



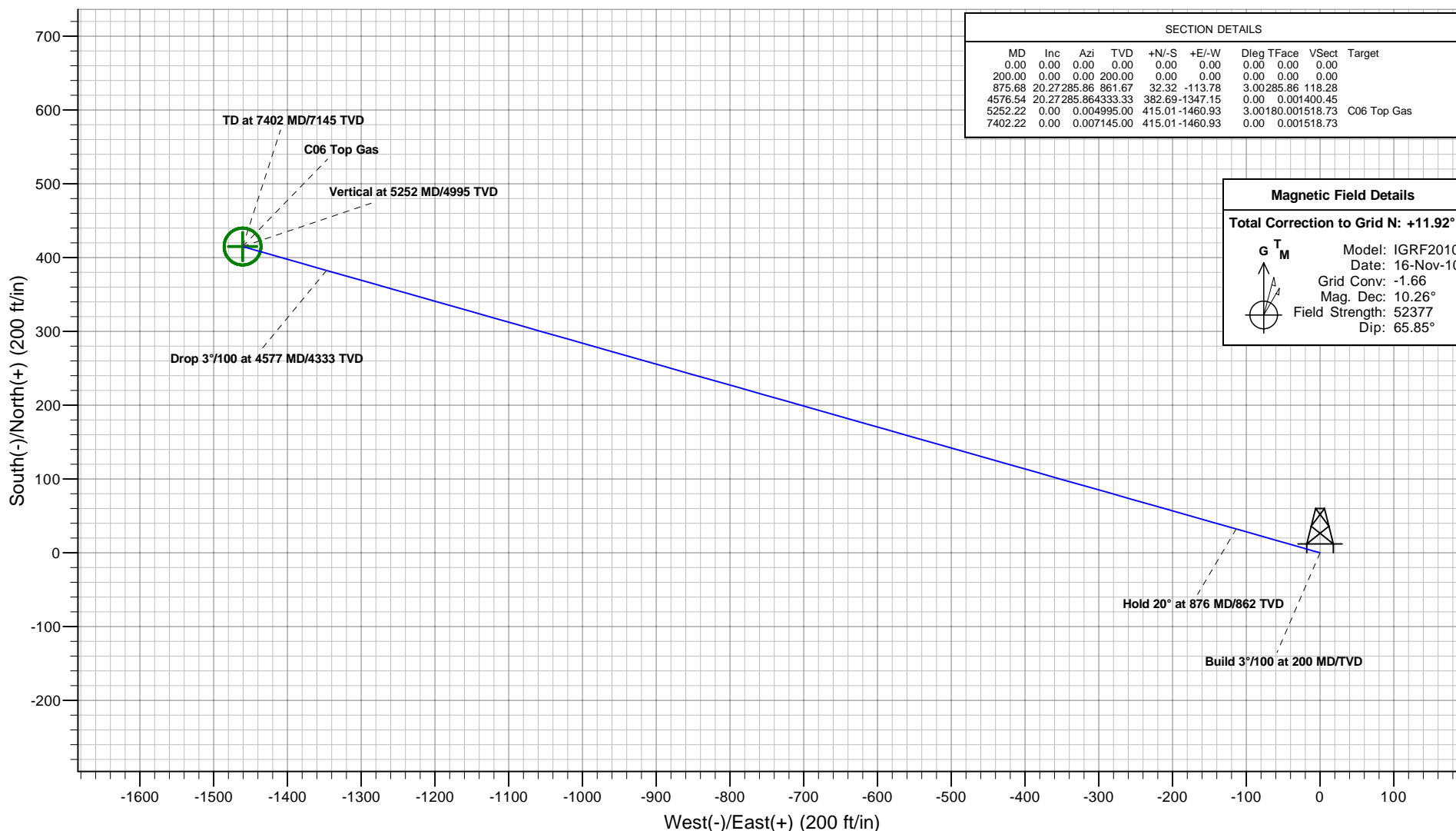
Antero Resources

McLin C06 (111226)



PLAN VIEW

Project: McLin
Site: McLin C
Well: McLin C06 (111226)
Wellbore: McLin C06
Design: McLin C06 P01



SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
875.68	20.27	285.86	861.67	32.32	-113.78	3.00	285.86	118.28	
4576.54	20.27	285.86	4333.33	382.69	-1347.15	0.00	0.00	1400.45	C06 Top Gas
5252.22	0.00	0.00	4995.00	415.01	-1460.93	3.00	180.00	1518.73	
7402.22	0.00	0.00	7145.00	415.01	-1460.93	0.00	0.00	1518.73	

