



# End of Well Report

Prepared for



## McLin C13

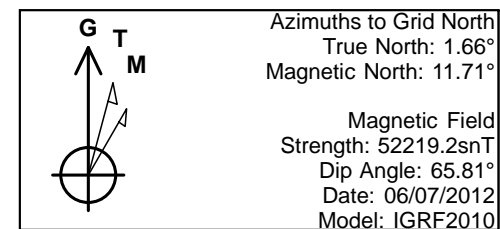
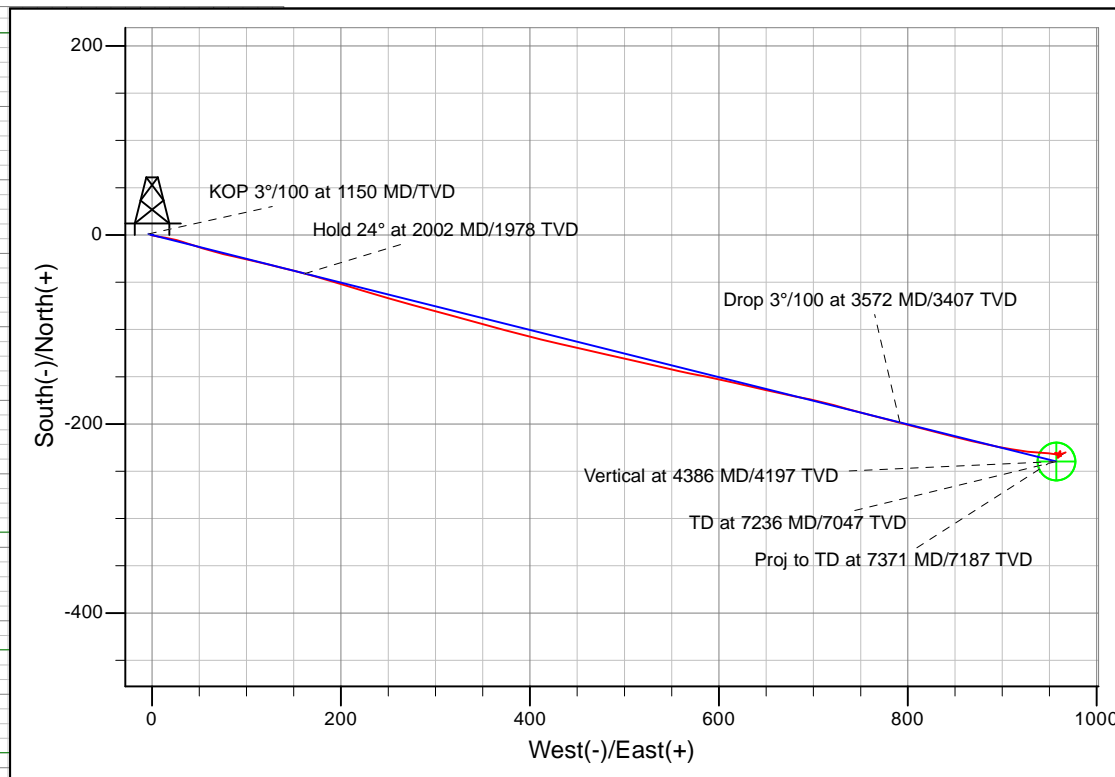
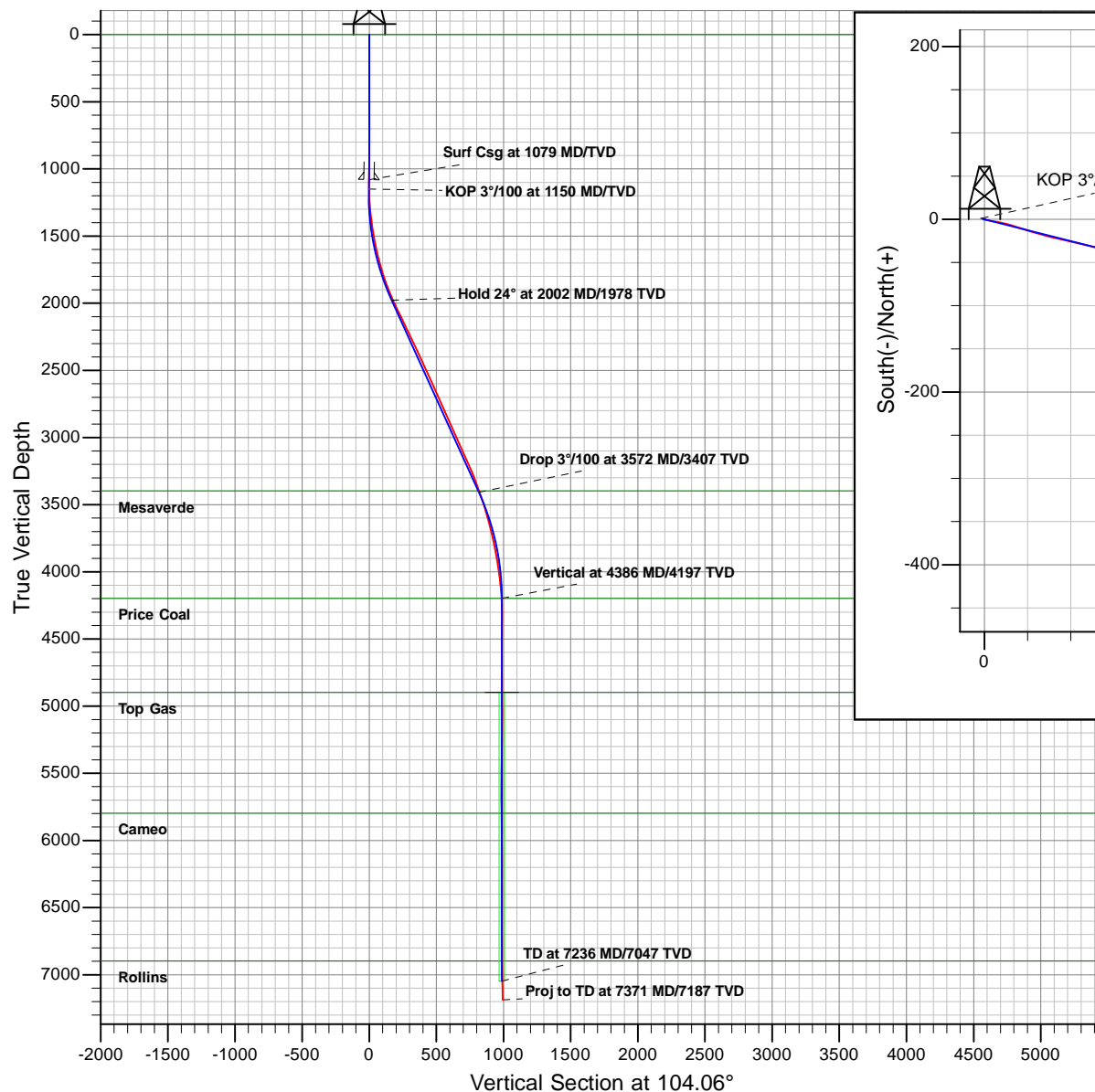
May 16th 2012

