,644.90	39.532638980°N	107.605855665°W
3,200.00	39.93	47.27	2,927.17	615.29	666.18	14,367,238.48	905,692.05	39.532762216°N	107.605693066°W
3,300.00	39.93	47.27	3,003.85	658.84	713.33	14,367,282.04	905,739.21	39.532885452°N	107.605530467°W
3,400.00	39.93	47.27	3,080.53	702.39	760.48	14,367,325.59	905,786.36	39.533008687°N	107.605367867°W
3,454.09	39.93	47.27	3,122.00	725.95	785.99	14,367,349.14	905,811.87	39.533075341°N	107.605279922°W
Mesaverde									
3,500.00	39.93	47.27	3,157.21	745.95	807.64	14,367,369.14	905,833.52	39.533131922°N	107.605205266°W
3,600.00	39.93	47.27	3,233.89	789.50	854.79	14,367,412.69	905,880.67	39.533255157°N	107.605042665°W
3,613.28	39.93	47.27	3,244.07	795.28	861.05	14,367,418.48	905,886.93	39.533271523°N	107.605021071°W
Drop 3°/100 at 3613 MD/3244 TVD									
3,700.00	37.33	47.27	3,311.81	832.01	900.82	14,367,455.21	905,926.70	39.533375458°N	107.604883935°W
3,800.00	34.33	47.27	3,392.87	871.73	943.82	14,367,494.92	905,969.70	39.533487834°N	107.604735659°W
3,900.00	31.33	47.27	3,476.89	908.51	983.65	14,367,531.71	906,009.52	39.533591912°N	107.604598333°W
4,000.00	28.33	47.27	3,563.63	942.26	1,020.19	14,367,565.45	906,046.06	39.533687405°N	107.604472334°W
4,100.00	25.33	47.27	3,652.85	972.88	1,053.34	14,367,596.07	906,079.22	39.533774051°N	107.604358006°W
4,200.00	22.33	47.27	3,744.31	1,000.29	1,083.02	14,367,623.49	906,108.90	39.533851614°N	107.604255664°W
4,300.00	19.33	47.27	3,837.76	1,024.42	1,109.14	14,367,647.61	906,135.02	39.533919881°N	107.604165588°W

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well McLIN B04 (111148)
Company:	Antero Resources	TVD Reference:	RKB @ 5622.00ft
Project:	McLin	MD Reference:	RKB @ 5622.00ft
Site:	McLin B	North Reference:	Grid
Well:	McLIN B04 (111148)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO McLIN B4		
Design:	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	
4,388.58	16.67	47.27	3,922.00	1,042.99	1,129.25	14,367,666.19	906,155.13	39.533972436°N	107.604096242°W	
Price Coal										
4,400.00	16.33	47.27	3,932.95	1,045.19	1,131.63	14,367,668.39	906,157.51	39.533978664°N	107.604088024°W	
4,500.00	13.33	47.27	4,029.61	1,062.56	1,150.44	14,367,685.75	906,176.31	39.534027803°N	107.604023186°W	
4,600.00	10.33	47.27	4,127.47	1,076.47	1,165.50	14,367,699.66	906,191.37	39.534067163°N	107.603971252°W	
4,700.00	7.33	47.27	4,226.27	1,086.88	1,176.77	14,367,710.08	906,202.65	39.534096635°N	107.603932363°W	
4,800.00	4.33	47.27	4,325.75	1,093.78	1,184.24	14,367,716.97	906,210.11	39.534116140°N	107.603906627°W	
4,900.00	1.33	47.27	4,425.61	1,097.13	1,187.87	14,367,720.32	906,213.74	39.534125624°N	107.603894113°W	
4,944.39	0.00	0.00	4,470.00	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
Vertical at 4944 MD/4470 TVD										
5,000.00	0.00	47.27	4,525.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,096.39	0.00	47.27	4,622.00	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
Top Gas										
5,100.00	0.00	47.27	4,625.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,200.00	0.00	47.27	4,725.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,300.00	0.00	47.27	4,825.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,400.00	0.00	47.27	4,925.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,500.00	0.00	47.27	5,025.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,600.00	0.00	47.27	5,125.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,700.00	0.00	47.27	5,225.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,800.00	0.00	47.27	5,325.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,900.00	0.00	47.27	5,425.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
5,996.39	0.00	47.27	5,522.00	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
Cameo										
6,000.00	0.00	47.27	5,525.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,100.00	0.00	47.27	5,625.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,200.00	0.00	47.27	5,725.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,300.00	0.00	47.27	5,825.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,400.00	0.00	47.27	5,925.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,500.00	0.00	47.27	6,025.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,600.00	0.00	47.27	6,125.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,700.00	0.00	47.27	6,225.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,800.00	0.00	47.27	6,325.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
6,900.00	0.00	47.27	6,425.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
7,000.00	0.00	47.27	6,525.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
7,096.39	0.00	47.27	6,622.00	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
Rollins										
7,100.00	0.00	47.27	6,625.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
7,200.00	0.00	47.27	6,725.61	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
7,246.39	0.00	47.27	6,772.00	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
TD at 7246 MD/6772 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
TD B4 P03	0.00	360.00	6,772.00	1,097.48	1,188.25	14,367,720.67	906,214.12	39.534126614°N	107.603892806°W	
- hit/miss target										
- Shape										
- plan hits target center										
- Circle (radius 20.00)										

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well McLIN B04 (111148)
Company:	Antero Resources	TVD Reference:	RKB @ 5622.00ft
Project:	McLin	MD Reference:	RKB @ 5622.00ft
Site:	McLin B	North Reference:	Grid
Well:	McLIN B04 (111148)	Survey Calculation Method:	Minimum Curvature
Wellbore:	ANTERO McLIN B4		
Design:	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			
3,454.09	3,122.00	Mesaverde			
4,388.58	3,922.00	Price Coal			
5,096.39	4,622.00	Top Gas			
5,996.39	5,522.00	Cameo			
7,096.39	6,622.00	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	
2,481.11	2,375.93	302.20	327.19	Hold 40° at 2481 MD/2376 TVD	
3,613.28	3,244.07	795.28	861.05	Drop 3°/100 at 3613 MD/3244 TVD	
4,944.39	4,470.00	1,097.48	1,188.25	Vertical at 4944 MD/4470 TVD	
7,246.39	6,772.00	1,097.48	1,188.25	TD at 7246 MD/6772 TVD	