



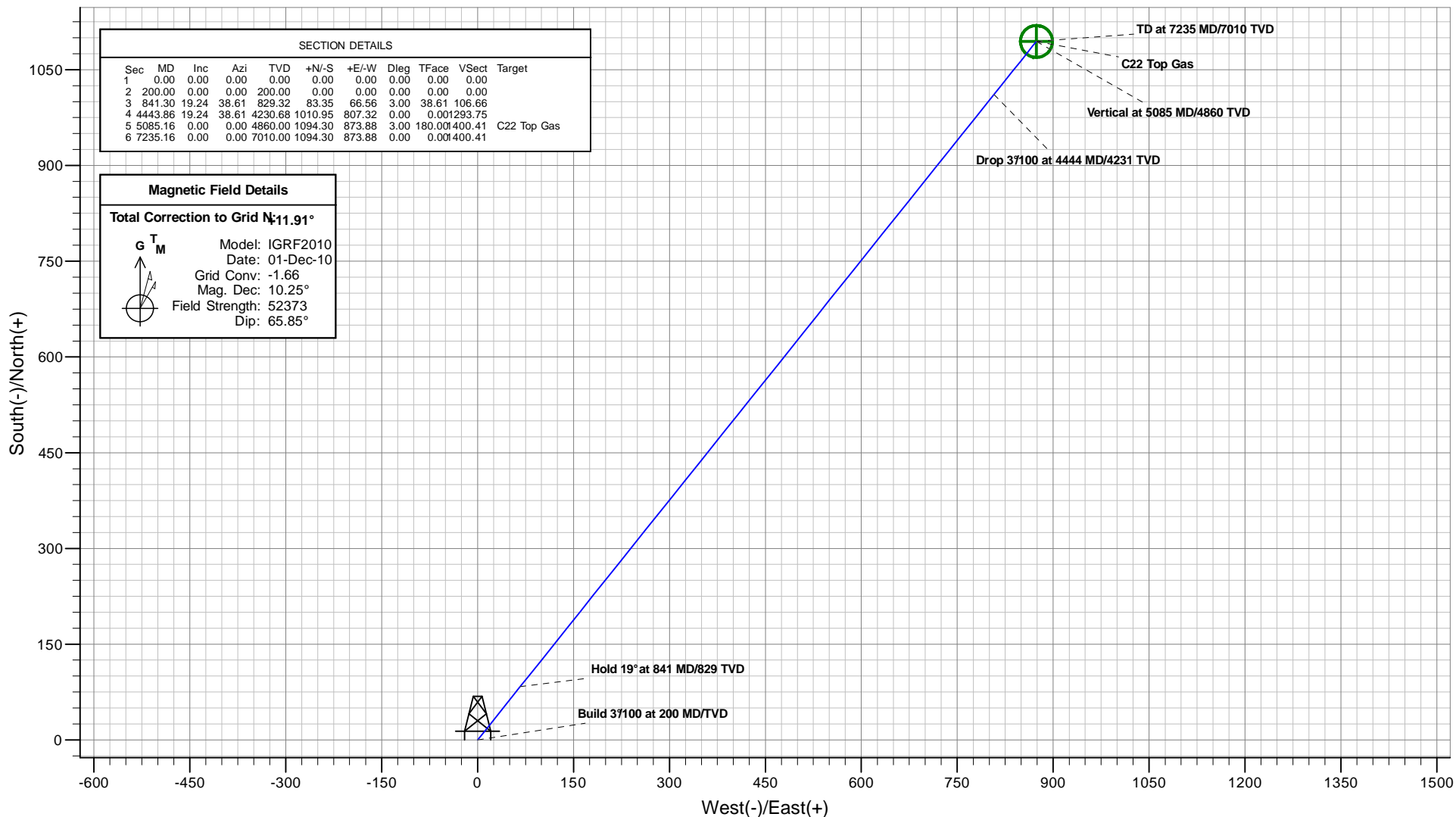
Antero Resources

McLin C22 (111246)



PLAN VIEW

Project: McLin
Site: McLin C
Well: McLin C22 (111246)
Wellbore: McLin C22
Design: McLin C22 P01



Plan: McLin C22 P01
Created By: ARK Directional Services
Date: 14:03, September 01 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 C22 (111246) - Slot C22, Grid North
Vertical (TVD) Reference: KB @ 5750.00ft (Original Well Elev)
Section (VS) Reference: Slot - C22(0.00N, 0.00E)
Measured Depth Reference: KB @ 5750.00ft (Original Well Elev)
Calculation Method: Minimum Curvature