ARK Directional Services Inc  
191 University Blvd, # 601  
Denver, CO 80206



# Antero Resources

McLin C  
McLin C13 (111232)  
Planned Vs. Actual



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

Plan: P03  
Created By: ARK Directional Services Inc.  
Date: 13:50, May 16 2012

## REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well McLin C13 (111232), 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

# **Antero Resources**

**McLin**

**McLin C**

**McLin C13 (111232)**

**McLin C13**

**Design: McLin C13**

## **Survey Report - Geographic**

**16 May, 2012**

# Survey Report - Geographic

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well McLin C13 (111232)
<b>Project:</b>	McLin	<b>TVD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Site:</b>	McLin C	<b>MD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Well:</b>	McLin C13 (111232)	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	McLin C13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	McLin C13	<b>Database:</b>	EDM5000

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

Site		McLin C			
Site Position:		Northing:	14,364,522.75 usft	Latitude:	39.525275157°N
From:	Map	Easting:	905,235.88 usft	Longitude:	107.607030464°W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.66 °

Well	McLin C13 (111232)					
Well Position	+N/-S	0.00 ft	Northing:	14,364,477.82 usft	Latitude:	39.525150148°N
	+E/-W	0.00 ft	Easting:	905,213.93 usft	Longitude:	107.607103616°W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	5,726.00 ft

<b>Wellbore</b>	McLin C13				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	06/07/12	10.05	65.81	52,219

<b>Design</b>	McLin C13				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	104.06	

<b>Survey Program</b>	<b>Date</b>	05/16/12			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
100.00	975.00	C13 gyro (McLin C13)	NS-GYRO-MS	North sensing gyrocompassing m/s	
1,000.00	7,371.00	McLin C13 (McLin C13)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Map Northing (usft)</b>	<b>Map Easting (usft)</b>	<b>Latitude</b>	<b>Longitude</b>	
0.00	0.00	0.00	0.00	0.00	0.00	14,364,477.82	905,213.93	39.525150148°N	107.607103616°W	
100.00	0.21	233.34	100.00	-0.11	-0.15	14,364,477.72	905,213.78	39.525149837°N	107.607104125°W	
200.00	0.37	99.54	200.00	-0.27	0.02	14,364,477.55	905,213.95	39.525149403°N	107.607103501°W	
300.00	0.37	359.13	300.00	0.00	0.34	14,364,477.82	905,214.27	39.525150167°N	107.607102418°W	
400.00	0.30	242.56	400.00	0.20	0.10	14,364,478.02	905,214.03	39.525150703°N	107.607103280°W	
500.00	0.42	95.95	500.00	0.04	0.23	14,364,477.87	905,214.16	39.525150278°N	107.607102795°W	
600.00	0.42	350.01	599.99	0.36	0.53	14,364,478.19	905,214.46	39.525151188°N	107.607101762°W	
700.00	0.22	225.96	699.99	0.59	0.33	14,364,478.42	905,214.26	39.525151796°N	107.607102499°W	
800.00	0.29	134.81	799.99	0.28	0.37	14,364,478.10	905,214.30	39.525150944°N	107.607102320°W	
900.00	0.30	18.60	899.99	0.35	0.64	14,364,478.17	905,214.57	39.525151157°N	107.607101396°W	
975.00	1.15	279.23	974.99	0.66	-0.04	14,364,478.48	905,213.89	39.525151944°N	107.607103837°W	

# Survey Report - Geographic

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well McLin C13 (111232)
<b>Project:</b>	McLin	<b>TVD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Site:</b>	McLin C	<b>MD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Well:</b>	McLin C13 (111232)	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	McLin C13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	McLin C13	<b>Database:</b>	EDM5000

