



## Directional Survey Certification

2948 I-70 Business Loop  
Grand Junction, CO 81504  
(970)-245-9447 Fax (970)-245-9454

|                            |                 |
|----------------------------|-----------------|
| <b>Operator</b>            | WPX Energy      |
| <b>Well Name &amp; No.</b> | GM 42-8         |
| <b>County &amp; State</b>  | Garfield, CO    |
| <b>SDI Job No.</b>         | 420616DEF367680 |
| <b>Rig</b>                 | H&P 318         |

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 250 feet to a measured depth of 6,740 feet is true and correct as determined from all available records.

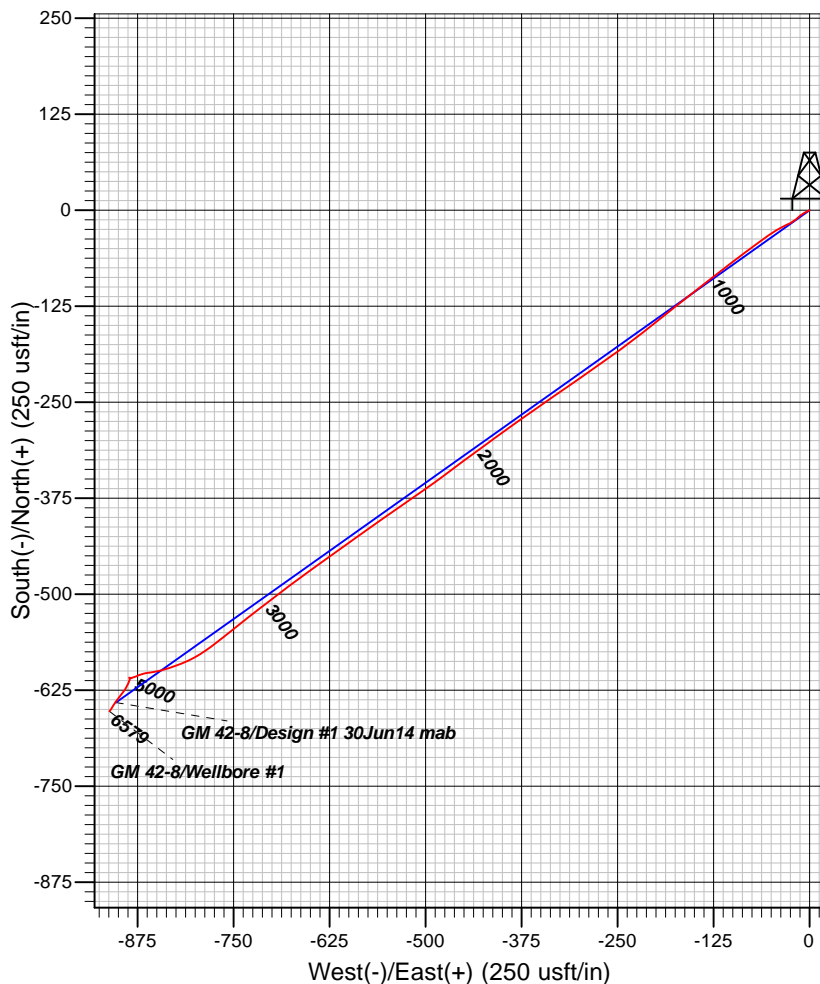
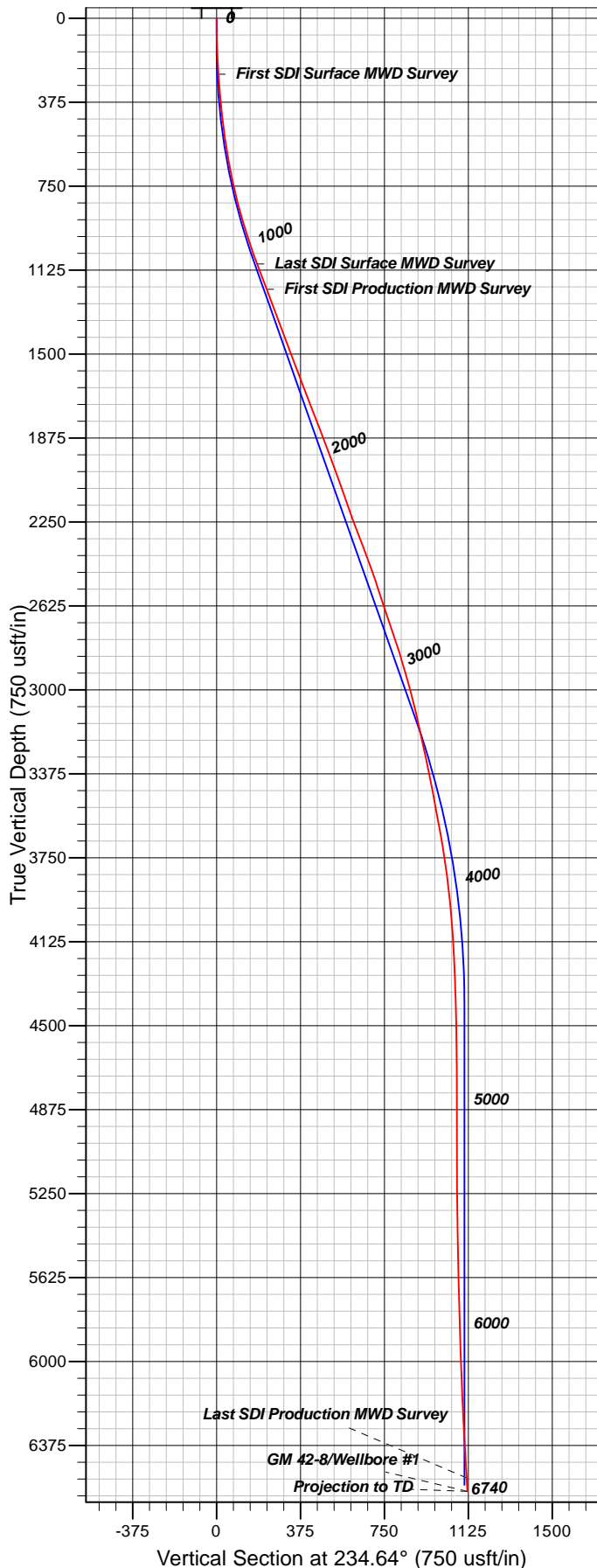
  