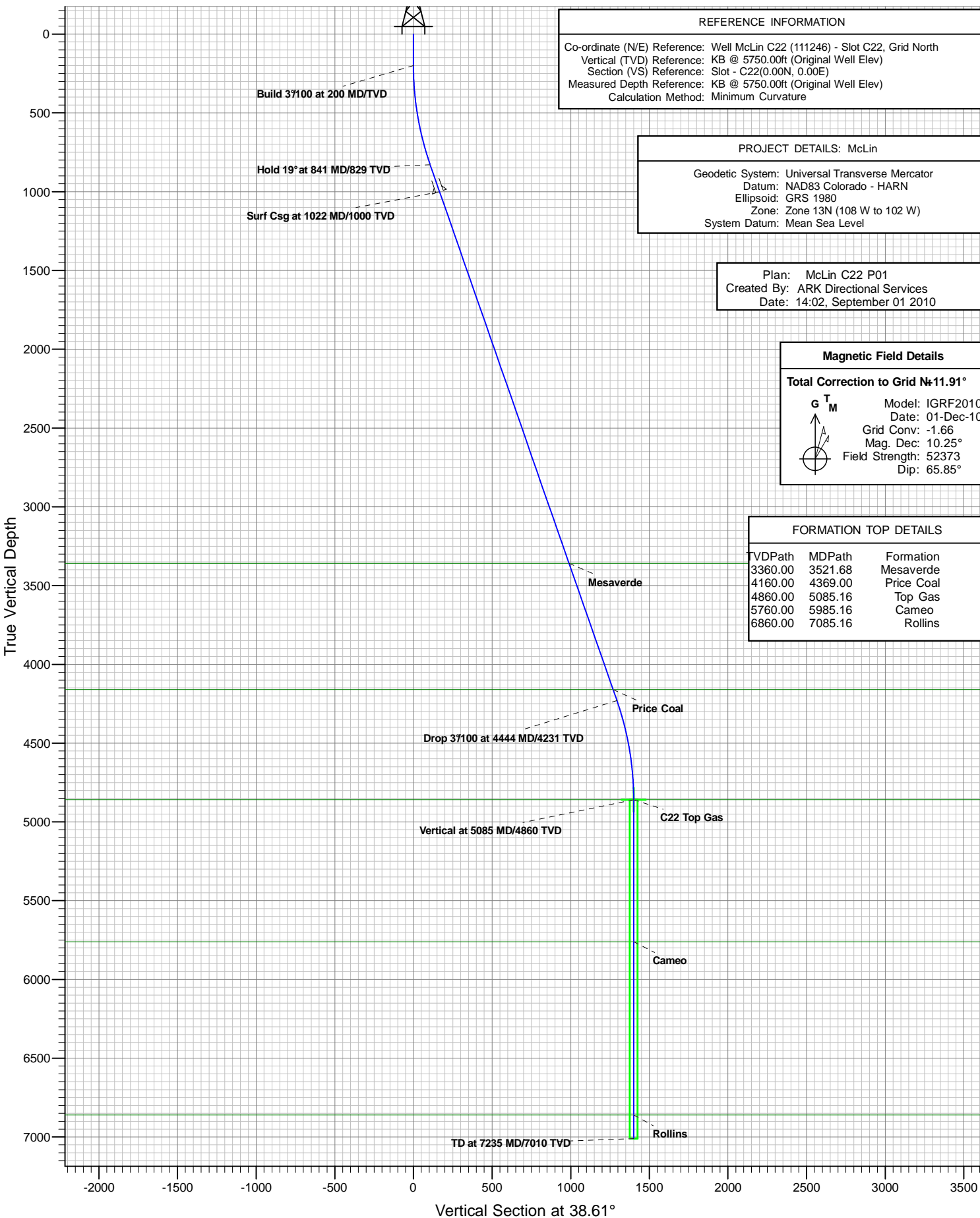


Antero Resources



McLin C22 (111246)

VERTICAL SECTION VIEW



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well McLin C22 (111246) - Slot C22, Grid North
Vertical (TVD) Reference: KB @ 5750.00ft (Original Well Elev)
Section (VS) Reference: Slot - C22(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

Plan: McLin C22 P01
Created By: ARK Directional Services
Date: 14:02, September 01 2010