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,000.00	1.15	279.23	999.98	0.74	-0.54	14,364,478.56	905,213.39	39.525152126°N	107.607105600°W
1,079.18	1.15	279.23	1,079.15	0.99	-2.11	14,364,478.82	905,211.82	39.525152700°N	107.607111183°W
1,122.00	0.40	102.33	1,121.96	1.03	-2.39	14,364,478.85	905,211.54	39.525152780°N	107.607112172°W
1,185.00	2.20	120.69	1,184.95	0.36	-1.13	14,364,478.19	905,212.80	39.525151057°N	107.607107658°W
1,248.00	4.00	102.81	1,247.85	-0.74	2.05	14,364,477.08	905,215.98	39.525148280°N	107.607096269°W
1,311.00	5.89	100.13	1,310.61	-1.80	7.38	14,364,476.03	905,221.31	39.525145807°N	107.607077296°W
1,374.00	6.99	98.50	1,373.22	-2.93	14.35	14,364,474.89	905,228.28	39.525143247°N	107.607052474°W
1,437.00	8.61	103.60	1,435.63	-4.61	22.73	14,364,473.22	905,236.66	39.525139315°N	107.607022630°W
1,500.00	9.49	107.20	1,497.85	-7.25	32.27	14,364,470.57	905,246.20	39.525132818°N	107.606988544°W
1,563.00	11.29	108.21	1,559.81	-10.72	43.09	14,364,467.11	905,257.02	39.525124177°N	107.606949856°W
1,625.00	13.10	107.20	1,620.41	-14.69	55.57	14,364,463.14	905,269.50	39.525114264°N	107.606905242°W
1,688.00	14.72	104.61	1,681.56	-18.82	70.14	14,364,459.00	905,284.07	39.525104090°N	107.606853214°W
1,751.00	16.39	102.81	1,742.25	-22.81	86.55	14,364,455.01	905,300.48	39.525094448°N	107.606794656°W
1,814.00	18.19	103.03	1,802.40	-27.00	104.80	14,364,450.83	905,318.73	39.525084408°N	107.606729577°W
1,877.00	20.39	103.12	1,861.86	-31.71	125.07	14,364,446.12	905,339.00	39.525073101°N	107.606657281°W
1,940.00	22.59	104.13	1,920.48	-37.15	147.50	14,364,440.67	905,361.42	39.525059943°N	107.606577277°W
2,003.00	23.99	105.62	1,978.35	-43.56	171.57	14,364,434.27	905,385.49	39.525044289°N	107.606491349°W
2,066.00	25.71	107.12	2,035.51	-51.03	196.96	14,364,426.80	905,410.89	39.525025809°N	107.606400613°W
2,130.00	25.88	106.72	2,093.13	-59.13	223.61	14,364,418.69	905,437.53	39.525005690°N	107.606305390°W
2,193.00	25.80	105.62	2,149.83	-66.78	249.98	14,364,411.05	905,463.91	39.524986806°N	107.606211180°W
2,255.00	26.02	105.49	2,205.60	-74.04	276.08	14,364,403.78	905,490.01	39.524968949°N	107.606117974°W
2,318.00	26.19	105.80	2,262.18	-81.52	302.77	14,364,396.30	905,516.70	39.524950559°N	107.606022640°W
2,381.00	25.88	104.61	2,318.78	-88.77	329.45	14,364,389.05	905,543.38	39.524932779°N	107.605927370°W
2,444.00	24.52	105.40	2,375.79	-95.71	355.36	14,364,382.11	905,569.29	39.524915798°N	107.605834870°W
2,507.00	24.21	105.01	2,433.18	-102.53	380.44	14,364,375.29	905,594.37	39.524899088°N	107.605745319°W
2,571.00	24.30	103.51	2,491.53	-109.01	405.92	14,364,368.82	905,619.85	39.524883348°N	107.605654391°W
2,634.00	24.70	103.51	2,548.85	-115.11	431.32	14,364,362.72	905,645.25	39.524868621°N	107.605563772°W
2,697.00	24.08	102.33	2,606.23	-120.93	456.68	14,364,356.90	905,670.61	39.524854669°N	107.605473352°W