\_\_\_\_\_  
Signature

1-Jul-16  
\_\_\_\_\_  
Date

**Janie Collins**  
Colorado District Well Planner  
Scientific Drilling International



Company: WPX Energy Rocky Mountain, LLC  
Project: Garfield County, CO NAD83  
Site: MV 16-9 Pad  
Well: GM 42-8  
Wellbore: Wellbore #1  
Design: Wellbore #1



#### Well Details: GM 42-8

| +N/-S      | +E/-W      | TVD Reference: KB @ 6111.00usft (HP 318) | Ground Level: 6087.00 | Slot |
|------------|------------|--|-----------------------|------|
| 0.00       | 0.00       | North                                    | East                  | A01  |
| 1601987.30 | 2260352.30 | 39.4569441                               | -108.1199105          |      |

#### REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well GM 42-8 - Slot A01, True North  
Vertical (TVD) Reference: KB @ 6111.00usft (HP 318)  
Section (VS) Reference: Slot - A01(0.00N, 0.00E)  
Measured Depth Reference: KB @ 6111.00usft (HP 318)  
Calculation Method: Minimum Curvature

#### PROJECT DETAILS: Garfield County, CO NAD83

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Central Zone

System Datum: Mean Sea Level

Plan: Wellbore #1

14:28, July 01 2016  
Created By: Janie Collins

|                  |                                |                                     |                           |
|------------------|--------------------------------|-------------------------------------|---------------------------|
| <b>Company:</b>  | WPX Energy Rocky Mountain, LLC | <b>Local Co-ordinate Reference:</b> | Well GM 42-8 - Slot A01   |
| <b>Project:</b>  | Garfield County, CO NAD83      | <b>TVD Reference:</b>               | KB @ 6111.00usft (HP 318) |
| <b>Site:</b>     | MV 16-9 Pad                    | <b>MD Reference:</b>                | KB @ 6111.00usft (HP 318) |
| <b>Well:</b>     | GM 42-8                        | <b>North Reference:</b>             | True                      |
| <b>Wellbore:</b> | Wellbore #1                    | <b>Survey Calculation Method:</b>   | Minimum Curvature         |
| <b>Design:</b>   | Wellbore #1                    | <b>Database:</b>                    | Grand Junction District   |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Garfield County, CO NAD83 |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | Colorado Central Zone     |                      |                |

|                       |             |              |                   |                   |              |
|-----------------------|-------------|--------------|-------------------|-------------------|--------------|
| Site                  | MV 16-9 Pad |              |                   |                   |              |
| Site Position:        |             | Northing:    | 1,601,987.30 usft | Latitude:         | 39.4569442   |
| From:                 | Map         | Easting:     | 2,260,352.30 usft | Longitude:        | -108.1199106 |
| Position Uncertainty: | 0.00 usft   | Slot Radius: | 13.20 in          | Grid Convergence: | -1.65 °      |

|                      |                    |           |                     |                   |               |               |
|----------------------|--------------------|-----------|---------------------|-------------------|---------------|---------------|
| Well                 | GM 42-8 - Slot A01 |           |                     |                   |               |               |
| Well Position        | +N/-S              | 0.00 usft | Northing:           | 1,601,987.30 usft | Latitude:     | 39.4569442    |
|                      | +E/-W              | 0.00 usft | Easting:            | 2,260,352.30 usft | Longitude:    | -108.1199106  |
| Position Uncertainty |                    | 0.00 usft | Wellhead Elevation: | 0.00 usft         | Ground Level: | 6,087.00 usft |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <b>Wellbore</b>  | Wellbore #1       |                    |                        |                      |                            |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |
|                  | BGGM2016          | 5/19/2016          | 9.76                   | 65.59                | 51,621                     |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <b>Design</b>            | Wellbore #1                    |                     |                     |                      |      |
| <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) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Direction (°)</b> |      |
|                          | 0.00                           | 0.00                | 0.00                | 234.64               |      |

|                       |                  |  |                  |                              |  |
|-----------------------|------------------|--|------------------|------------------------------|--|
| <b>Survey Program</b> | <b>Date</b>      | 7/1/2016                               |                  |                              |  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>               | <b>Tool Name</b> | <b>Description</b>           |  |
| 250.00                | 1,118.00         | Survey #1 - Surface MWD Survey (Wellbo | SDI MWD          | SDI MWD - Standard ver 1.0.1 |  |
| 1,239.00              | 6,740.00         | Survey #2 - Production MWD Survey (Wel | SDI MWD          | SDI MWD - Standard ver 1.0.1 |  |