Magnetic Field Details	
Total Correction to Grid N: +11.92°	
	Model: IGRF2010
	Date: 16-Nov-10
	Grid Conv: -1.66
	Mag. Dec: 10.26°
	Field Strength: 52377
	Dip: 65.85°

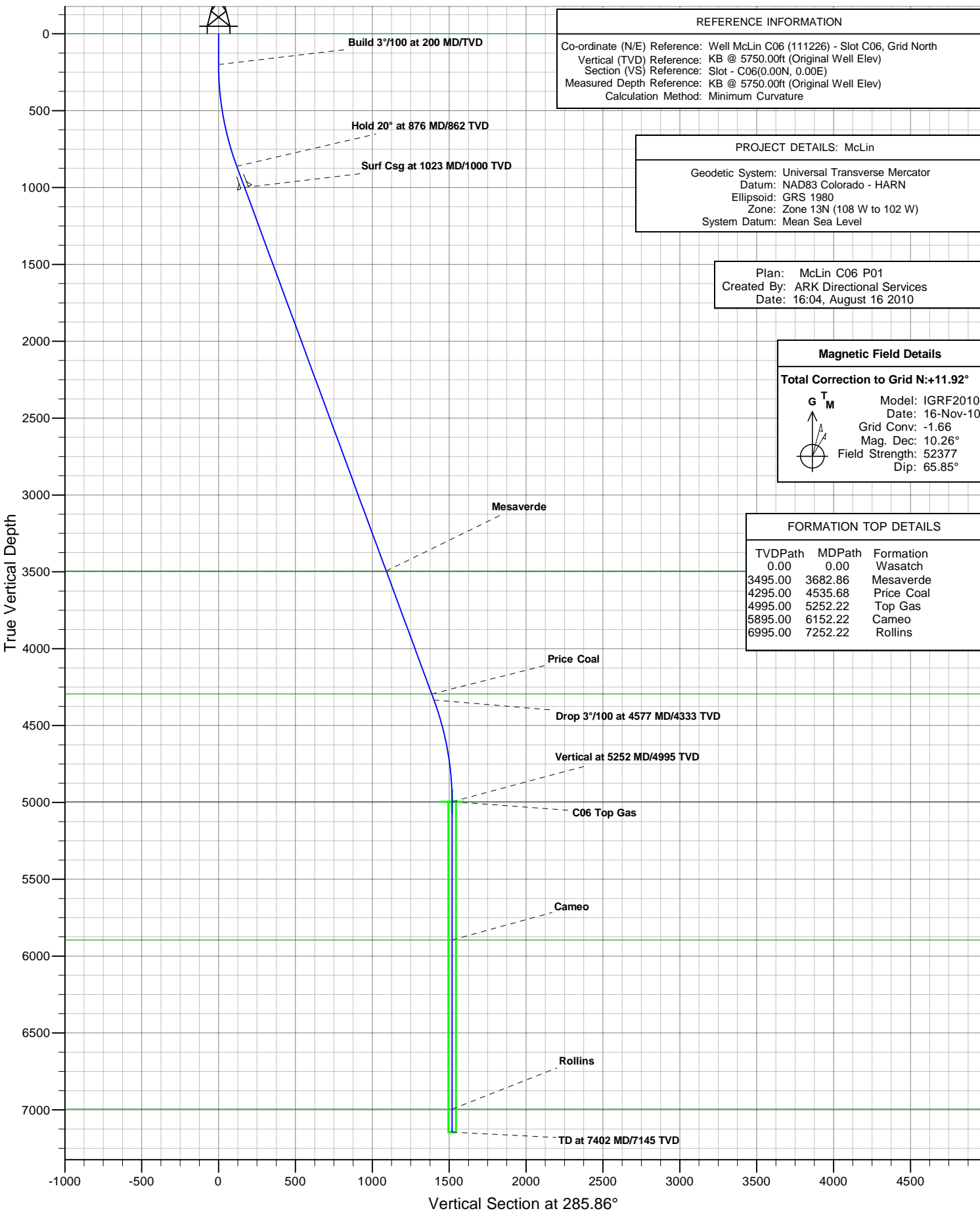
Plan: McLin C06 P01
Created By: ARK Directional Services
Date: 16:05, August 16 2010