Magnetic Field Details

Total Correction to Grid N=11.91°

G^T_M Model: IGRF2010
Date: 01-Dec-10
Grid Conv: -1.66
Mag. Dec: 10.25°
Field Strength: 52373
Dip: 65.85°

Antero Resources

McLin

McLin C

McLin C22 (111246) - Slot C22

McLin C22

Plan: McLin C22 P01

Standard Planning Report - Geographic

01 September, 2010

ARK Directional Services

Planning Report - Geographic

| | | | |
|------------------|--------------------|-------------------------------------|-------------------------------------|
| Database: | EDM SERVER DB | Local Co-ordinate Reference: | Well McLin C22 (111246) - Slot C22 |
| 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 C22 (111246) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | McLin C22 | | |
| Design: | McLin C22 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 C22 (111246) - Slot C22 | | |
| Well Position | +N/-S | 0.00 ft | Northing: |
| | +E/-W | 0.00 ft | Easting: |
| Position Uncertainty | 0.00 ft | Wellhead Elevation: | |
| | | Latitude: | 39.525368898°N |
| | | Longitude: | 107.606975575°W |
| | | Ground Level: | 5,726.00 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | McLin C22 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 2010/12/01 | 10.25 | 65.85 | 52,373 |

| | | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|--|
| Design | McLin C22 P01 | | | | |
| Audit Notes: | | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.00 | |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) | |
| | 4,860.00 | 0.00 | 0.00 | 38.61 | |

| | | | | | | | | | | |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|-----------------------------|----------------------------|----------------|---------------|
| 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 | |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 841.30 | 19.24 | 38.61 | 829.32 | 83.35 | 66.56 | 3.00 | 3.00 | 0.00 | 38.61 | |
| 4,443.86 | 19.24 | 38.61 | 4,230.68 | 1,010.95 | 807.32 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,085.16 | 0.00 | 0.00 | 4,860.00 | 1,094.30 | 873.88 | 3.00 | -3.00 | 0.00 | 180.00 | C22 Top Gas |
| 7,235.16 | 0.00 | 0.00 | 7,010.00 | 1,094.30 | 873.88 | 0.00 | 0.00 | 0.00 | 0.00 | |

