

# **Extraction Oil & Gas**

**Weld County, CO (NAD83)**

**Sec 10-T01S-R68W Interchange Pad**

**Interchange B N35-20-8C**

**Wellbore #1**

**Design: Wellbore #1**

## **Standard Survey Report**

**27 June, 2019**

## Survey Report

|                  |                                  |                                     |                                  |
|------------------|----------------------------------|-------------------------------------|----------------------------------|
| <b>Company:</b>  | Extraction Oil & Gas             | <b>Local Co-ordinate Reference:</b> | Well Interchange B N35-20-8C     |
| <b>Project:</b>  | Weld County, CO (NAD83)          | <b>TVD Reference:</b>               | KB @ 5241.00usft (Patterson 901) |
| <b>Site:</b>     | Sec 10-T01S-R68W Interchange Pad | <b>MD Reference:</b>                | KB @ 5241.00usft (Patterson 901) |
| <b>Well:</b>     | Interchange B N35-20-8C          | <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>                    | EDM 5000.15 Single User Db       |

|                    |                           |                      |              |
|--------------------|---------------------------|----------------------|--------------|
| <b>Project</b>     | Weld County, CO (NAD83),  |                      |              |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Ground Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |              |
| <b>Map Zone:</b>   | Colorado Northern Zone    |                      |              |

|                       |           |                                  |                   |                   |             |
|-----------------------|-----------|----------------------------------|-------------------|-------------------|-------------|
| Site                  |           | Sec 10-T01S-R68W Interchange Pad |                   |                   |             |
| Site Position:        |           | Northing:                        | 1,235,601.28 usft | Latitude:         | 39.978987   |
| From:                 | Map       | Easting:                         | 3,142,562.59 usft | Longitude:        | -104.991281 |
| Position Uncertainty: | 0.00 usft | Slot Radius:                     | 13-3/16 "         | Grid Convergence: | 0.33 °      |

| Well                 |       | Interchange B N35-20-8C |                     |                   |               |               |
|----------------------|-------|-------------------------|---------------------|-------------------|---------------|---------------|
| Well Position        | +N/-S | 0.00 usft               | Northing:           | 1,235,605.75 usft | Latitude:     | 39.978999     |
|                      | +E/-W | 0.00 usft               | Easting:            | 3,142,580.22 usft | Longitude:    | -104.991218   |
| Position Uncertainty |       | 0.00 usft               | Wellhead Elevation: | usft              | Ground Level: | 5,213.00 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> |
|                  | IGRF2015          | 5/8/2019           | 8.09                   | 66.44                | 51,890.68578505            |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <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                | 10.50                |      |

|                       |                  |                                 |                  |                    |  |
|-----------------------|------------------|---------------------------------|------------------|--------------------|--|
| <b>Survey Program</b> | <b>Date</b>      | 6/27/2019                       |                  |                    |  |
| <b>From (usft)</b>    | <b>To (usft)</b> | <b>Survey (Wellbore)</b>        | <b>Tool Name</b> | <b>Description</b> |  |
| 122.30                | 1,604.30         | Surface Surveys (Wellbore #1)   | MWD              | MWD - Standard     |  |
| 1,672.00              | 18,910.00        | Atlas MWD Surveys (Wellbore #1) | MWD              | MWD - Standard     |  |

|                              |                        |                    |                              |                     |                     |                                |                                |                               |                              |  |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|--|
| <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                         |  |
| 122.30                       | 0.35                   | 62.51              | 122.30                       | 0.17                | 0.33                | 0.23                           | 0.29                           | 0.29                          | 0.00                         |  |
| 209.30                       | 0.31                   | 356.51             | 209.30                       | 0.53                | 0.55                | 0.62                           | 0.41                           | -0.05                         | -75.86                       |  |
| 297.30                       | 0.22                   | 1.70               | 297.30                       | 0.94                | 0.54                | 1.02                           | 0.11                           | -0.10                         | 5.90                         |  |
| 384.30                       | 2.07                   | 49.77              | 384.28                       | 2.12                | 1.75                | 2.40                           | 2.22                           | 2.13                          | 55.25                        |  |
| 471.30                       | 3.03                   | 45.38              | 471.19                       | 4.75                | 4.58                | 5.50                           | 1.13                           | 1.10                          | -5.05                        |  |
| 559.30                       | 4.00                   | 39.49              | 559.02                       | 8.75                | 8.19                | 10.10                          | 1.17                           | 1.10                          | -6.69                        |  |
| 646.30                       | 6.37                   | 43.97              | 645.66                       | 14.57               | 13.47               | 16.78                          | 2.76                           | 2.72                          | 5.15                         |  |
| 733.30                       | 8.00                   | 45.82              | 731.98                       | 22.26               | 21.17               | 25.74                          | 1.89                           | 1.87                          | 2.13                         |  |
| 820.30                       | 10.50                  | 45.38              | 817.84                       | 32.05               | 31.15               | 37.19                          | 2.87                           | 2.87                          | -0.51                        |  |

# Survey Report

|                  |                                  |                                     |                                  |
|------------------|----------------------------------|-------------------------------------|----------------------------------|
| <b>Company:</b>  | Extraction Oil & Gas             | <b>Local Co-ordinate Reference:</b> | Well Interchange B N35-20-8C     |
| <b>Project:</b>  | Weld County, CO (NAD83)          | <b>TVD Reference:</b>               | KB @ 5241.00usft (Patterson 901) |
| <b>Site:</b>     | Sec 10-T01S-R68W Interchange Pad | <b>MD Reference:</b>                | KB @ 5241.00usft (Patterson 901) |
| <b>Well:</b>     | Interchange B N35-20-8C          | <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>                    | EDM 5000.15 Single User Db       |

