



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well McLin C06 (111226), 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	
1701.58	16.55	270.01	1693.94	0.01	-79.10	3.00	270.01	79.10	
3830.88	16.55	270.01	3735.06	0.13	-685.54	0.00	0.00	685.54	
4382.46	0.00	270.01	4279.00	0.14	-764.63	3.00	180.00	764.63	
7232.46	0.00	270.01	7129.00	0.14	-764.63	0.00	270.01	764.63	C06 BH

Antero Resources

McLin

McLin C

McLin C06 (111226)

McLin C06

Plan: McLin C06 P02

Standard Planning Report - Geographic

22 March, 2012

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well McLin C06 (111226)
Company:	Antero Resources	TVD Reference:	KB @ 5750.00ft (Original Well Elev)
Project:	McLin	MD Reference:	KB @ 5750.00ft (Original Well Elev)
Site:	McLin C	North Reference:	Grid
Well:	McLin C06 (111226)	Survey Calculation Method:	Minimum Curvature
Wellbore:	McLin C06		
Design:	McLin C06 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 C		
Site Position:		Northing:	14,364,522.75 usft
From:	Map	Easting:	905,235.88 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in
		Latitude:	39.525275157°N
		Longitude:	107.607030464°W
		Grid Convergence:	-1.66 °

Well	McLin C06 (111226)		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	McLin C06				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	06/07/12	10.05	65.81	52,219

Design	McLin C06 P02			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	7,129.00	0.00	0.00	270.01

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(ft)	(ft)	Rate	Rate	Rate	(°)	
(ft)			(ft)			(°/100ft)	(°/100ft)	(°/100ft)		
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	
1,701.58	16.55	270.01	1,693.94	0.01	-79.10	3.00	3.00	0.00	270.01	
3,830.88	16.55	270.01	3,735.06	0.13	-685.54	0.00	0.00	0.00	0.00	
4,382.46	0.00	270.01	4,279.00	0.14	-764.63	3.00	-3.00	0.00	180.00	
7,232.46	0.00	270.01	7,129.00	0.14	-764.63	0.00	0.00	0.00	270.01	C06 BH