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

REFERENCE INFORMATION
Co-ordinate (N/E) Reference: Well McLin C06 (111226) - Slot C06, Grid North
Vertical (TVD) Reference: KB @ 5750.00ft (Original Well Elev)
Section (VS) Reference: Slot - C06(0.00N, 0.00E)
Measured Depth Reference: KB @ 5750.00ft (Original Well Elev)
Calculation Method: Minimum Curvature



VERTICAL SECTION VIEW



Antero Resources

McLin

McLin C

McLin C06 (111226) - Slot C06

McLin C06

Plan: McLin C06 P01

Standard Planning Report - Geographic

16 August, 2010

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well McLin C06 (111226) - Slot C06
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 P01		

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:	14,364,522.752 usft
From:	Map	Easting:	905,235.880 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) - Slot C06		
Well Position	+N/-S	0.00 ft	Northing:
	+E/-W	0.00 ft	Easting:
Position Uncertainty	0.00 ft	Wellhead Elevation:	
		Latitude:	39.525238171°N
		Longitude:	107.607139683°W
		Ground Level:	5,726.00 ft

Wellbore	McLin C06				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	2010/11/16	10.26	65.85	52,377

Design	McLin C06 P01			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	285.86

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
875.68	20.27	285.86	861.67	32.32	-113.78	3.00	3.00	0.00	285.86	
4,576.54	20.27	285.86	4,333.33	382.69	-1,347.15	0.00	0.00	0.00	0.00	
5,252.22	0.00	0.00	4,995.00	415.01	-1,460.93	3.00	-3.00	0.00	180.00	C06 Top Gas
7,402.22	0.00	0.00	7,145.00	415.01	-1,460.93	0.00	0.00	0.00	0.00	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well McLin C06 (111226) - Slot C06
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 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	0.00	0.00	14,364,510.175	905,204.686	39.525238171°N	107.607139683°W
Wasatch									
100.00	0.00	0.00	100.00	0.00	0.00	14,364,510.175	905,204.686	39.525238171°N	107.607139683°W
200.00	0.00	0.00	200.00	0.00	0.00	14,364,510.175	905,204.686	39.525238171°N	107.607139683°W
Build 3°/100 at 200 MD/TVD									
300.00	3.00	285.86	299.95	0.72	-2.52	14,364,510.890	905,202.168	39.525239934°N	107.607148676°W
400.00	6.00	285.86	399.63	2.86	-10.06	14,364,513.034	905,194.622	39.525245215°N	107.607175630°W
500.00	9.00	285.86	498.77	6.43	-22.62	14,364,516.600	905,182.067	39.525254001°N	107.607220472°W
600.00	12.00	285.86	597.08	11.40	-40.15	14,364,521.579	905,164.540	39.525266269°N	107.607283079°W
700.00	15.00	285.86	694.31	17.78	-62.60	14,364,527.958	905,142.086	39.525281983°N	107.607363279°W
800.00	18.00	285.86	790.18	25.54	-89.92	14,364,535.718	905,114.769	39.525301101°N	107.607460852°W
875.68	20.27	285.86	861.67	32.32	-113.78	14,364,542.496	905,090.906	39.525317801°N	107.607546084°W
Hold 20° at 876 MD/862 TVD									
900.00	20.27	285.86	884.49	34.62	-121.88	14,364,544.799	905,082.802	39.525323473°N	107.607575033°W
1,000.00	20.27	285.86	978.29	44.09	-155.21	14,364,554.266	905,049.475	39.525346797°N	107.607694069°W
1,023.00	20.27	285.86	999.87	46.27	-162.88	14,364,556.443	905,041.810	39.525352161°N	107.607721448°W
Surf Csg at 1023 MD/1000 TVD									
1,100.00	20.27	285.86	1,072.10	53.56	-188.54	14,364,563.733	905,016.149	39.525370120°N	107.607813106°W
1,200.00	20.27	285.86	1,165.91	63.03	-221.86	14,364,573.200	904,982.822	39.525393444°N	107.607932143°W
1,300.00	20.27	285.86	1,259.71	72.49	-255.19	14,364,582.667	904,949.496	39.525416767°N	107.608051180°W