| 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) |
| 908.30                      | 11.87           | 43.88       | 904.16                | 44.20        | 43.13        | 51.32                   | 1.59                    | 1.56                   | -1.70                 |
| 995.30                      | 13.71           | 44.32       | 989.00                | 58.03        | 56.54        | 67.36                   | 2.12                    | 2.11                   | 0.51                  |
| 1,082.30                    | 15.73           | 45.38       | 1,073.14              | 73.69        | 72.14        | 85.60                   | 2.34                    | 2.32                   | 1.22                  |
| 1,169.30                    | 16.66           | 44.76       | 1,156.69              | 90.83        | 89.31        | 105.58                  | 1.09                    | 1.07                   | -0.71                 |
| 1,257.30                    | 18.72           | 45.90       | 1,240.52              | 109.62       | 108.34       | 127.52                  | 2.37                    | 2.34                   | 1.30                  |
| 1,344.30                    | 20.00           | 45.73       | 1,322.60              | 129.72       | 129.02       | 151.05                  | 1.47                    | 1.47                   | -0.20                 |
| 1,431.30                    | 22.37           | 47.22       | 1,403.72              | 151.35       | 151.83       | 176.48                  | 2.79                    | 2.72                   | 1.71                  |
| 1,518.30                    | 24.87           | 47.57       | 1,483.42              | 174.94       | 177.49       | 204.35                  | 2.88                    | 2.87                   | 0.40                  |
| 1,604.30                    | 25.62           | 47.84       | 1,561.21              | 199.63       | 204.62       | 233.56                  | 0.88                    | 0.87                   | 0.31                  |
| Tie into Surface Surveys    |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,672.00                    | 26.87           | 46.47       | 1,621.93              | 219.99       | 226.56       | 257.58                  | 2.05                    | 1.85                   | -2.02                 |
| First MWD Survey @ 1672' MD |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,767.00                    | 28.99           | 48.59       | 1,705.86              | 250.01       | 259.40       | 293.08                  | 2.46                    | 2.23                   | 2.23                  |
| 1,863.00                    | 31.82           | 51.23       | 1,788.65              | 281.25       | 296.58       | 330.57                  | 3.26                    | 2.95                   | 2.75                  |
| 1,958.00                    | 30.84           | 49.29       | 1,869.80              | 312.81       | 334.57       | 368.53                  | 1.48                    | -1.03                  | -2.04                 |
| 2,054.00                    | 29.87           | 47.00       | 1,952.64              | 345.17       | 370.71       | 406.93                  | 1.57                    | -1.01                  | -2.39                 |
| 2,149.00                    | 33.63           | 46.38       | 2,033.41              | 379.46       | 407.07       | 447.28                  | 3.97                    | 3.96                   | -0.65                 |
| 2,245.00                    | 31.90           | 44.40       | 2,114.14              | 415.93       | 444.06       | 489.87                  | 2.12                    | -1.80                  | -2.06                 |
| 2,340.00                    | 30.00           | 41.85       | 2,195.61              | 451.56       | 477.47       | 530.99                  | 2.43                    | -2.00                  | -2.68                 |
| 2,435.00                    | 31.82           | 39.82       | 2,277.12              | 488.49       | 509.36       | 573.11                  | 2.21                    | 1.92                   | -2.14                 |
| 2,530.00                    | 31.55           | 43.74       | 2,357.97              | 525.69       | 542.59       | 615.74                  | 2.19                    | -0.28                  | 4.13                  |
| 2,626.00                    | 29.78           | 50.66       | 2,440.56              | 558.96       | 578.40       | 654.98                  | 4.11                    | -1.84                  | 7.21                  |
| 2,721.00                    | 33.05           | 53.22       | 2,521.63              | 589.43       | 617.41       | 692.05                  | 3.72                    | 3.44                   | 2.69                  |
| 2,817.00                    | 30.31           | 51.41       | 2,603.32              | 620.22       | 657.32       | 729.60                  | 3.02                    | -2.85                  | -1.89                 |
| 2,912.00                    | 28.37           | 49.87       | 2,686.13              | 649.73       | 693.32       | 765.17                  | 2.19                    | -2.04                  | -1.62                 |
| 3,008.00                    | 30.31           | 54.27       | 2,769.82              | 678.58       | 730.43       | 800.30                  | 3.02                    | 2.02                   | 4.58                  |
| 3,103.00                    | 31.64           | 54.93       | 2,851.28              | 706.90       | 770.29       | 835.40                  | 1.44                    | 1.40                   | 0.69                  |
| 3,198.00                    | 31.29           | 48.28       | 2,932.33              | 737.64       | 809.11       | 872.70                  | 3.67                    | -0.37                  | -7.00                 |
| 3,294.00                    | 31.07           | 42.99       | 3,014.48              | 772.36       | 844.61       | 913.31                  | 2.86                    | -0.23                  | -5.51                 |
| 3,389.00                    | 27.49           | 41.32       | 3,097.33              | 806.77       | 875.81       | 952.83                  | 3.86                    | -3.77                  | -1.76                 |
| 3,485.00                    | 27.66           | 47.62       | 3,182.44              | 838.44       | 906.91       | 989.63                  | 3.04                    | 0.18                   | 6.56                  |
| 3,580.00                    | 29.56           | 45.02       | 3,265.84              | 869.87       | 939.78       | 1,026.52                | 2.39                    | 2.00                   | -2.74                 |
| 3,676.00                    | 31.20           | 44.93       | 3,348.66              | 904.21       | 974.09       | 1,066.55                | 1.71                    | 1.71                   | -0.09                 |
| 3,771.00                    | 31.42           | 43.21       | 3,429.82              | 939.68       | 1,008.43     | 1,107.68                | 0.97                    | 0.23                   | -1.81                 |
| 3,866.00                    | 33.10           | 45.24       | 3,510.16              | 976.00       | 1,043.80     | 1,149.83                | 2.10                    | 1.77                   | 2.14                  |
| 3,961.00                    | 30.93           | 47.05       | 3,590.71              | 1,010.90     | 1,080.10     | 1,190.76                | 2.50                    | -2.28                  | 1.91                  |
| 4,057.00                    | 32.17           | 46.34       | 3,672.52              | 1,045.36     | 1,116.64     | 1,231.30                | 1.35                    | 1.29                   | -0.74                 |
| 4,152.00                    | 34.34           | 43.12       | 3,751.96              | 1,082.38     | 1,153.26     | 1,274.38                | 2.94                    | 2.28                   | -3.39                 |
| 4,247.00                    | 30.80           | 41.71       | 3,832.01              | 1,120.11     | 1,187.77     | 1,317.76                | 3.81                    | -3.73                  | -1.48                 |
| 4,343.00                    | 31.68           | 42.42       | 3,914.09              | 1,157.07     | 1,221.13     | 1,360.18                | 0.99                    | 0.92                   | 0.74                  |
| 4,438.00                    | 31.68           | 42.11       | 3,994.93              | 1,193.99     | 1,254.69     | 1,402.60                | 0.17                    | 0.00                   | -0.33                 |
| 4,534.00                    | 33.45           | 41.85       | 4,075.84              | 1,232.40     | 1,289.25     | 1,446.66                | 1.85                    | 1.84                   | -0.27                 |
| 4,629.00                    | 29.70           | 41.32       | 4,156.76              | 1,269.60     | 1,322.26     | 1,489.25                | 3.96                    | -3.95                  | -0.56                 |