|                                     |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
|-------------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| <b>Survey</b>                       |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
| <b>Measured Depth (usft)</b>        | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b> | <b>Vertical Section (usft)</b> | <b>Dogleg Rate (°/100usft)</b> | <b>Build Rate (°/100usft)</b> | <b>Turn Rate (°/100usft)</b> |  |
| 0.00                                | 0.00                   | 0.00               | 0.00                         | 0.00                | 0.00                | 0.00                           | 0.00                           | 0.00                          | 0.00                         |  |
| 250.00                              | 3.97                   | 242.43             | 249.80                       | -4.01               | -7.67               | 8.58                           | 1.59                           | 1.59                          | 0.00                         |  |
| <b>First SDI Surface MWD Survey</b> |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
| 279.00                              | 4.20                   | 236.54             | 278.73                       | -5.06               | -9.45               | 10.63                          | 1.65                           | 0.79                          | -20.31                       |  |
| 309.00                              | 4.59                   | 231.52             | 308.64                       | -6.41               | -11.31              | 12.93                          | 1.82                           | 1.30                          | -16.73                       |  |
| 400.00                              | 5.88                   | 229.03             | 399.26                       | -11.73              | -17.68              | 21.21                          | 1.44                           | 1.42                          | -2.74                        |  |
| 491.00                              | 7.06                   | 244.29             | 489.68                       | -17.21              | -26.24              | 31.36                          | 2.28                           | 1.30                          | 16.77                        |  |
| 582.00                              | 9.27                   | 243.14             | 579.75                       | -22.95              | -37.81              | 44.12                          | 2.44                           | 2.43                          | -1.26                        |  |
| 673.00                              | 10.59                  | 234.47             | 669.39                       | -31.12              | -51.16              | 59.73                          | 2.19                           | 1.45                          | -9.53                        |  |
| 763.00                              | 13.00                  | 234.21             | 757.49                       | -41.85              | -66.10              | 78.13                          | 2.68                           | 2.68                          | -0.29                        |  |

|                  |                                |                                     |                           |
|------------------|--------------------------------|-------------------------------------|---------------------------|
| <b>Company:</b>  | WPX Energy Rocky Mountain, LLC | <b>Local Co-ordinate Reference:</b> | Well GM 42-8 - Slot A01   |
| <b>Project:</b>  | Garfield County, CO NAD83      | <b>TVD Reference:</b>               | KB @ 6111.00usft (HP 318) |
| <b>Site:</b>     | MV 16-9 Pad                    | <b>MD Reference:</b>                | KB @ 6111.00usft (HP 318) |
| <b>Well:</b>     | GM 42-8                        | <b>North Reference:</b>             | True                      |
| <b>Wellbore:</b> | Wellbore #1                    | <b>Survey Calculation Method:</b>   | Minimum Curvature         |
| <b>Design:</b>   | Wellbore #1                    | <b>Database:</b>                    | Grand Junction District   |