ARK Directional Services

Planning Report - Geographic

| | | | |
|------------------|--------------------|-------------------------------------|-------------------------------------|
| Database: | EDM SERVER DB | Local Co-ordinate Reference: | Well McLin C22 (111246) - Slot C22 |
| 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 C22 (111246) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | McLin C22 | | |
| Design: | McLin C22 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 | 14,364,556.442 | 905,252.350 | 39.525368898°N | 107.606975575°W |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 14,364,556.442 | 905,252.350 | 39.525368898°N | 107.606975575°W |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 14,364,556.442 | 905,252.350 | 39.525368898°N | 107.606975575°W |
| Build 3°/100 at 200 MD/TVD | | | | | | | | | |
| 300.00 | 3.00 | 38.61 | 299.95 | 2.05 | 1.63 | 14,364,558.487 | 905,253.983 | 39.525374639°N | 107.606969999°W |
| 400.00 | 6.00 | 38.61 | 399.63 | 8.18 | 6.53 | 14,364,564.617 | 905,258.879 | 39.525391847°N | 107.606953285°W |
| 500.00 | 9.00 | 38.61 | 498.77 | 18.37 | 14.67 | 14,364,574.815 | 905,267.023 | 39.525420474°N | 107.606925480°W |
| 600.00 | 12.00 | 38.61 | 597.08 | 32.61 | 26.04 | 14,364,589.054 | 905,278.393 | 39.525460442°N | 107.606886660°W |
| 700.00 | 15.00 | 38.61 | 694.31 | 50.85 | 40.61 | 14,364,607.294 | 905,292.959 | 39.525511642°N | 107.606836931°W |
| 800.00 | 18.00 | 38.61 | 790.18 | 73.04 | 58.33 | 14,364,629.484 | 905,310.680 | 39.525573932°N | 107.606776430°W |
| 841.30 | 19.24 | 38.61 | 829.32 | 83.35 | 66.56 | 14,364,639.789 | 905,318.909 | 39.525602859°N | 107.606748334°W |
| Hold 19° at 841 MD/829 TVD | | | | | | | | | |
| 900.00 | 19.24 | 38.61 | 884.74 | 98.46 | 78.63 | 14,364,654.902 | 905,330.978 | 39.525645282°N | 107.606707129°W |
| 1,000.00 | 19.24 | 38.61 | 979.15 | 124.21 | 99.19 | 14,364,680.651 | 905,351.540 | 39.525717559°N | 107.606636927°W |
| 1,022.00 | 19.24 | 38.61 | 999.92 | 129.87 | 103.71 | 14,364,686.315 | 905,356.063 | 39.525733460°N | 107.606621483°W |
| Surf Csg at 1022 MD/1000 TVD | | | | | | | | | |
| 1,100.00 | 19.24 | 38.61 | 1,073.57 | 149.96 | 119.75 | 14,364,706.399 | 905,372.102 | 39.525789836°N | 107.606566726°W |
| 1,200.00 | 19.24 | 38.61 | 1,167.98 | 175.71 | 140.31 | 14,364,732.148 | 905,392.664 | 39.525862113°N | 107.606496524°W |
| 1,300.00 | 19.24 | 38.61 | 1,262.40 | 201.45 | 160.88 | 14,364,757.896 | 905,413.226 | 39.525934390°N | 107.606426322°W |
| 1,400.00 | 19.24 | 38.61 | 1,356.81 | 227.20 | 181.44 | 14,364,783.644 | 905,433.788 | 39.526006667°N | 107.606356120°W |
| 1,500.00 | 19.24 | 38.61 | 1,451.23 | 252.95 | 202.00 | 14,364,809.393 | 905,454.350 | 39.526078944°N | 107.606285918°W |
| 1,600.00 | 19.24 | 38.61 | 1,545.64 | 278.70 | 222.56 | 14,364,835.141 | 905,474.912 | 39.526151221°N | 107.606215715°W |
| 1,700.00 | 19.24 | 38.61 | 1,640.06 | 304.45 | 243.12 | 14,364,860.890 | 905,495.474 | 39.526223498°N | 107.606145513°W |
| 1,800.00 | 19.24 | 38.61 | 1,734.47 | 330.20 | 263.69 | 14,364,886.638 | 905,516.035 | 39.526295775°N | 107.606075310°W |
| 1,900.00 | 19.24 | 38.61 | 1,828.89 | 355.95 | 284.25 | 14,364,912.386 | 905,536.597 | 39.526368051°N | 107.606005107°W |
| 2,000.00 | 19.24 | 38.61 | 1,923.30 | 381.69 | 304.81 | 14,364,938.135 | 905,557.159 | 39.526440328°N | 107.605934904°W |