# Survey Report

|                  |                                  |                                     |                                  |
|------------------|----------------------------------|-------------------------------------|----------------------------------|
| <b>Company:</b>  | Extraction Oil & Gas             | <b>Local Co-ordinate Reference:</b> | Well Interchange B N35-20-8C     |
| <b>Project:</b>  | Weld County, CO (NAD83)          | <b>TVD Reference:</b>               | KB @ 5241.00usft (Patterson 901) |
| <b>Site:</b>     | Sec 10-T01S-R68W Interchange Pad | <b>MD Reference:</b>                | KB @ 5241.00usft (Patterson 901) |
| <b>Well:</b>     | Interchange B N35-20-8C          | <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>                    | EDM 5000.15 Single User Db       |

| 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) |  |
| 4,725.00                      | 31.29           | 45.15       | 4,239.48              | 1,305.04     | 1,355.65     | 1,530.18                | 2.62                    | 1.66                   | 3.99                  |  |
| 4,819.00                      | 31.60           | 46.56       | 4,319.68              | 1,339.19     | 1,390.83     | 1,570.17                | 0.85                    | 0.33                   | 1.50                  |  |
| 4,915.00                      | 33.85           | 44.18       | 4,400.44              | 1,375.67     | 1,427.74     | 1,612.76                | 2.70                    | 2.34                   | -2.48                 |  |
| 5,010.00                      | 30.40           | 43.21       | 4,480.88              | 1,412.17     | 1,462.64     | 1,655.01                | 3.67                    | -3.63                  | -1.02                 |  |
| 5,106.00                      | 32.92           | 44.27       | 4,562.59              | 1,448.56     | 1,497.49     | 1,697.14                | 2.69                    | 2.63                   | 1.10                  |  |
| 5,201.00                      | 29.43           | 43.26       | 4,643.86              | 1,484.06     | 1,531.52     | 1,738.24                | 3.71                    | -3.67                  | -1.06                 |  |
| 5,297.00                      | 29.43           | 47.00       | 4,727.48              | 1,517.32     | 1,564.93     | 1,777.04                | 1.91                    | 0.00                   | 3.90                  |  |
| 5,392.00                      | 28.46           | 46.52       | 4,810.61              | 1,548.81     | 1,598.43     | 1,814.10                | 1.05                    | -1.02                  | -0.51                 |  |
| 5,488.00                      | 30.27           | 47.79       | 4,894.27              | 1,580.81     | 1,632.95     | 1,851.86                | 1.99                    | 1.89                   | 1.32                  |  |
| 5,583.00                      | 26.60           | 45.42       | 4,977.80              | 1,611.84     | 1,665.84     | 1,888.36                | 4.04                    | -3.86                  | -2.49                 |  |
| 5,678.00                      | 28.55           | 46.74       | 5,062.01              | 1,642.33     | 1,697.53     | 1,924.11                | 2.15                    | 2.05                   | 1.39                  |  |
| 5,774.00                      | 31.60           | 44.00       | 5,145.08              | 1,676.15     | 1,731.72     | 1,963.60                | 3.48                    | 3.18                   | -2.85                 |  |
| 5,869.00                      | 32.17           | 41.89       | 5,225.74              | 1,712.88     | 1,765.89     | 2,005.94                | 1.32                    | 0.60                   | -2.22                 |  |
| 5,965.00                      | 30.31           | 46.16       | 5,307.83              | 1,748.70     | 1,800.44     | 2,047.45                | 3.01                    | -1.94                  | 4.45                  |  |
| 6,060.00                      | 29.70           | 48.06       | 5,390.10              | 1,781.03     | 1,835.24     | 2,085.58                | 1.19                    | -0.64                  | 2.00                  |  |
| 6,155.00                      | 30.00           | 45.59       | 5,472.50              | 1,813.38     | 1,869.71     | 2,123.67                | 1.33                    | 0.32                   | -2.60                 |  |
| 6,251.00                      | 30.00           | 42.73       | 5,555.64              | 1,847.81     | 1,903.14     | 2,163.61                | 1.49                    | 0.00                   | -2.98                 |  |
| 6,346.00                      | 30.31           | 43.61       | 5,637.79              | 1,882.61     | 1,935.79     | 2,203.78                | 0.57                    | 0.33                   | 0.93                  |  |
| 6,441.00                      | 32.35           | 42.46       | 5,718.93              | 1,918.72     | 1,969.49     | 2,245.42                | 2.24                    | 2.15                   | -1.21                 |  |
| 6,537.00                      | 33.45           | 43.12       | 5,799.53              | 1,956.99     | 2,004.91     | 2,289.50                | 1.21                    | 1.15                   | 0.69                  |  |