| Survey                          |                 |             |                       |              |              |                         |                         |                        |                       |
|---------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)           | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 854.00                          | 15.53           | 233.16      | 845.67                | -55.14       | -84.16       | 100.55                  | 2.79                    | 2.78                   | -1.15                 |
| 944.00                          | 16.64           | 232.23      | 932.15                | -70.26       | -103.99      | 125.47                  | 1.27                    | 1.23                   | -1.03                 |
| 1,035.00                        | 18.99           | 232.42      | 1,018.78              | -87.27       | -126.02      | 153.28                  | 2.58                    | 2.58                   | 0.21                  |
| 1,118.00                        | 20.58           | 232.13      | 1,096.88              | -104.47      | -148.24      | 181.35                  | 1.92                    | 1.92                   | -0.35                 |
| Last SDI Surface MWD Survey     |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,239.00                        | 20.94           | 230.77      | 1,210.02              | -131.20      | -181.78      | 224.17                  | 0.50                    | 0.30                   | -1.12                 |
| First SDI Production MWD Survey |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,334.00                        | 20.57           | 232.62      | 1,298.86              | -152.06      | -208.19      | 257.79                  | 0.79                    | -0.39                  | 1.95                  |
| 1,428.00                        | 20.24           | 231.93      | 1,386.96              | -172.12      | -234.12      | 290.53                  | 0.43                    | -0.35                  | -0.73                 |
| 1,522.00                        | 20.94           | 235.67      | 1,474.96              | -191.62      | -260.79      | 323.57                  | 1.58                    | 0.74                   | 3.98                  |
| 1,617.00                        | 20.33           | 233.95      | 1,563.86              | -210.90      | -288.15      | 357.05                  | 0.91                    | -0.64                  | -1.81                 |
| 1,711.00                        | 21.26           | 235.89      | 1,651.74              | -230.07      | -315.46      | 390.42                  | 1.23                    | 0.99                   | 2.06                  |
| 1,805.00                        | 21.40           | 235.15      | 1,739.30              | -249.43      | -343.65      | 424.60                  | 0.32                    | 0.15                   | -0.79                 |
| 1,900.00                        | 20.84           | 234.93      | 1,827.92              | -269.04      | -371.70      | 458.83                  | 0.60                    | -0.59                  | -0.23                 |
| 1,994.00                        | 20.52           | 233.51      | 1,915.86              | -288.44      | -398.63      | 492.02                  | 0.63                    | -0.34                  | -1.51                 |
| 2,089.00                        | 20.21           | 234.33      | 2,004.93              | -307.91      | -425.35      | 525.08                  | 0.44                    | -0.33                  | 0.86                  |
| 2,183.00                        | 19.83           | 233.14      | 2,093.25              | -326.95      | -451.30      | 557.26                  | 0.59                    | -0.40                  | -1.27                 |
| 2,277.00                        | 19.03           | 233.32      | 2,181.89              | -345.67      | -476.35      | 588.52                  | 0.85                    | -0.85                  | 0.19                  |
| 2,371.00                        | 20.87           | 234.89      | 2,270.25              | -364.45      | -502.33      | 620.58                  | 2.04                    | 1.96                   | 1.67                  |
| 2,465.00                        | 20.89           | 235.38      | 2,358.08              | -383.60      | -529.82      | 654.08                  | 0.19                    | 0.02                   | 0.52                  |
| 2,560.00                        | 19.98           | 235.01      | 2,447.10              | -402.53      | -557.06      | 687.25                  | 0.97                    | -0.96                  | -0.39                 |
