



Comet Ridge

# **COMET RIDGE RESOURCES, LLC**

**FREMONT COUNTY, CO**

**LAKE 34-29**

**LAKE 34-29**

**LAKE 34-29**

**Survey: Survey #1**

## **Standard Survey Report**

**08 November, 2010**



**Weatherford®**

|                  |                            |                                     |                                |
|------------------|----------------------------|-------------------------------------|--------------------------------|
| <b>Company:</b>  | COMET RIDGE RESOURCES, LLC | <b>Local Co-ordinate Reference:</b> | Well LAKE 34-29                |
| <b>Project:</b>  | FREMONT COUNTY, CO         | <b>TVD Reference:</b>               | WELL @ 5381.00ft (CAPSTAR 312) |
| <b>Site:</b>     | LAKE 34-29                 | <b>MD Reference:</b>                | WELL @ 5381.00ft (CAPSTAR 312) |
| <b>Well:</b>     | LAKE 34-29                 | <b>North Reference:</b>             | True                           |
| <b>Wellbore:</b> | LAKE 34-29                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | LAKE 34-29                 | <b>Database:</b>                    | EDM 2003.21 Single User Db     |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | FREMONT COUNTY, CO        |                      |                |
| <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     |                      |                |

|                              |            |                          |                  |
|------------------------------|------------|--------------------------|------------------|
| <b>Site</b>                  | LAKE 34-29 |                          |                  |
| <b>Site Position:</b>        |            | <b>Northing:</b>         | 1,192,533.22 ft  |
| <b>From:</b>                 | Lat/Long   | <b>Easting:</b>          | 3,105,343.85 ft  |
| <b>Position Uncertainty:</b> | 0.00 ft    | <b>Slot Radius:</b>      | "                |
|                              |            | <b>Latitude:</b>         | 38° 21' 41.022 N |
|                              |            | <b>Longitude:</b>        | 105° 7' 57.454 W |
|                              |            | <b>Grid Convergence:</b> | 0.23 °           |

|                             |              |                            |                                  |
|-----------------------------|--------------|----------------------------|----------------------------------|
| <b>Well</b>                 | LAKE 34-29   |                            |                                  |
| <b>Well Position</b>        | <b>+N/-S</b> | 0.00 ft                    | <b>Northing:</b> 1,192,533.22 ft |
|                             | <b>+E/-W</b> | 0.00 ft                    | <b>Easting:</b> 3,105,343.85 ft  |
| <b>Position Uncertainty</b> | 0.00 ft      | <b>Wellhead Elevation:</b> | ft                               |
|                             |              | <b>Latitude:</b>           | 38° 21' 41.022 N                 |
|                             |              | <b>Longitude:</b>          | 105° 7' 57.454 W                 |
|                             |              | <b>Ground Level:</b>       | 5,370.00 ft                      |

|                  |                   |                    |                                   |
|------------------|-------------------|--------------------|-----------------------------------|
| <b>Wellbore</b>  | LAKE 34-29        |                    |                                   |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b>            |
|                  | BGGM2010          | 6/16/2010          | 8.99                              |
|                  |                   |                    | <b>Dip Angle (°)</b> 65.37        |
|                  |                   |                    | <b>Field Strength (nT)</b> 52,070 |

|                          |                              |                      |                             |
|--------------------------|------------------------------|----------------------|-----------------------------|
| <b>Design</b>            | LAKE 34-29                   |                      |                             |
| <b>Audit Notes:</b>      |                              |                      |                             |
| <b>Version:</b>          | 1.0                          | <b>Phase:</b>        | ACTUAL                      |
|                          |                              | <b>Tie On Depth:</b> | 0.00                        |
| <b>Vertical Section:</b> | <b>Depth From (TVD) (ft)</b> | <b>+N/-S (ft)</b>    | <b>+E/-W (ft)</b>           |
|                          | 0.00                         | 0.00                 | 0.00                        |
|                          |                              |                      | <b>Direction (°)</b> 147.07 |

|                       |                |                          |                  |                    |
|-----------------------|----------------|--------------------------|------------------|--------------------|
| <b>Survey Program</b> | <b>Date</b>    | 11/8/2010                |                  |                    |
| <b>From (ft)</b>      | <b>To (ft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |
| 671.00                | 3,600.00       | Survey #1 (LAKE 34-29)   | MWD              | MWD - Standard     |