| 6,632.00                      | 30.45           | 40.35       | 5,880.14              | 1,994.45     | 2,038.40     | 2,332.44                | 3.51                    | -3.16                  | -2.92                 |  |
| 6,727.00                      | 29.52           | 44.53       | 5,962.43              | 2,029.49     | 2,070.41     | 2,372.72                | 2.41                    | -0.98                  | 4.40                  |  |
| 6,822.00                      | 31.86           | 50.31       | 6,044.14              | 2,062.20     | 2,106.13     | 2,411.39                | 3.96                    | 2.46                   | 6.08                  |  |
| 6,918.00                      | 31.60           | 51.45       | 6,125.79              | 2,094.05     | 2,145.29     | 2,449.85                | 0.68                    | -0.27                  | 1.19                  |  |
| 7,014.00                      | 31.02           | 53.48       | 6,207.81              | 2,124.45     | 2,184.84     | 2,486.94                | 1.25                    | -0.60                  | 2.11                  |  |
| 7,109.00                      | 27.53           | 52.25       | 6,290.67              | 2,152.47     | 2,221.89     | 2,521.24                | 3.73                    | -3.67                  | -1.29                 |  |
| 7,204.00                      | 24.57           | 50.22       | 6,376.01              | 2,178.55     | 2,254.43     | 2,552.82                | 3.25                    | -3.12                  | -2.14                 |  |
| 7,299.00                      | 21.52           | 49.07       | 6,463.42              | 2,202.61     | 2,282.78     | 2,581.64                | 3.25                    | -3.21                  | -1.21                 |  |
| 7,394.00                      | 24.35           | 49.16       | 6,550.90              | 2,226.84     | 2,310.77     | 2,610.56                | 2.98                    | 2.98                   | 0.09                  |  |
| 7,490.00                      | 21.43           | 46.91       | 6,639.33              | 2,251.77     | 2,338.56     | 2,640.13                | 3.17                    | -3.04                  | -2.34                 |  |
| 7,585.00                      | 18.74           | 45.50       | 6,728.54              | 2,274.32     | 2,362.12     | 2,666.60                | 2.88                    | -2.83                  | -1.48                 |  |
| 7,680.00                      | 16.22           | 44.89       | 6,819.15              | 2,294.42     | 2,382.37     | 2,690.06                | 2.66                    | -2.65                  | -0.64                 |  |
| 7,776.00                      | 14.10           | 40.88       | 6,911.81              | 2,312.76     | 2,399.49     | 2,711.21                | 2.46                    | -2.21                  | -4.18                 |  |
| 7,871.00                      | 9.41            | 37.13       | 7,004.79              | 2,327.71     | 2,411.76     | 2,728.15                | 5.00                    | -4.94                  | -3.95                 |  |
| 7,966.00                      | 6.32            | 22.85       | 7,098.89              | 2,338.73     | 2,418.48     | 2,740.20                | 3.82                    | -3.25                  | -15.03                |  |
| 8,062.00                      | 4.15            | 346.35      | 7,194.51              | 2,346.97     | 2,419.71     | 2,748.53                | 4.03                    | -2.26                  | -38.02                |  |
| 8,180.00                      | 3.76            | 327.01      | 7,312.24              | 2,354.37     | 2,416.60     | 2,755.24                | 1.17                    | -0.33                  | -16.39                |  |
| 8,276.00                      | 2.83            | 320.88      | 7,408.08              | 2,358.85     | 2,413.39     | 2,759.06                | 1.03                    | -0.97                  | -6.39                 |  |
| 8,371.00                      | 2.70            | 343.62      | 7,502.97              | 2,362.81     | 2,411.28     | 2,762.57                | 1.15                    | -0.14                  | 23.94                 |  |
| 8,466.00                      | 8.22            | 36.47       | 7,597.54              | 2,370.43     | 2,414.69     | 2,770.68                | 7.29                    | 5.81                   | 55.63                 |  |
| 8,562.00                      | 18.25           | 9.41        | 7,690.95              | 2,390.85     | 2,421.25     | 2,791.95                | 12.01                   | 10.45                  | -28.19                |  |
| 8,657.00                      | 28.41           | 5.39        | 7,778.07              | 2,428.12     | 2,425.81     | 2,829.44                | 10.82                   | 10.69                  | -4.23                 |  |
| 8,677.43                      | 30.00           | 5.60        | 7,795.91              | 2,438.05     | 2,426.77     | 2,839.37                | 7.79                    | 7.78                   | 1.03                  |  |
| 30° Inclination @ 8677.43' MD |                 |             |                       |              |              |                         |                         |                        |                       |  |