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well McLin C06 (111226)
Company:	Antero Resources	TVD Reference:	KB @ 5750.00ft (Original Well Elev)
Project:	McLin	MD Reference:	KB @ 5750.00ft (Original Well Elev)
Site:	McLin C	North Reference:	Grid
Well:	McLin C06 (111226)	Survey Calculation Method:	Minimum Curvature
Wellbore:	McLin C06		
Design:	McLin C06 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	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
Wasatch									
100.00	0.00	0.00	100.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
200.00	0.00	0.00	200.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
300.00	0.00	0.00	300.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
400.00	0.00	0.00	400.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
500.00	0.00	0.00	500.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
600.00	0.00	0.00	600.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
700.00	0.00	0.00	700.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
800.00	0.00	0.00	800.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
900.00	0.00	0.00	900.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
Surf Csg at 1000 MD/TVD									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
1,150.00	0.00	0.00	1,150.00	0.00	0.00	14,364,510.17	905,204.69	39.525238145°N	107.607139663°W
KOP 3°/100 at 1150 MD/TVD									
1,200.00	1.50	270.01	1,199.99	0.00	-0.65	14,364,510.17	905,204.04	39.525238094°N	107.607141981°W
1,300.00	4.50	270.01	1,299.85	0.00	-5.89	14,364,510.17	905,198.80	39.525237680°N	107.607160520°W
1,400.00	7.50	270.01	1,399.29	0.00	-16.34	14,364,510.17	905,188.35	39.525236855°N	107.607197547°W
1,500.00	10.50	270.01	1,498.04	0.01	-31.98	14,364,510.17	905,172.71	39.525235619°N	107.607252960°W
1,600.00	13.50	270.01	1,595.85	0.01	-52.77	14,364,510.18	905,151.92	39.525233977°N	107.607326608°W
1,700.00	16.50	270.01	1,692.43	0.01	-78.65	14,364,510.18	905,126.04	39.525231932°N	107.607418289°W
1,701.58	16.55	270.01	1,693.94	0.01	-79.10	14,364,510.18	905,125.60	39.525231897°N	107.607419876°W
Hold 17° at 1702 MD/1694 TVD									
1,800.00	16.55	270.01	1,788.29	0.02	-107.13	14,364,510.19	905,097.56	39.525229682°N	107.607519184°W
1,900.00	16.55	270.01	1,884.15	0.03	-135.61	14,364,510.19	905,069.08	39.525227432°N	107.607620081°W
2,000.00	16.55	270.01	1,980.01	0.03	-164.09	14,364,510.20	905,040.60	39.525225181°N	107.607720979°W
2,100.00	16.55	270.01	2,075.86	0.04	-192.57	14,364,510.20	905,012.12	39.525222931°N	107.607821876°W
2,200.00	16.55	270.01	2,171.72	0.04	-221.05	14,364,510.21	904,983.64	39.525220680°N	107.607922774°W
2,300.00	16.55	270.01	2,267.58	0.05	-249.53	14,364,510.21	904,955.16	39.525218430°N	107.608023671°W
2,400.00	16.55	270.01	2,363.44	0.05	-278.01	14,364,510.22	904,926.68	39.525216179°N	107.608124568°W
2,500.00	16.55	270.01	2,459.30	0.06	-306.49	14,364,510.22	904,898.20	39.525213928°N	107.608225466°W
2,600.00	16.55	270.01	2,555.16	0.06	-334.97	14,364,510.23	904,869.72	39.525211677°N	107.608326363°W
2,700.00	16.55	270.01	2,651.01	0.07	-363.45	14,364,510.23	904,841.24	39.525209426°N	107.608427260°W
2,800.00	16.55	270.01	2,746.87	0.07	-391.93	14,364,510.24	904,812.76	39.525207175°N	107.608528158°W
2,900.00	16.55	270.01	2,842.73	0.08	-420.42	14,364,510.24	904,784.28	39.525204924°N	107.608629055°W
3,000.00	16.55	270.01	2,938.59	0.08	-448.90	14,364,510.25	904,755.80	39.525202673°N	107.608729952°W
3,100.00	16.55	270.01	3,034.45	0.09	-477.38	14,364,510.25	904,727.32	39.525200422°N	107.608830849°W
3,200.00	16.55	270.01	3,130.31	0.09	-505.86	14,364,510.26	904,698.84	39.525198170°N	107.608931747°W
3,300.00	16.55	270.01	3,226.17	0.10	-534.34	14,364,510.27	904,670.36	39.525195919°N	107.609032644°W
3,400.00	16.55	270.01	3,322.02	0.10	-562.82	14,364,510.27	904,641.87	39.525193667°N	107.609133541°W
3,500.00	16.55	270.01	3,417.88	0.11	-591.30	14,364,510.28	904,613.39	39.525191415°N	107.609234438°W
3,563.76	16.55	270.01	3,479.00	0.11	-609.46	14,364,510.28	904,595.24	39.525189980°N	107.609298768°W
Mesaverde									
3,600.00	16.55	270.01	3,513.74	0.11	-619.78	14,364,510.28	904,584.91	39.525189164°N	107.609335336°W
3,700.00	16.55	270.01	3,609.60	0.12	-648.26	14,364,510.29	904,556.43	39.525186912°N	107.609436233°W
3,800.00	16.55	270.01	3,705.46	0.13	-676.74	14,364,510.29	904,527.95	39.525184660°N	107.609537130°W
3,830.88	16.55	270.01	3,735.06	0.13	-685.54	14,364,510.29	904,519.16	39.525183964°N	107.609568288°W
Drop 3°/100 at 3831 MD/3735 TVD									
3,900.00	14.47	270.01	3,801.66	0.13	-704.02	14,364,510.30	904,500.68	39.525182503°N	107.609633765°W
4,000.00	11.47	270.01	3,899.09	0.13	-726.47	14,364,510.30	904,478.23	39.525180728°N	107.609713290°W
4,100.00	8.47	270.01	3,997.57	0.14	-743.78	14,364,510.30	904,460.91	39.525179359°N	107.609774640°W
4,200.00	5.47	270.01	4,096.82	0.14	-755.92	14,364,510.31	904,448.77	39.525178399°N	107.609817648°W
4,300.00	2.47	270.01	4,196.57	0.14	-762.85	14,364,510.31	904,441.84	39.525177851°N	107.609842196°W