| 2,654.00                        | 17.95           | 234.53      | 2,535.99              | -420.15      | -582.02      | 717.80                  | 2.17                    | -2.16                  | -0.51                 |
| 2,748.00                        | 18.75           | 234.69      | 2,625.21              | -437.29      | -606.14      | 747.39                  | 0.85                    | 0.85                   | 0.17                  |
| 2,842.00                        | 18.53           | 233.95      | 2,714.28              | -454.81      | -630.55      | 777.43                  | 0.34                    | -0.23                  | -0.79                 |
| 2,936.00                        | 18.40           | 233.83      | 2,803.44              | -472.36      | -654.60      | 807.20                  | 0.14                    | -0.14                  | -0.13                 |
| 3,030.00                        | 16.05           | 233.69      | 2,893.22              | -488.81      | -677.05      | 835.03                  | 2.50                    | -2.50                  | -0.15                 |
| 3,125.00                        | 15.76           | 232.01      | 2,984.58              | -504.53      | -697.80      | 861.05                  | 0.57                    | -0.31                  | -1.77                 |
| 3,219.00                        | 13.09           | 232.74      | 3,075.61              | -518.83      | -716.34      | 884.45                  | 2.85                    | -2.84                  | 0.78                  |
| 3,313.00                        | 12.75           | 232.17      | 3,167.23              | -531.64      | -733.00      | 905.45                  | 0.39                    | -0.36                  | -0.61                 |
| 3,408.00                        | 12.23           | 231.38      | 3,259.98              | -544.35      | -749.14      | 925.97                  | 0.58                    | -0.55                  | -0.83                 |
| 3,502.00                        | 12.01           | 230.95      | 3,351.88              | -556.72      | -764.52      | 945.67                  | 0.25                    | -0.23                  | -0.46                 |
| 3,596.00                        | 10.30           | 232.89      | 3,444.11              | -567.96      | -778.81      | 963.83                  | 1.86                    | -1.82                  | 2.06                  |
| 3,691.00                        | 11.08           | 237.80      | 3,537.46              | -577.94      | -793.31      | 981.43                  | 1.26                    | 0.82                   | 5.17                  |
| 3,785.00                        | 10.30           | 245.03      | 3,629.83              | -586.31      | -808.57      | 998.72                  | 1.65                    | -0.83                  | 7.69                  |
| 3,880.00                        | 9.34            | 251.37      | 3,723.44              | -592.35      | -823.58      | 1,014.46                | 1.52                    | -1.01                  | 6.67                  |
| 3,974.00                        | 7.91            | 250.72      | 3,816.37              | -596.93      | -836.91      | 1,027.98                | 1.52                    | -1.52                  | -0.69                 |
| 4,068.00                        | 6.99            | 259.02      | 3,909.58              | -600.15      | -848.63      | 1,039.40                | 1.50                    | -0.98                  | 8.83                  |
| 4,163.00                        | 5.28            | 262.20      | 4,004.04              | -601.85      | -858.64      | 1,048.54                | 1.83                    | -1.80                  | 3.35                  |
| 4,257.00                        | 4.05            | 258.59      | 4,097.72              | -603.09      | -866.18      | 1,055.41                | 1.34                    | -1.31                  | -3.84                 |
| 4,352.00                        | 2.57            | 248.42      | 4,192.56              | -604.54      | -871.45      | 1,060.55                | 1.67                    | -1.56                  | -10.71                |
| 4,447.00                        | 2.83            | 245.50      | 4,287.46              | -606.29      | -875.56      | 1,064.92                | 0.31                    | 0.27                   | -3.07                 |
| 4,541.00                        | 1.23            | 254.34      | 4,381.39              | -607.53      | -878.65      | 1,068.15                | 1.73                    | -1.70                  | 9.40                  |
| 4,635.00                        | 1.51            | 251.31      | 4,475.37              | -608.20      | -880.79      | 1,070.28                | 0.31                    | 0.30                   | -3.22                 |