# Survey Report

|                  |                                  |                                     |                                  |
|------------------|----------------------------------|-------------------------------------|----------------------------------|
| <b>Company:</b>  | Extraction Oil & Gas             | <b>Local Co-ordinate Reference:</b> | Well Interchange B N35-20-8C     |
| <b>Project:</b>  | Weld County, CO (NAD83)          | <b>TVD Reference:</b>               | KB @ 5241.00usft (Patterson 901) |
| <b>Site:</b>     | Sec 10-T01S-R68W Interchange Pad | <b>MD Reference:</b>                | KB @ 5241.00usft (Patterson 901) |
| <b>Well:</b>     | Interchange B N35-20-8C          | <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>                    | EDM 5000.15 Single User Db       |

| 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) |  |
| 8,753.00                      | 35.88           | 6.23        | 7,859.30              | 2,478.90     | 2,431.02     | 2,880.31                | 7.79                    | 7.78                   | 0.83                  |  |
| 8,848.00                      | 47.99           | 5.70        | 7,929.84              | 2,541.93     | 2,437.57     | 2,943.48                | 12.75                   | 12.75                  | -0.56                 |  |
| 8,880.00                      | 52.63           | 3.80        | 7,950.27              | 2,566.46     | 2,439.59     | 2,967.97                | 15.20                   | 14.50                  | -5.94                 |  |
| 8,912.00                      | 56.34           | 3.01        | 7,968.86              | 2,592.46     | 2,441.14     | 2,993.81                | 11.77                   | 11.59                  | -2.47                 |  |
| 8,944.00                      | 59.08           | 0.45        | 7,985.95              | 2,619.49     | 2,441.94     | 3,020.54                | 10.91                   | 8.56                   | -8.00                 |  |
| 9,039.00                      | 65.89           | 353.40      | 8,029.86              | 2,703.49     | 2,437.27     | 3,102.28                | 9.73                    | 7.17                   | -7.42                 |  |
| 9,093.53                      | 70.00           | 353.38      | 8,050.33              | 2,753.68     | 2,431.45     | 3,150.57                | 7.54                    | 7.54                   | -0.04                 |  |
| 70° Inclination @ 9093.53' MD |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 9,102.96                      | 70.71           | 353.37      | 8,053.50              | 2,762.50     | 2,430.43     | 3,159.06                | 7.54                    | 7.54                   | -0.04                 |  |
| Cross @ 9102.96' MD           |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 9,134.00                      | 73.05           | 353.36      | 8,063.15              | 2,791.80     | 2,427.02     | 3,187.25                | 7.54                    | 7.54                   | -0.04                 |  |
| 9,230.00                      | 84.05           | 357.32      | 8,082.19              | 2,885.42     | 2,419.45     | 3,277.92                | 12.15                   | 11.46                  | 4.13                  |  |
| 9,325.00                      | 89.00           | 357.28      | 8,087.95              | 2,980.11     | 2,414.99     | 3,370.22                | 5.21                    | 5.21                   | -0.04                 |  |
| 9,421.00                      | 88.20           | 356.75      | 8,090.29              | 3,075.95     | 2,409.99     | 3,463.54                | 1.00                    | -0.83                  | -0.55                 |  |
| 9,511.00                      | 88.86           | 357.81      | 8,092.60              | 3,165.82     | 2,405.72     | 3,551.13                | 1.39                    | 0.73                   | 1.18                  |  |
| 9,607.00                      | 89.57           | 357.81      | 8,093.92              | 3,261.74     | 2,402.05     | 3,644.77                | 0.74                    | 0.74                   | 0.00                  |  |
| 9,702.00                      | 89.48           | 357.32      | 8,094.70              | 3,356.65     | 2,398.02     | 3,737.36                | 0.52                    | -0.09                  | -0.52                 |  |
| 9,797.00                      | 90.23           | 358.56      | 8,094.94              | 3,451.59     | 2,394.60     | 3,830.09                | 1.53                    | 0.79                   | 1.31                  |  |
| 9,893.00                      | 91.47           | 1.38        | 8,093.52              | 3,547.57     | 2,394.55     | 3,924.45                | 3.21                    | 1.29                   | 2.94                  |  |
| 9,988.00                      | 91.87           | 1.11        | 8,090.75              | 3,642.50     | 2,396.61     | 4,018.17                | 0.51                    | 0.42                   | -0.28                 |  |
| 10,084.00                     | 90.77           | 2.74        | 8,088.54              | 3,738.42     | 2,399.84     | 4,113.07                | 2.05                    | -1.15                  | 1.70                  |  |
| 10,180.00                     | 89.48           | 1.29        | 8,088.33              | 3,834.36     | 2,403.21     | 4,208.02                | 2.02                    | -1.34                  | -1.51                 |  |
| 10,275.00                     | 89.93           | 1.77        | 8,088.82              | 3,929.32     | 2,405.75     | 4,301.85                | 0.69                    | 0.47                   | 0.51                  |  |
| 10,370.00                     | 90.54           | 1.07        | 8,088.43              | 4,024.29     | 2,408.10     | 4,395.66                | 0.98                    | 0.64                   | -0.74                 |  |
| 10,466.00                     | 91.56           | 0.50        | 8,086.67              | 4,120.26     | 2,409.42     | 4,490.27                | 1.22                    | 1.06                   | -0.59                 |  |
| 10,561.00                     | 90.85           | 359.44      | 8,084.67              | 4,215.24     | 2,409.37     | 4,583.65                | 1.34                    | -0.75                  | -1.12                 |  |
| 10,657.00                     | 91.83           | 358.95      | 8,082.43              | 4,311.20     | 2,408.02     | 4,677.76                | 1.14                    | 1.02                   | -0.51                 |  |
| 10,752.00                     | 90.63           | 358.29      | 8,080.39              | 4,406.15     | 2,405.73     | 4,770.70                | 1.44                    | -1.26                  | -0.69                 |  |
| 10,848.00                     | 90.01           | 358.29      | 8,079.85              | 4,502.10     | 2,402.87     | 4,864.53                | 0.65                    | -0.65                  | 0.00                  |  |
| 10,943.00                     | 90.63           | 357.76      | 8,079.32              | 4,597.05     | 2,399.59     | 4,957.28                | 0.86                    | 0.65                   | -0.56                 |  |
| 11,039.00                     | 91.21           | 357.59      | 8,077.78              | 4,692.95     | 2,395.70     | 5,050.88                | 0.63                    | 0.60                   | -0.18                 |  |
| 11,134.00                     | 91.74           | 356.88      | 8,075.33              | 4,787.81     | 2,391.12     | 5,143.31                | 0.93                    | 0.56                   | -0.75                 |  |
| 11,230.00                     | 92.44           | 356.93      | 8,071.83              | 4,883.61     | 2,385.94     | 5,236.56                | 0.73                    | 0.73                   | 0.05                  |  |
| 11,325.00                     | 89.26           | 358.03      | 8,070.42              | 4,978.49     | 2,381.76     | 5,329.10                | 3.54                    | -3.35                  | 1.16                  |  |
| 11,420.00                     | 90.01           | 357.72      | 8,071.03              | 5,073.42     | 2,378.24     | 5,421.80                | 0.85                    | 0.79                   | -0.33                 |  |
| 11,516.00                     | 90.63           | 357.63      | 8,070.49              | 5,169.34     | 2,374.35     | 5,515.40                | 0.65                    | 0.65                   | -0.09                 |  |
| 11,611.00                     | 87.63           | 359.22      | 8,071.94              | 5,264.28     | 2,371.74     | 5,608.28                | 3.57                    | -3.16                  | 1.67                  |  |
| 11,707.00                     | 88.16           | 0.85        | 8,075.46              | 5,360.21     | 2,371.80     | 5,702.61                | 1.78                    | 0.55                   | 1.70                  |  |
| 11,802.00                     | 89.88           | 0.76        | 8,077.09              | 5,455.19     | 2,373.13     | 5,796.24                | 1.81                    | 1.81                   | -0.09                 |  |
| 11,898.00                     | 89.26           | 0.36        | 8,077.81              | 5,551.18     | 2,374.07     | 5,890.80                | 0.77                    | -0.65                  | -0.42                 |  |
| 11,993.00                     | 91.47           | 0.76        | 8,077.20              | 5,646.17     | 2,375.00     | 5,984.36                | 2.36                    | 2.33                   | 0.42                  |  |
| 12,088.00                     | 92.53           | 0.58        | 8,073.89              | 5,741.10     | 2,376.11     | 6,077.91                | 1.13                    | 1.12                   | -0.19                 |  |
| 12,184.00                     | 91.07           | 0.63        | 8,070.87              | 5,837.04     | 2,377.12     | 6,172.43                | 1.52                    | -1.52                  | 0.05                  |  |