Planning Report - Geographic

Database:	EDM5000-New	Local Co-ordinate Reference:	Well McLin C06 (111226)
Company:	Antero Resources	TVD Reference:	KB @ 5750.00ft (Original Well Elev)
Project:	McLin	MD Reference:	KB @ 5750.00ft (Original Well Elev)
Site:	McLin C	North Reference:	Grid
Well:	McLin C06 (111226)	Survey Calculation Method:	Minimum Curvature
Wellbore:	McLin C06		
Design:	McLin C06 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	
4,382.46	0.00	270.01	4,279.00	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
Vertical at 4382 MD/4279 TVD - Price Coal										
4,400.00	0.00	270.01	4,296.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
4,500.00	0.00	270.01	4,396.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
4,600.00	0.00	270.01	4,496.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
4,700.00	0.00	270.01	4,596.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
4,800.00	0.00	270.01	4,696.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
4,900.00	0.00	270.01	4,796.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,000.00	0.00	270.01	4,896.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,082.46	0.00	270.01	4,979.00	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
Top Gas										
5,100.00	0.00	270.01	4,996.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,200.00	0.00	270.01	5,096.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,300.00	0.00	270.01	5,196.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,400.00	0.00	270.01	5,296.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,500.00	0.00	270.01	5,396.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,600.00	0.00	270.01	5,496.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,700.00	0.00	270.01	5,596.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,800.00	0.00	270.01	5,696.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,900.00	0.00	270.01	5,796.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
5,982.46	0.00	270.01	5,879.00	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
Cameo										
6,000.00	0.00	270.01	5,896.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,100.00	0.00	270.01	5,996.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,200.00	0.00	270.01	6,096.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,300.00	0.00	270.01	6,196.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,400.00	0.00	270.01	6,296.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,500.00	0.00	270.01	6,396.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,600.00	0.00	270.01	6,496.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,700.00	0.00	270.01	6,596.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,800.00	0.00	270.01	6,696.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
6,900.00	0.00	270.01	6,796.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
7,000.00	0.00	270.01	6,896.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
7,082.46	0.00	270.01	6,979.00	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
Rollins										
7,100.00	0.00	270.01	6,996.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
7,200.00	0.00	270.01	7,096.54	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
7,232.46	0.00	270.01	7,129.00	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°W	
TD at 7232 MD/7129 TVD										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
C06 BH	0.00	360.00	7,129.00	0.14	-764.63	14,364,510.31	904,440.06	39.525177710°N	107.609848500°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 C06 (111226)
Company:	Antero Resources	TVD Reference:	KB @ 5750.00ft (Original Well Elev)
Project:	McLin	MD Reference:	KB @ 5750.00ft (Original Well Elev)
Site:	McLin C	North Reference:	Grid
Well:	McLin C06 (111226)	Survey Calculation Method:	Minimum Curvature
Wellbore:	McLin C06		
Design:	McLin C06 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			
3,563.76	3,479.00	Mesaverde			
4,382.46	4,279.00	Price Coal			
5,082.46	4,979.00	Top Gas			
5,982.46	5,879.00	Cameo			
7,082.46	6,979.00	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	
1,701.58	1,693.94	0.01	-79.10	Hold 17° at 1702 MD/1694 TVD	
3,830.88	3,735.06	0.13	-685.54	Drop 3°/100 at 3831 MD/3735 TVD	
4,382.46	4,279.00	0.14	-764.63	Vertical at 4382 MD/4279 TVD	
7,232.46	7,129.00	0.14	-764.63	TD at 7232 MD/7129 TVD	