|                  |                                |                                     |                           |
|------------------|--------------------------------|-------------------------------------|---------------------------|
| <b>Company:</b>  | WPX Energy Rocky Mountain, LLC | <b>Local Co-ordinate Reference:</b> | Well GM 42-8 - Slot A01   |
| <b>Project:</b>  | Garfield County, CO NAD83      | <b>TVD Reference:</b>               | KB @ 6111.00usft (HP 318) |
| <b>Site:</b>     | MV 16-9 Pad                    | <b>MD Reference:</b>                | KB @ 6111.00usft (HP 318) |
| <b>Well:</b>     | GM 42-8                        | <b>North Reference:</b>             | True                      |
| <b>Wellbore:</b> | Wellbore #1                    | <b>Survey Calculation Method:</b>   | Minimum Curvature         |
| <b>Design:</b>   | Wellbore #1                    | <b>Database:</b>                    | Grand Junction District   |

| Survey                         |                 |             |                       |              |              |                         |                         |                        |                       |  |
|--------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)          | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 4,730.00                       | 1.25            | 245.15      | 4,570.34              | -609.03      | -882.92      | 1,072.50                | 0.31                    | -0.27                  | -6.48                 |  |
| 4,824.00                       | 0.28            | 346.51      | 4,664.33              | -609.24      | -883.90      | 1,073.43                | 1.42                    | -1.03                  | 107.83                |  |
| 4,918.00                       | 0.37            | 288.71      | 4,758.33              | -608.92      | -884.24      | 1,073.52                | 0.34                    | 0.10                   | -61.49                |  |
| 5,012.00                       | 0.39            | 292.64      | 4,852.33              | -608.70      | -884.83      | 1,073.87                | 0.03                    | 0.02                   | 4.18                  |  |
| 5,107.00                       | 0.63            | 268.35      | 4,947.33              | -608.59      | -885.65      | 1,074.47                | 0.33                    | 0.25                   | -25.57                |  |
| 5,202.00                       | 0.47            | 104.63      | 5,042.32              | -608.70      | -885.79      | 1,074.66                | 1.15                    | -0.17                  | -172.34               |  |
| 5,296.00                       | 0.47            | 147.10      | 5,136.32              | -609.12      | -885.21      | 1,074.42                | 0.36                    | 0.00                   | 45.18                 |  |
| 5,390.00                       | 0.73            | 186.32      | 5,230.32              | -610.04      | -885.07      | 1,074.84                | 0.50                    | 0.28                   | 41.72                 |  |
| 5,485.00                       | 0.79            | 191.18      | 5,325.31              | -611.29      | -885.26      | 1,075.72                | 0.09                    | 0.06                   | 5.12                  |  |
| 5,579.00                       | 1.22            | 209.78      | 5,419.29              | -612.79      | -885.88      | 1,077.09                | 0.57                    | 0.46                   | 19.79                 |  |
| 5,673.00                       | 1.56            | 197.92      | 5,513.27              | -614.88      | -886.77      | 1,079.03                | 0.47                    | 0.36                   | -12.62                |  |
| 5,767.00                       | 1.52            | 206.58      | 5,607.23              | -617.21      | -887.72      | 1,081.15                | 0.25                    | -0.04                  | 9.21                  |  |
| 5,862.00                       | 1.61            | 212.56      | 5,702.20              | -619.46      | -889.01      | 1,083.50                | 0.20                    | 0.09                   | 6.29                  |  |
| 5,956.00                       | 1.63            | 203.27      | 5,796.16              | -621.80      | -890.24      | 1,085.87                | 0.28                    | 0.02                   | -9.88                 |  |
| 6,050.00                       | 1.91            | 213.83      | 5,890.11              | -624.33      | -891.64      | 1,088.47                | 0.46                    | 0.30                   | 11.23                 |  |
| 6,144.00                       | 1.90            | 215.79      | 5,984.06              | -626.90      | -893.43      | 1,091.41                | 0.07                    | -0.01                  | 2.09                  |  |
| 6,239.00                       | 2.42            | 216.03      | 6,078.99              | -629.80      | -895.53      | 1,094.80                | 0.55                    | 0.55                   | 0.25                  |  |
| 6,333.00                       | 2.99            | 221.83      | 6,172.89              | -633.23      | -898.33      | 1,099.08                | 0.67                    | 0.61                   | 6.17                  |  |
| 6,428.00                       | 2.98            | 213.47      | 6,267.76              | -637.13      | -901.35      | 1,103.79                | 0.46                    | -0.01                  | -8.80                 |  |
| 6,522.00                       | 3.39            | 213.72      | 6,361.62              | -641.48      | -904.24      | 1,108.67                | 0.44                    | 0.44                   | 0.27                  |  |
| 6,617.00                       | 3.51            | 213.08      | 6,456.44              | -646.26      | -907.38      | 1,114.00                | 0.13                    | 0.13                   | -0.67                 |  |
| 6,680.00                       | 3.38            | 215.20      | 6,519.33              | -649.39      | -909.51      | 1,117.54                | 0.29                    | -0.21                  | 3.37                  |  |
| Last SDI Production MWD Survey |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 6,740.00                       | 3.38            | 215.20      | 6,579.23              | -652.28      | -911.55      | 1,120.88                | 0.00                    | 0.00                   | 0.00                  |  |
| Projection to TD               |                 |             |                       |              |              |                         |                         |                        |                       |  |

| Design Annotations    |                       |                   |              |                                 |  |
|-----------------------|-----------------------|-------------------|--------------|---------------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              |                                 |  |
|                       |                       | +N/-S (usft)      | +E/-W (usft) | Comment                         |  |
| 250.00                | 249.80                | -4.01             | -7.67        | First SDI Surface MWD Survey    |  |
| 1,118.00              | 1,096.88              | -104.47           | -148.24      | Last SDI Surface MWD Survey     |  |
| 1,239.00              | 1,210.02              | -131.20           | -181.78      | First SDI Production MWD Survey |  |
| 6,680.00              | 6,519.33              | -649.39           | -909.51      | Last SDI Production MWD Survey  |  |
| 6,740.00              | 6,579.23              | -652.28           | -911.55      | Projection to TD                |  |

|                   |                    |             |
|-------------------|--------------------|-------------|
| Checked By: _____ | Approved By: _____ | Date: _____ |
|-------------------|--------------------|-------------|