2,760.00	23.99	102.90	2,663.77	-126.53	481.72	14,364,351.29	905,695.65	39.524841284°N	107.605384070°W
2,823.00	24.30	102.90	2,721.26	-132.29	506.84	14,364,345.54	905,720.77	39.524827496°N	107.605294490°W
2,886.00	24.21	102.81	2,778.70	-138.04	532.07	14,364,339.78	905,746.00	39.524813703°N	107.605204513°W
2,949.00	24.30	103.12	2,836.13	-143.85	557.29	14,364,333.97	905,771.22	39.524799776°N	107.605114570°W
3,012.00	24.30	100.52	2,893.55	-149.16	582.66	14,364,328.67	905,796.59	39.524787225°N	107.605024149°W
3,074.00	24.21	102.90	2,950.08	-154.33	607.60	14,364,323.50	905,821.52	39.524775029°N	107.604935284°W
3,137.00	24.21	103.42	3,007.54	-160.21	632.75	14,364,317.62	905,846.68	39.524760890°N	107.604845561°W
3,200.00	24.21	102.19	3,065.00	-165.93	657.94	14,364,311.89	905,871.87	39.524747183°N	107.604755729°W
3,264.00	24.70	101.23	3,123.26	-171.31	683.89	14,364,306.52	905,897.81	39.524734496°N	107.604663272°W
3,327.00	24.52	103.73	3,180.54	-176.98	709.50	14,364,300.85	905,923.43	39.524720984°N	107.604571962°W
3,389.00	23.12	105.93	3,237.26	-183.37	733.70	14,364,294.45	905,947.63	39.524705362°N	107.604485558°W
3,452.00	21.01	104.13	3,295.64	-189.52	756.55	14,364,288.30	905,970.48	39.524690297°N	107.604403983°W
3,515.00	19.91	105.23	3,354.67	-195.10	777.85	14,364,282.73	905,991.78	39.524676693°N	107.604327942°W
3,578.00	19.69	104.52	3,413.94	-200.58	798.48	14,364,277.25	906,012.41	39.524663299°N	107.604254314°W
3,641.00	18.41	104.30	3,473.49	-205.70	818.39	14,364,272.13	906,032.32	39.524650838°N	107.604183238°W
3,704.00	16.48	104.00	3,533.59	-210.32	836.71	14,364,267.51	906,050.63	39.524639619°N	107.604117891°W
3,767.00	15.60	104.00	3,594.14	-214.53	853.60	14,364,263.30	906,067.52	39.524629406°N	107.604057623°W
3,830.00	14.90	103.51	3,654.92	-218.47	869.69	14,364,259.36	906,083.62	39.524619870°N	107.604000200°W
3,893.00	13.10	102.19	3,716.04	-221.87	884.55	14,364,255.96	906,098.47	39.524611722°N	107.603947224°W
3,956.00	12.22	100.83	3,777.51	-224.63	898.07	14,364,253.20	906,112.00	39.524605222°N	107.603899018°W
4,019.00	10.90	99.51	3,839.23	-226.87	910.50	14,364,250.96	906,124.42	39.524600072°N	107.603854775°W
4,081.00	10.02	97.49	3,900.20	-228.54	921.63	14,364,249.29	906,135.55	39.524596369°N	107.603815176°W
4,144.00	8.61	94.42	3,962.37	-229.61	931.76	14,364,248.21	906,145.69	39.524594217°N	107.603779157°W
4,207.00	7.60	95.03	4,024.74	-230.34	940.62	14,364,247.48	906,154.54	39.524592920°N	107.603747722°W
4,270.00	6.28	94.20	4,087.28	-230.96	948.20	14,364,246.86	906,162.13	39.524591828°N	107.603720782°W
4,333.00	4.61	100.30	4,149.99	-231.67	954.13	14,364,246.16	906,168.06	39.524590364°N	107.603699709°W
4,396.00	3.21	106.90	4,212.84	-232.63	958.31	14,364,245.19	906,172.24	39.524588047°N	107.603684806°W