# Survey Report

|                  |                                  |                                     |                                  |
|------------------|----------------------------------|-------------------------------------|----------------------------------|
| <b>Company:</b>  | Extraction Oil & Gas             | <b>Local Co-ordinate Reference:</b> | Well Interchange B N35-20-8C     |
| <b>Project:</b>  | Weld County, CO (NAD83)          | <b>TVD Reference:</b>               | KB @ 5241.00usft (Patterson 901) |
| <b>Site:</b>     | Sec 10-T01S-R68W Interchange Pad | <b>MD Reference:</b>                | KB @ 5241.00usft (Patterson 901) |
| <b>Well:</b>     | Interchange B N35-20-8C          | <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>                    | EDM 5000.15 Single User Db       |

| 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) |  |
| 12,279.00             | 89.84           | 0.89        | 8,070.12              | 5,932.03     | 2,378.38     | 6,266.06                | 1.32                    | -1.29                  | 0.27                  |  |
| 12,375.00             | 91.52           | 0.94        | 8,068.98              | 6,028.01     | 2,379.91     | 6,360.71                | 1.75                    | 1.75                   | 0.05                  |  |
| 12,470.00             | 88.86           | 0.54        | 8,068.66              | 6,122.99     | 2,381.14     | 6,454.33                | 2.83                    | -2.80                  | -0.42                 |  |
| 12,565.00             | 89.66           | 0.28        | 8,069.89              | 6,217.98     | 2,381.82     | 6,547.85                | 0.89                    | 0.84                   | -0.27                 |  |
| 12,660.00             | 89.88           | 359.40      | 8,070.27              | 6,312.98     | 2,381.55     | 6,641.21                | 0.95                    | 0.23                   | -0.93                 |  |
| 12,756.00             | 90.41           | 358.82      | 8,070.03              | 6,408.97     | 2,380.06     | 6,735.32                | 0.82                    | 0.55                   | -0.60                 |  |
| 12,851.00             | 90.23           | 357.15      | 8,069.50              | 6,503.90     | 2,376.72     | 6,828.06                | 1.77                    | -0.19                  | -1.76                 |  |
| 12,947.00             | 90.94           | 357.99      | 8,068.52              | 6,599.81     | 2,372.65     | 6,921.62                | 1.15                    | 0.74                   | 0.88                  |  |
| 13,042.00             | 91.96           | 358.03      | 8,066.11              | 6,694.72     | 2,369.35     | 7,014.34                | 1.07                    | 1.07                   | 0.04                  |  |
| 13,137.00             | 90.59           | 358.29      | 8,064.00              | 6,789.65     | 2,366.31     | 7,107.12                | 1.47                    | -1.44                  | 0.27                  |  |
| 13,232.00             | 91.12           | 357.94      | 8,062.58              | 6,884.58     | 2,363.18     | 7,199.90                | 0.67                    | 0.56                   | -0.37                 |  |
| 13,328.00             | 89.00           | 359.40      | 8,062.48              | 6,980.55     | 2,360.95     | 7,293.86                | 2.68                    | -2.21                  | 1.52                  |  |
| 13,424.00             | 87.36           | 359.26      | 8,065.53              | 7,076.49     | 2,359.83     | 7,387.99                | 1.71                    | -1.71                  | -0.15                 |  |
| 13,519.00             | 87.41           | 359.48      | 8,069.86              | 7,171.39     | 2,358.79     | 7,481.10                | 0.24                    | 0.05                   | 0.23                  |  |
| 13,615.00             | 90.19           | 0.32        | 8,071.87              | 7,267.35     | 2,358.62     | 7,575.44                | 3.03                    | 2.90                   | 0.88                  |  |
| 13,710.00             | 91.16           | 0.01        | 8,070.76              | 7,362.35     | 2,358.89     | 7,668.89                | 1.07                    | 1.02                   | -0.33                 |  |
| 13,806.00             | 89.31           | 357.28      | 8,070.36              | 7,458.31     | 2,356.62     | 7,762.83                | 3.44                    | -1.93                  | -2.84                 |  |
| 13,901.00             | 89.31           | 356.35      | 8,071.51              | 7,553.15     | 2,351.35     | 7,855.12                | 0.98                    | 0.00                   | -0.98                 |  |
| 13,997.00             | 88.95           | 358.78      | 8,072.96              | 7,649.05     | 2,347.27     | 7,948.67                | 2.56                    | -0.38                  | 2.53                  |  |
| 14,093.00             | 90.50           | 358.73      | 8,073.42              | 7,745.02     | 2,345.18     | 8,042.66                | 1.62                    | 1.61                   | -0.05                 |  |
| 14,113.49             | 90.79           | 358.70      | 8,073.19              | 7,765.50     | 2,344.72     | 8,062.72                | 1.41                    | 1.40                   | -0.14                 |  |
| Cross @ 14113.49' MD  |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 14,188.00             | 91.83           | 358.60      | 8,071.49              | 7,839.97     | 2,342.97     | 8,135.62                | 1.41                    | 1.40                   | -0.14                 |  |
| 14,284.00             | 88.73           | 358.73      | 8,071.02              | 7,935.93     | 2,340.73     | 8,229.57                | 3.23                    | -3.23                  | 0.14                  |  |
| 14,379.00             | 90.59           | 359.75      | 8,071.59              | 8,030.92     | 2,339.47     | 8,322.73                | 2.23                    | 1.96                   | 1.07                  |  |
| 14,475.00             | 91.34           | 0.36        | 8,069.97              | 8,126.90     | 2,339.57     | 8,417.13                | 1.01                    | 0.78                   | 0.64                  |  |
| 14,571.00             | 90.59           | 2.74        | 8,068.35              | 8,222.85     | 2,342.16     | 8,511.94                | 2.60                    | -0.78                  | 2.48                  |  |
| 14,666.00             | 91.21           | 1.91        | 8,066.86              | 8,317.75     | 2,346.02     | 8,605.96                | 1.09                    | 0.65                   | -0.87                 |  |
| 14,761.00             | 92.36           | 1.33        | 8,063.90              | 8,412.67     | 2,348.70     | 8,699.78                | 1.36                    | 1.21                   | -0.61                 |  |
| 14,857.00             | 89.75           | 3.49        | 8,062.13              | 8,508.55     | 2,352.74     | 8,794.79                | 3.53                    | -2.72                  | 2.25                  |  |
| 14,952.00             | 89.44           | 3.54        | 8,062.81              | 8,603.37     | 2,358.56     | 8,889.08                | 0.33                    | -0.33                  | 0.05                  |  |
| 15,047.00             | 90.23           | 2.83        | 8,063.08              | 8,698.22     | 2,363.84     | 8,983.31                | 1.12                    | 0.83                   | -0.75                 |  |
| 15,142.00             | 90.85           | 2.57        | 8,062.18              | 8,793.11     | 2,368.31     | 9,077.43                | 0.71                    | 0.65                   | -0.27                 |  |
| 15,238.00             | 90.37           | 1.77        | 8,061.16              | 8,889.04     | 2,371.95     | 9,172.41                | 0.97                    | -0.50                  | -0.83                 |  |
| 15,334.00             | 89.48           | 1.82        | 8,061.29              | 8,984.99     | 2,374.96     | 9,267.30                | 0.93                    | -0.93                  | 0.05                  |  |
| 15,429.00             | 90.32           | 1.11        | 8,061.45              | 9,079.96     | 2,377.38     | 9,361.12                | 1.16                    | 0.88                   | -0.75                 |  |
| 15,525.00             | 88.91           | 0.67        | 8,062.10              | 9,175.94     | 2,378.88     | 9,455.77                | 1.54                    | -1.47                  | -0.46                 |  |
| 15,620.00             | 89.57           | 1.11        | 8,063.36              | 9,270.92     | 2,380.35     | 9,549.43                | 0.83                    | 0.69                   | 0.46                  |  |
| 15,716.00             | 89.93           | 359.62      | 8,063.78              | 9,366.91     | 2,380.96     | 9,643.93                | 1.60                    | 0.38                   | -1.55                 |  |
| 15,811.00             | 90.15           | 359.44      | 8,063.71              | 9,461.91     | 2,380.18     | 9,737.19                | 0.30                    | 0.23                   | -0.19                 |  |
| 15,906.00             | 90.94           | 359.31      | 8,062.81              | 9,556.90     | 2,379.15     | 9,830.40                | 0.84                    | 0.83                   | -0.14                 |  |
| 16,002.00             | 89.62           | 357.99      | 8,062.34              | 9,652.87     | 2,376.88     | 9,924.35                | 1.94                    | -1.38                  | -1.38                 |  |
| 16,097.00             | 89.84           | 356.84      | 8,062.79              | 9,747.77     | 2,372.60     | 10,016.89               | 1.23                    | 0.23                   | -1.21                 |  |
| 16,192.00             | 90.19           | 356.31      | 8,062.76              | 9,842.60     | 2,366.92     | 10,109.09               | 0.67                    | 0.37                   | -0.56                 |  |