| 2,100.00 | 19.24 | 38.61 | 2,017.72 | 407.44 | 325.37 | 14,364,963.883 | 905,577.721 | 39.526512605°N | 107.605864701°W |
| 2,200.00 | 19.24 | 38.61 | 2,112.14 | 433.19 | 345.93 | 14,364,989.632 | 905,598.283 | 39.526584881°N | 107.605794498°W |
| 2,300.00 | 19.24 | 38.61 | 2,206.55 | 458.94 | 366.50 | 14,365,015.380 | 905,618.845 | 39.526657158°N | 107.605724294°W |
| 2,400.00 | 19.24 | 38.61 | 2,300.97 | 484.69 | 387.06 | 14,365,041.129 | 905,639.407 | 39.526729434°N | 107.605654091°W |
| 2,500.00 | 19.24 | 38.61 | 2,395.38 | 510.44 | 407.62 | 14,365,066.877 | 905,659.969 | 39.526801711°N | 107.605583887°W |
| 2,600.00 | 19.24 | 38.61 | 2,489.80 | 536.18 | 428.18 | 14,365,092.625 | 905,680.531 | 39.526873987°N | 107.605513683°W |
| 2,700.00 | 19.24 | 38.61 | 2,584.21 | 561.93 | 448.74 | 14,365,118.374 | 905,701.093 | 39.526946264°N | 107.605443479°W |
| 2,800.00 | 19.24 | 38.61 | 2,678.63 | 587.68 | 469.31 | 14,365,144.122 | 905,721.655 | 39.527018540°N | 107.605373275°W |
| 2,900.00 | 19.24 | 38.61 | 2,773.04 | 613.43 | 489.87 | 14,365,169.871 | 905,742.217 | 39.527090817°N | 107.605303071°W |
| 3,000.00 | 19.24 | 38.61 | 2,867.46 | 639.18 | 510.43 | 14,365,195.619 | 905,762.779 | 39.527163093°N | 107.605232866°W |
| 3,100.00 | 19.24 | 38.61 | 2,961.87 | 664.93 | 530.99 | 14,365,221.367 | 905,783.341 | 39.527235369°N | 107.605162662°W |
| 3,200.00 | 19.24 | 38.61 | 3,056.29 | 690.68 | 551.55 | 14,365,247.116 | 905,803.903 | 39.527307646°N | 107.605092457°W |
| 3,300.00 | 19.24 | 38.61 | 3,150.70 | 716.42 | 572.12 | 14,365,272.864 | 905,824.465 | 39.527379922°N | 107.605022252°W |
| 3,400.00 | 19.24 | 38.61 | 3,245.12 | 742.17 | 592.68 | 14,365,298.613 | 905,845.027 | 39.527452198°N | 107.604952047°W |
| 3,500.00 | 19.24 | 38.61 | 3,339.53 | 767.92 | 613.24 | 14,365,324.361 | 905,865.589 | 39.527524474°N | 107.604881842°W |
| 3,521.68 | 19.24 | 38.61 | 3,360.00 | 773.50 | 617.70 | 14,365,329.943 | 905,870.046 | 39.527540143°N | 107.604866622°W |
| Mesaverde | | | | | | | | | |
| 3,600.00 | 19.24 | 38.61 | 3,433.95 | 793.67 | 633.80 | 14,365,350.109 | 905,886.151 | 39.527596750°N | 107.604811637°W |
| 3,700.00 | 19.24 | 38.61 | 3,528.36 | 819.42 | 654.36 | 14,365,375.858 | 905,906.713 | 39.527669026°N | 107.604741431°W |
| 3,800.00 | 19.24 | 38.61 | 3,622.78 | 845.17 | 674.93 | 14,365,401.606 | 905,927.275 | 39.527741302°N | 107.604671226°W |
| 3,900.00 | 19.24 | 38.61 | 3,717.19 | 870.91 | 695.49 | 14,365,427.355 | 905,947.837 | 39.527813578°N | 107.604601020°W |
| 4,000.00 | 19.24 | 38.61 | 3,811.61 | 896.66 | 716.05 | 14,365,453.103 | 905,968.398 | 39.527885854°N | 107.604530814°W |
| 4,100.00 | 19.24 | 38.61 | 3,906.02 | 922.41 | 736.61 | 14,365,478.851 | 905,988.960 | 39.527958130°N | 107.604460608°W |
| 4,200.00 | 19.24 | 38.61 | 4,000.44 | 948.16 | 757.17 | 14,365,504.600 | 906,009.522 | 39.528030406°N | 107.604390402°W |
| 4,300.00 | 19.24 | 38.61 | 4,094.85 | 973.91 | 777.74 | 14,365,530.348 | 906,030.084 | 39.528102682°N | 107.604320195°W |
| 4,369.00 | 19.24 | 38.61 | 4,160.00 | 991.68 | 791.92 | 14,365,548.115 | 906,044.272 | 39.528152552°N | 107.604271753°W |
| Price Coal | | | | | | | | | |
| 4,400.00 | 19.24 | 38.61 | 4,189.27 | 999.66 | 798.30 | 14,365,556.097 | 906,050.646 | 39.528174958°N | 107.604249989°W |