# Survey Report - Geographic

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well McLin C13 (111232)
<b>Project:</b>	McLin	<b>TVD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Site:</b>	McLin C	<b>MD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Well:</b>	McLin C13 (111232)	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	McLin C13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	McLin C13	<b>Database:</b>	EDM5000

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,459.00	1.58	99.42	4,275.79	-233.29	960.85	14,364,244.54	906,174.78	39.524586452°N	107.603675724°W
4,522.00	0.22	316.43	4,338.78	-233.34	961.63	14,364,244.48	906,175.55	39.524586364°N	107.603672978°W
4,585.00	0.79	309.40	4,401.78	-232.98	961.21	14,364,244.85	906,175.14	39.524587327°N	107.603674500°W
4,648.00	0.62	320.12	4,464.77	-232.44	960.65	14,364,245.38	906,174.58	39.524588757°N	107.603676518°W
4,711.00	0.70	330.80	4,527.77	-231.84	960.25	14,364,245.98	906,174.17	39.524590364°N	107.603678019°W
4,774.00	0.62	355.32	4,590.76	-231.17	960.03	14,364,246.66	906,173.96	39.524592201°N	107.603678851°W
4,837.00	0.70	7.80	4,653.76	-230.45	960.06	14,364,247.38	906,173.98	39.524594181°N	107.603678839°W
4,900.00	1.01	32.19	4,716.75	-229.60	960.40	14,364,248.23	906,174.33	39.524596544°N	107.603677693°W
4,963.00	0.40	57.90	4,779.75	-229.01	960.89	14,364,248.82	906,174.81	39.524598192°N	107.603676046°W
5,027.00	0.70	46.91	4,843.74	-228.62	961.36	14,364,249.20	906,175.29	39.524599288°N	107.603674403°W
5,090.00	0.48	186.61	4,906.74	-228.62	961.61	14,364,249.20	906,175.54	39.524599310°N	107.603673515°W
5,153.00	1.10	180.59	4,969.74	-229.49	961.58	14,364,248.34	906,175.50	39.524596929°N	107.603673556°W
5,184.00	1.41	183.01	5,000.73	-230.17	961.55	14,364,247.66	906,175.48	39.524595066°N	107.603673568°W
5,247.00	1.19	173.52	5,063.71	-231.59	961.59	14,364,246.23	906,175.51	39.524591162°N	107.603673305°W
5,310.00	1.32	162.00	5,126.70	-232.93	961.88	14,364,244.89	906,175.81	39.524587508°N	107.603672112°W
5,373.00	0.70	179.71	5,189.69	-234.01	962.11	14,364,243.82	906,176.04	39.524584577°N	107.603671200°W
5,436.00	0.88	295.51	5,252.68	-234.18	961.67	14,364,243.64	906,175.60	39.524584058°N	107.603672722°W
5,500.00	1.32	295.20	5,316.67	-233.66	960.56	14,364,244.17	906,174.49	39.524585412°N	107.603676710°W
5,563.00	1.19	301.40	5,379.66	-233.01	959.35	14,364,244.82	906,173.28	39.524587098°N	107.603681081°W
5,625.00	1.19	296.83	5,441.64	-232.38	958.23	14,364,245.44	906,172.15	39.524588727°N	107.603685127°W
5,688.00	1.10	299.42	5,504.63	-231.79	957.11	14,364,246.04	906,171.04	39.524590264°N	107.603689122°W
5,752.00	1.01	311.81	5,568.62	-231.11	956.16	14,364,246.71	906,170.09	39.524592047°N	107.603692577°W
5,814.00	0.31	352.51	5,630.62	-230.58	955.73	14,364,247.24	906,169.66	39.524593469°N	107.603694151°W
5,877.00	0.62	71.43	5,693.61	-230.30	956.03	14,364,247.52	906,169.96	39.524594254°N	107.603693114°W
5,940.00	0.22	111.29	5,756.61	-230.24	956.47	14,364,247.59	906,170.39	39.524594466°N	107.603691576°W