1,400.00	20.27	285.86	1,353.52	81.96	-288.52	14,364,592.134	904,916.169	39.525440090°N	107.608170217°W
1,500.00	20.27	285.86	1,447.33	91.43	-321.84	14,364,601.602	904,882.843	39.525463413°N	107.608289254°W
1,600.00	20.27	285.86	1,541.13	100.89	-355.17	14,364,611.069	904,849.516	39.525486736°N	107.608408291°W
1,700.00	20.27	285.86	1,634.94	110.36	-388.50	14,364,620.536	904,816.190	39.525510059°N	107.608527328°W
1,800.00	20.27	285.86	1,728.75	119.83	-421.82	14,364,630.003	904,782.863	39.525533381°N	107.608646365°W
1,900.00	20.27	285.86	1,822.55	129.30	-455.15	14,364,639.470	904,749.537	39.525556704°N	107.608765403°W
2,000.00	20.27	285.86	1,916.36	138.76	-488.48	14,364,648.937	904,716.210	39.525580026°N	107.608884440°W
2,100.00	20.27	285.86	2,010.17	148.23	-521.80	14,364,658.404	904,682.884	39.525603348°N	107.609003478°W
2,200.00	20.27	285.86	2,103.97	157.70	-555.13	14,364,667.872	904,649.558	39.525626670°N	107.609122515°W
2,300.00	20.27	285.86	2,197.78	167.16	-588.46	14,364,677.339	904,616.231	39.525649992°N	107.609241553°W
2,400.00	20.27	285.86	2,291.59	176.63	-621.78	14,364,686.806	904,582.905	39.525673314°N	107.609360590°W
2,500.00	20.27	285.86	2,385.40	186.10	-655.11	14,364,696.273	904,549.578	39.525696636°N	107.609479628°W
2,600.00	20.27	285.86	2,479.20	195.57	-688.44	14,364,705.740	904,516.252	39.525719957°N	107.609598666°W
2,700.00	20.27	285.86	2,573.01	205.03	-721.76	14,364,715.207	904,482.925	39.525743279°N	107.609717704°W
2,800.00	20.27	285.86	2,666.82	214.50	-755.09	14,364,724.675	904,449.599	39.525766600°N	107.609836742°W
2,900.00	20.27	285.86	2,760.62	223.97	-788.42	14,364,734.142	904,416.272	39.525789921°N	107.609955780°W
3,000.00	20.27	285.86	2,854.43	233.43	-821.74	14,364,743.609	904,382.946	39.525813243°N	107.610074818°W
3,100.00	20.27	285.86	2,948.24	242.90	-855.07	14,364,753.076	904,349.619	39.525836563°N	107.610193856°W
3,200.00	20.27	285.86	3,042.04	252.37	-888.40	14,364,762.543	904,316.293	39.525859884°N	107.610312895°W
3,300.00	20.27	285.86	3,135.85	261.84	-921.72	14,364,772.010	904,282.966	39.525883205°N	107.610431933°W
3,400.00	20.27	285.86	3,229.66	271.30	-955.05	14,364,781.477	904,249.640	39.525906526°N	107.610550971°W
3,500.00	20.27	285.86	3,323.46	280.77	-988.37	14,364,790.945	904,216.313	39.525929846°N	107.610670010°W
3,600.00	20.27	285.86	3,417.27	290.24	-1,021.70	14,364,800.412	904,182.987	39.525953166°N	107.610789049°W
3,682.86	20.27	285.86	3,495.00	298.08	-1,049.32	14,364,808.256	904,155.372	39.525972490°N	107.610887686°W
Mesaverde									
3,700.00	20.27	285.86	3,511.08	299.70	-1,055.03	14,364,809.879	904,149.660	39.525976487°N	107.610908087°W
3,800.00	20.27	285.86	3,604.88	309.17	-1,088.35	14,364,819.346	904,116.334	39.525999807°N	107.611027126°W
3,900.00	20.27	285.86	3,698.69	318.64	-1,121.68	14,364,828.813	904,083.007	39.526023127°N	107.611146165°W
4,000.00	20.27	285.86	3,792.50	328.11	-1,155.01	14,364,838.280	904,049.681	39.526046447°N	107.611265204°W
4,100.00	20.27	285.86	3,886.30	337.57	-1,188.33	14,364,847.747	904,016.354	39.526069766°N	107.611384243°W
4,200.00	20.27	285.86	3,980.11	347.04	-1,221.66	14,364,857.215	903,983.028	39.526093086°N	107.611503282°W
4,300.00	20.27	285.86	4,073.92	356.51	-1,254.99	14,364,866.682	903,949.702	39.526116405°N	107.611622321°W
4,400.00	20.27	285.86	4,167.72	365.97	-1,288.31	14,364,876.149	903,916.375	39.526139725°N	107.611741360°W
4,500.00	20.27	285.86	4,261.53	375.44	-1,321.64	14,364,885.616	903,883.049	39.526163044°N	107.611860399°W