# Survey Report

|                  |                                  |                                     |                                  |
|------------------|----------------------------------|-------------------------------------|----------------------------------|
| <b>Company:</b>  | Extraction Oil & Gas             | <b>Local Co-ordinate Reference:</b> | Well Interchange B N35-20-8C     |
| <b>Project:</b>  | Weld County, CO (NAD83)          | <b>TVD Reference:</b>               | KB @ 5241.00usft (Patterson 901) |
| <b>Site:</b>     | Sec 10-T01S-R68W Interchange Pad | <b>MD Reference:</b>                | KB @ 5241.00usft (Patterson 901) |
| <b>Well:</b>     | Interchange B N35-20-8C          | <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>                    | EDM 5000.15 Single User Db       |

| 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) |  |
| 16,288.00                                       | 89.93           | 354.99      | 8,062.66              | 9,938.32     | 2,359.64     | 10,201.89               | 1.40                    | -0.27                  | -1.38                 |  |
| 16,383.00                                       | 89.66           | 353.36      | 8,063.00              | 10,032.83    | 2,350.00     | 10,293.05               | 1.74                    | -0.28                  | -1.72                 |  |
| 16,479.00                                       | 88.69           | 355.34      | 8,064.38              | 10,128.34    | 2,340.55     | 10,385.25               | 2.30                    | -1.01                  | 2.06                  |  |
| 16,574.00                                       | 88.42           | 356.71      | 8,066.78              | 10,223.08    | 2,333.97     | 10,477.21               | 1.47                    | -0.28                  | 1.44                  |  |
| 16,670.00                                       | 88.78           | 356.84      | 8,069.12              | 10,318.90    | 2,328.57     | 10,570.44               | 0.40                    | 0.38                   | 0.14                  |  |
| 16,765.00                                       | 89.35           | 358.82      | 8,070.68              | 10,413.82    | 2,324.97     | 10,663.11               | 2.17                    | 0.60                   | 2.08                  |  |
| 16,860.00                                       | 90.01           | 358.34      | 8,071.21              | 10,508.78    | 2,322.62     | 10,756.06               | 0.86                    | 0.69                   | -0.51                 |  |
| 16,956.00                                       | 89.88           | 0.81        | 8,071.30              | 10,604.77    | 2,321.91     | 10,850.31               | 2.58                    | -0.14                  | 2.57                  |  |
| 17,051.00                                       | 90.50           | 0.81        | 8,070.98              | 10,699.76    | 2,323.25     | 10,943.96               | 0.65                    | 0.65                   | 0.00                  |  |
| 17,147.00                                       | 91.43           | 0.36        | 8,069.37              | 10,795.74    | 2,324.23     | 11,038.51               | 1.08                    | 0.97                   | -0.47                 |  |
| 17,242.00                                       | 90.77           | 1.29        | 8,067.54              | 10,890.72    | 2,325.60     | 11,132.14               | 1.20                    | -0.69                  | 0.98                  |  |
| 17,338.00                                       | 91.25           | 1.03        | 8,065.85              | 10,986.68    | 2,327.54     | 11,226.85               | 0.57                    | 0.50                   | -0.27                 |  |
| 17,433.00                                       | 91.07           | 359.62      | 8,063.93              | 11,081.66    | 2,328.08     | 11,320.34               | 1.50                    | -0.19                  | -1.48                 |  |
| 17,529.00                                       | 87.67           | 359.48      | 8,064.98              | 11,177.63    | 2,327.33     | 11,414.57               | 3.54                    | -3.54                  | -0.15                 |  |
| 17,624.00                                       | 87.72           | 359.35      | 8,068.80              | 11,272.55    | 2,326.36     | 11,507.73               | 0.15                    | 0.05                   | -0.14                 |  |
| 17,719.00                                       | 88.20           | 359.31      | 8,072.18              | 11,367.49    | 2,325.25     | 11,600.87               | 0.51                    | 0.51                   | -0.04                 |  |
| 17,815.00                                       | 89.09           | 359.22      | 8,074.45              | 11,463.45    | 2,324.02     | 11,695.00               | 0.93                    | 0.93                   | -0.09                 |  |
| 17,911.00                                       | 90.10           | 359.17      | 8,075.13              | 11,559.44    | 2,322.67     | 11,789.14               | 1.05                    | 1.05                   | -0.05                 |  |
| 18,006.00                                       | 90.28           | 358.25      | 8,074.82              | 11,654.41    | 2,320.53     | 11,882.13               | 0.99                    | 0.19                   | -0.97                 |  |
| 18,102.00                                       | 91.03           | 358.12      | 8,073.72              | 11,750.36    | 2,317.49     | 11,975.92               | 0.79                    | 0.78                   | -0.14                 |  |
| 18,197.00                                       | 91.65           | 357.90      | 8,071.50              | 11,845.27    | 2,314.19     | 12,068.64               | 0.69                    | 0.65                   | -0.23                 |  |
| 18,292.00                                       | 91.03           | 359.48      | 8,069.28              | 11,940.22    | 2,312.02     | 12,161.60               | 1.79                    | -0.65                  | 1.66                  |  |
| 18,388.00                                       | 89.66           | 0.58        | 8,068.70              | 12,036.21    | 2,312.07     | 12,256.00               | 1.83                    | -1.43                  | 1.15                  |  |
| 18,483.00                                       | 90.50           | 0.58        | 8,068.57              | 12,131.21    | 2,313.03     | 12,349.58               | 0.88                    | 0.88                   | 0.00                  |  |
| 18,579.00                                       | 88.69           | 2.35        | 8,069.25              | 12,227.16    | 2,315.49     | 12,444.38               | 2.64                    | -1.89                  | 1.84                  |  |
| 18,674.00                                       | 89.53           | 2.04        | 8,070.72              | 12,322.08    | 2,319.12     | 12,538.37               | 0.94                    | 0.88                   | -0.33                 |  |
| 18,769.00                                       | 90.59           | 2.13        | 8,070.62              | 12,417.02    | 2,322.58     | 12,632.35               | 1.12                    | 1.12                   | 0.09                  |  |
| 18,854.00                                       | 91.03           | 1.55        | 8,069.42              | 12,501.97    | 2,325.31     | 12,716.37               | 0.86                    | 0.52                   | -0.68                 |  |
| Last MWD Survey @ 18854' MD                     |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 18,910.00                                       | 91.03           | 1.55        | 8,068.41              | 12,557.94    | 2,326.82     | 12,771.68               | 0.00                    | 0.00                   | 0.00                  |  |
| Projection to TD @ 18910' MD 517' FNL/ 764' FEL |                 |             |                       |              |              |                         |                         |                        |                       |  |