6,003.00	0.70	110.41	5,819.61	-230.42	956.94	14,364,247.41	906,170.87	39.524594015°N	107.603689881°W
6,066.00	0.62	101.93	5,882.61	-230.62	957.63	14,364,247.20	906,171.56	39.524593509°N	107.603687401°W
6,129.00	0.79	122.32	5,945.60	-230.92	958.33	14,364,246.90	906,172.26	39.524592734°N	107.603684888°W
6,192.00	0.88	164.02	6,008.60	-231.62	958.84	14,364,246.20	906,172.76	39.524590860°N	107.603683045°W
6,255.00	0.79	176.72	6,071.59	-232.52	958.99	14,364,245.30	906,172.92	39.524588407°N	107.603682393°W
6,319.00	0.70	157.21	6,135.58	-233.32	959.17	14,364,244.50	906,173.10	39.524586224°N	107.603681685°W
6,381.00	0.70	126.23	6,197.58	-233.89	959.62	14,364,243.93	906,173.55	39.524584688°N	107.603680024°W
6,444.00	0.48	128.52	6,260.58	-234.29	960.14	14,364,243.54	906,174.07	39.524583654°N	107.603678153°W
6,507.00	0.62	217.59	6,323.57	-234.72	960.14	14,364,243.10	906,174.06	39.524582462°N	107.603678113°W
6,570.00	1.01	225.81	6,386.57	-235.38	959.53	14,364,242.45	906,173.46	39.524580611°N	107.603680193°W
6,633.00	0.48	279.12	6,449.56	-235.72	958.87	14,364,242.10	906,172.80	39.524579612°N	107.603682491°W
6,696.00	0.22	328.12	6,512.56	-235.58	958.55	14,364,242.25	906,172.48	39.524579982°N	107.603683655°W
6,759.00	0.70	17.73	6,575.56	-235.11	958.60	14,364,242.72	906,172.53	39.524581274°N	107.603683514°W
6,822.00	0.62	60.31	6,638.56	-234.57	959.01	14,364,243.25	906,172.94	39.524582776°N	107.603682105°W
6,885.00	0.79	50.03	6,701.55	-234.13	959.64	14,364,243.70	906,173.57	39.524584054°N	107.603679923°W
6,948.00	1.19	33.51	6,764.54	-233.30	960.34	14,364,244.52	906,174.27	39.524586371°N	107.603677549°W
7,011.00	0.70	55.13	6,827.53	-232.54	961.01	14,364,245.29	906,174.94	39.524588525°N	107.603675229°W
7,074.00	0.62	57.50	6,890.53	-232.13	961.62	14,364,245.69	906,175.55	39.524589679°N	107.603673134°W
7,137.00	0.79	67.61	6,953.52	-231.78	962.31	14,364,246.04	906,176.23	39.524590690°N	107.603670728°W
7,200.00	1.10	73.01	7,016.52	-231.44	963.29	14,364,246.38	906,177.21	39.524591707°N	107.603667292°W
7,263.00	1.19	67.83	7,079.50	-231.02	964.47	14,364,246.81	906,178.40	39.524592963°N	107.603663140°W
7,326.00	1.58	69.50	7,142.48	-230.47	965.89	14,364,247.36	906,179.82	39.524594587°N	107.603658169°W
7,371.00	1.58	69.50	7,187.47	-230.03	967.05	14,364,247.79	906,180.98	39.524595872°N	107.603654096°W
Proj to TD at 7371 MD/7187 TVD									

## Survey Report - Geographic

<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well McLin C13 (111232)
<b>Project:</b>	McLin	<b>TVD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Site:</b>	McLin C	<b>MD Reference:</b>	KB @ 5750.00ft (Original Well Elev)
<b>Well:</b>	McLin C13 (111232)	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	McLin C13	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	McLin C13	<b>Database:</b>	EDM5000

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,371.00	7,187.47	-230.03	967.05	Proj to TD at 7371 MD/7187 TVD

Checked By: _____	Approved By: _____	Date: _____
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