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well McLin C06 (111226) - Slot C06
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 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	
4,535.68	20.27	285.86	4,295.00	378.82	-1,333.53	14,364,888.994	903,871.158	39.526171364°N	107.611902871°W	
Price Coal										
4,576.54	20.27	285.86	4,333.33	382.69	-1,347.15	14,364,892.862	903,857.542	39.526180891°N	107.611951506°W	
Drop 3°/100 at 4577 MD/4333 TVD										
4,600.00	19.57	285.86	4,355.39	384.87	-1,354.84	14,364,895.046	903,849.852	39.526186272°N	107.611978973°W	
4,700.00	16.57	285.86	4,450.45	393.35	-1,384.66	14,364,903.520	903,820.024	39.526207143°N	107.612085517°W	
4,800.00	13.57	285.86	4,547.00	400.45	-1,409.67	14,364,910.622	903,795.022	39.526224637°N	107.612174821°W	
4,900.00	10.57	285.86	4,644.78	406.16	-1,429.77	14,364,916.334	903,774.916	39.526238706°N	107.612246641°W	
5,000.00	7.57	285.86	4,743.52	410.47	-1,444.93	14,364,920.639	903,759.759	39.526249311°N	107.612300779°W	
5,100.00	4.57	285.86	4,842.95	413.35	-1,455.09	14,364,923.527	903,749.594	39.526256423°N	107.612337087°W	
5,200.00	1.57	285.86	4,942.79	414.81	-1,460.24	14,364,924.988	903,744.449	39.526260023°N	107.612355465°W	
5,252.22	0.00	0.00	4,995.00	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
Vertical at 5252 MD/4995 TVD - Top Gas										
5,300.00	0.00	0.00	5,042.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
5,400.00	0.00	0.00	5,142.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
5,500.00	0.00	0.00	5,242.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
5,600.00	0.00	0.00	5,342.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
5,700.00	0.00	0.00	5,442.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
5,800.00	0.00	0.00	5,542.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
5,900.00	0.00	0.00	5,642.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,000.00	0.00	0.00	5,742.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,100.00	0.00	0.00	5,842.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,152.22	0.00	0.00	5,895.00	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
Cameo										
6,200.00	0.00	0.00	5,942.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,300.00	0.00	0.00	6,042.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,400.00	0.00	0.00	6,142.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,500.00	0.00	0.00	6,242.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,600.00	0.00	0.00	6,342.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,700.00	0.00	0.00	6,442.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,800.00	0.00	0.00	6,542.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
6,900.00	0.00	0.00	6,642.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
7,000.00	0.00	0.00	6,742.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
7,100.00	0.00	0.00	6,842.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
7,200.00	0.00	0.00	6,942.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
7,252.22	0.00	0.00	6,995.00	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
Rollins										
7,300.00	0.00	0.00	7,042.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
7,400.00	0.00	0.00	7,142.78	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
7,402.22	0.00	0.00	7,145.00	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	
TD at 7402 MD/7145 TVD										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
C06 Top Gas - plan hits target center - Circle (radius 25.00)	0.00	0.00	4,995.00	415.01	-1,460.93	14,364,925.183	903,743.762	39.526260504°N	107.612357917°W	

ARK Directional Services

Planning Report - Geographic

Database:	EDM SERVER DB	Local Co-ordinate Reference:	Well McLin C06 (111226) - Slot C06
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 P01		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,023.00	999.87	Surf Csg at 1023 MD/1000 TVD	5.50	6.00	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
0.00	0.00	Wasatch			
3,682.86	3,495.00	Mesaverde			
4,535.68	4,295.00	Price Coal			
5,252.22	4,995.00	Top Gas			
6,152.22	5,895.00	Cameo			
7,252.22	6,995.00	Rollins			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.00	200.00	0.00	0.00	Build 3°/100 at 200 MD/TVD	
875.68	861.67	32.32	-113.78	Hold 20° at 876 MD/862 TVD	
4,576.54	4,333.33	382.69	-1,347.15	Drop 3°/100 at 4577 MD/4333 TVD	
5,252.22	4,995.00	415.01	-1,460.93	Vertical at 5252 MD/4995 TVD	
7,402.22	7,145.00	415.01	-1,460.93	TD at 7402 MD/7145 TVD	