## Survey Report

|                  |                                  |                                     |                                  |
|------------------|----------------------------------|-------------------------------------|----------------------------------|
| <b>Company:</b>  | Extraction Oil & Gas             | <b>Local Co-ordinate Reference:</b> | Well Interchange B N35-20-8C     |
| <b>Project:</b>  | Weld County, CO (NAD83)          | <b>TVD Reference:</b>               | KB @ 5241.00usft (Patterson 901) |
| <b>Site:</b>     | Sec 10-T01S-R68W Interchange Pad | <b>MD Reference:</b>                | KB @ 5241.00usft (Patterson 901) |
| <b>Well:</b>     | Interchange B N35-20-8C          | <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>                    | EDM 5000.15 Single User Db       |

| Design Targets  |                  |                 |               |                 |                 |                    |                   |           |             |
|---|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|-----------|-------------|
| Target Name<br>- hit/miss target<br>- Shape                                 | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Northing<br>(usft) | Easting<br>(usft) | Latitude  | Longitude   |
| 30° Inclination @ 8677.4<br>- actual wellpath hits target center<br>- Point | 0.00             | 0.00            | 7,795.91      | 2,438.05        | 2,426.77        | 1,238,057.68       | 3,144,992.96      | 39.985692 | -104.982558 |
| 70° Inclination @ 9093.5<br>- actual wellpath hits target center<br>- Point | 0.00             | 0.00            | 8,050.33      | 2,753.68        | 2,431.45        | 1,238,373.34       | 3,144,995.83      | 39.986558 | -104.982541 |
| Cross @ 9102.96' MD<br>- actual wellpath hits target center<br>- Point      | 0.00             | 0.00            | 8,053.50      | 2,762.50        | 2,430.43        | 1,238,382.15       | 3,144,994.76      | 39.986582 | -104.982545 |
| Cross @ 14113.49' MD<br>- actual wellpath hits target center<br>- Point     | 0.00             | 0.00            | 8,073.19      | 7,765.50        | 2,344.72        | 1,243,384.57       | 3,144,880.35      | 40.000317 | -104.982849 |

| Design Annotations          |                             |                   |                 |   |  |
|-----------------------------|-----------------------------|-------------------|-----------------|---|--|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 |   |  |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) | Comment   |  |
| 1,604.30                    | 1,561.21                    | 199.63            | 204.62          | Tie into Surface Surveys                        |  |
| 1,672.00                    | 1,621.93                    | 219.99            | 226.56          | First MWD Survey @ 1672' MD                     |  |
| 8,677.43                    | 7,795.91                    | 2,438.05          | 2,426.77        | 30° Inclination @ 8677.43' MD                   |  |
| 9,093.53                    | 8,050.33                    | 2,753.68          | 2,431.45        | 70° Inclination @ 9093.53' MD                   |  |
| 9,102.96                    | 8,053.50                    | 2,762.50          | 2,430.43        | Cross @ 9102.96' MD                             |  |
| 14,113.49                   | 8,073.19                    | 7,765.50          | 2,344.72        | Cross @ 14113.49' MD                            |  |
| 18,854.00                   | 8,069.42                    | 12,501.97         | 2,325.31        | Last MWD Survey @ 18854' MD                     |  |
| 18,910.00                   | 8,068.41                    | 12,557.94         | 2,326.82        | Projection to TD @ 18910' MD 517' FNL/ 764' FEL |  |

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