ARK Directional Services

Planning Report - Geographic

| | | | |
|------------------|--------------------|-------------------------------------|-------------------------------------|
| Database: | EDM SERVER DB | Local Co-ordinate Reference: | Well McLin C22 (111246) - Slot C22 |
| 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 C22 (111246) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | McLin C22 | | |
| Design: | McLin C22 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 |
| 4,443.86 | 19.24 | 38.61 | 4,230.68 | 1,010.95 | 807.32 | 14,365,567.390 | 906,059.665 | 39.528206658°N | 107.604219196°W |
| Drop 3°/100 at 4444 MD/4231 TVD | | | | | | | | | |
| 4,500.00 | 17.55 | 38.61 | 4,283.95 | 1,024.79 | 818.37 | 14,365,581.234 | 906,070.720 | 39.528245519°N | 107.604181448°W |
| 4,600.00 | 14.55 | 38.61 | 4,380.04 | 1,046.40 | 835.63 | 14,365,602.843 | 906,087.976 | 39.528306173°N | 107.604122530°W |
| 4,700.00 | 11.55 | 38.61 | 4,477.44 | 1,064.05 | 849.72 | 14,365,620.491 | 906,102.070 | 39.528355713°N | 107.604074408°W |
| 4,800.00 | 8.55 | 38.61 | 4,575.89 | 1,077.69 | 860.62 | 14,365,634.133 | 906,112.964 | 39.528394004°N | 107.604037213°W |
| 4,900.00 | 5.55 | 38.61 | 4,675.13 | 1,087.29 | 868.28 | 14,365,643.729 | 906,120.627 | 39.528420941°N | 107.604011047°W |
| 5,000.00 | 2.55 | 38.61 | 4,774.86 | 1,092.81 | 872.69 | 14,365,649.254 | 906,125.039 | 39.528436450°N | 107.603995982°W |
| 5,085.16 | 0.00 | 0.00 | 4,860.00 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| Vertical at 5085 MD/4860 TVD - Top Gas - C22 Top Gas | | | | | | | | | |
| 5,100.00 | 0.00 | 0.00 | 4,874.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,200.00 | 0.00 | 0.00 | 4,974.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,300.00 | 0.00 | 0.00 | 5,074.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,400.00 | 0.00 | 0.00 | 5,174.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,500.00 | 0.00 | 0.00 | 5,274.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,600.00 | 0.00 | 0.00 | 5,374.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,700.00 | 0.00 | 0.00 | 5,474.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,800.00 | 0.00 | 0.00 | 5,574.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,900.00 | 0.00 | 0.00 | 5,674.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 5,985.16 | 0.00 | 0.00 | 5,760.00 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| Cameo | | | | | | | | | |
| 6,000.00 | 0.00 | 0.00 | 5,774.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,100.00 | 0.00 | 0.00 | 5,874.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,200.00 | 0.00 | 0.00 | 5,974.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,300.00 | 0.00 | 0.00 | 6,074.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,400.00 | 0.00 | 0.00 | 6,174.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,500.00 | 0.00 | 0.00 | 6,274.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,600.00 | 0.00 | 0.00 | 6,374.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,700.00 | 0.00 | 0.00 | 6,474.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,800.00 | 0.00 | 0.00 | 6,574.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 6,900.00 | 0.00 | 0.00 | 6,674.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 7,000.00 | 0.00 | 0.00 | 6,774.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 7,085.16 | 0.00 | 0.00 | 6,860.00 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| Rollins | | | | | | | | | |
| 7,100.00 | 0.00 | 0.00 | 6,874.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 7,200.00 | 0.00 | 0.00 | 6,974.84 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| 7,235.16 | 0.00 | 0.00 | 7,010.00 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| TD at 7235 MD/7010 TVD | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---------------------------|---------------|--------------|----------|------------|------------|-----------------|----------------|----------------|-----------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| C22 Top Gas | 0.00 | 360.00 | 4,860.00 | 1,094.30 | 873.88 | 14,365,650.737 | 906,126.224 | 39.528440614°N | 107.603991937°W |
| - plan hits target center | | | | | | | | | |
| - Circle (radius 25.00) | | | | | | | | | |

ARK Directional Services

Planning Report - Geographic

| | | | |
|------------------|--------------------|-------------------------------------|-------------------------------------|
| Database: | EDM SERVER DB | Local Co-ordinate Reference: | Well McLin C22 (111246) - Slot C22 |
| 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 C22 (111246) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | McLin C22 | | |
| Design: | McLin C22 P01 | | |

| Casing Points | | | | | |
|---------------------|---------------------|------------------------------|----------------------|--------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (in) | Hole Diameter (in) | |
| 1,022.00 | 999.92 | Surf Csg at 1022 MD/1000 TVD | 5.50 | 6.00 | |

| Formations | | | | | |
|---------------------|---------------------|------------|-----------|---------|-------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
| 3,521.68 | 3,360.00 | Mesaverde | | | |
| 4,369.00 | 4,160.00 | Price Coal | | | |
| 5,085.16 | 4,860.00 | Top Gas | | | |
| 5,985.16 | 5,760.00 | Cameo | | | |
| 7,085.16 | 6,860.00 | 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 | |
| 841.30 | 829.32 | 83.35 | 66.56 | Hold 19° at 841 MD/829 TVD | |
| 4,443.86 | 4,230.68 | 1,010.95 | 807.32 | Drop 3°/100 at 4444 MD/4231 TVD | |
| 5,085.16 | 4,860.00 | 1,094.30 | 873.88 | Vertical at 5085 MD/4860 TVD | |
| 7,235.16 | 7,010.00 | 1,094.30 | 873.88 | TD at 7235 MD/7010 TVD | |