|                            |                        |                    |                            |                   |                   |                              |                              |                             |                            |  |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|------------------------------|-----------------------------|----------------------------|--|
| <b>Survey</b>              |                        |                    |                            |                   |                   |                              |                              |                             |                            |  |
| <b>Measured Depth (ft)</b> | <b>Inclination (°)</b> | <b>Azimuth (°)</b> | <b>Vertical Depth (ft)</b> | <b>+N/-S (ft)</b> | <b>+E/-W (ft)</b> | <b>Vertical Section (ft)</b> | <b>Dogleg Rate (°/100ft)</b> | <b>Build Rate (°/100ft)</b> | <b>Turn Rate (°/100ft)</b> |  |
| 0.00                       | 0.00                   | 0.00               | 0.00                       | 0.00              | 0.00              | 0.00                         | 0.00                         | 0.00                        | 0.00                       |  |
| 671.00                     | 0.50                   | 141.24             | 670.99                     | -2.28             | 1.83              | 2.91                         | 0.07                         | 0.07                        | 0.00                       |  |
| 766.00                     | 0.44                   | 126.74             | 765.99                     | -2.82             | 2.38              | 3.67                         | 0.14                         | -0.06                       | -15.26                     |  |
| 859.00                     | 0.44                   | 125.99             | 858.99                     | -3.25             | 2.96              | 4.34                         | 0.01                         | 0.00                        | -0.81                      |  |
| 953.00                     | 0.47                   | 116.27             | 952.98                     | -3.63             | 3.60              | 5.00                         | 0.09                         | 0.03                        | -10.34                     |  |
| 1,047.00                   | 0.38                   | 139.99             | 1,046.98                   | -4.04             | 4.14              | 5.64                         | 0.21                         | -0.10                       | 25.23                      |  |
| 1,142.00                   | 0.50                   | 141.87             | 1,141.98                   | -4.61             | 4.60              | 6.37                         | 0.13                         | 0.13                        | 1.98                       |  |
| 1,237.00                   | 0.75                   | 136.37             | 1,236.97                   | -5.38             | 5.29              | 7.39                         | 0.27                         | 0.26                        | -5.79                      |  |
| 1,332.00                   | 0.94                   | 139.62             | 1,331.96                   | -6.43             | 6.22              | 8.78                         | 0.21                         | 0.20                        | 3.42                       |  |
| 1,427.00                   | 1.00                   | 125.24             | 1,426.95                   | -7.50             | 7.40              | 10.32                        | 0.26                         | 0.06                        | -15.14                     |  |
| 1,523.00                   | 0.63                   | 113.24             | 1,522.94                   | -8.19             | 8.57              | 11.53                        | 0.42                         | -0.39                       | -12.50                     |  |
| 1,618.00                   | 1.00                   | 106.24             | 1,617.93                   | -8.63             | 9.85              | 12.60                        | 0.40                         | 0.39                        | -7.37                      |  |
| 1,713.00                   | 1.00                   | 110.37             | 1,712.91                   | -9.15             | 11.42             | 13.89                        | 0.08                         | 0.00                        | 4.35                       |  |

|                  |                            |                                     |                                |
|------------------|----------------------------|-------------------------------------|--------------------------------|
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| <b>Wellbore:</b> | LAKE 34-29                 | <b>Survey Calculation Method:</b>   | Minimum Curvature              |
| <b>Design:</b>   | LAKE 34-29                 | <b>Database:</b>                    | EDM 2003.21 Single User Db     |

| Survey              |                 |             |                     |            |            |                       |                       |                      |                     |  |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|--|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |  |
| 1,807.00            | 1.06            | 112.47      | 1,806.90            | -9.77      | 12.99      | 15.26                 | 0.08                  | 0.06                 | 2.23                |  |
| 1,902.00            | 0.69            | 106.49      | 1,901.89            | -10.27     | 14.35      | 16.42                 | 0.40                  | -0.39                | -6.29               |  |
| 1,997.00            | 0.69            | 120.24      | 1,996.88            | -10.72     | 15.40      | 17.36                 | 0.17                  | 0.00                 | 14.47               |  |
| 2,092.00            | 4.00            | 144.87      | 2,091.79            | -13.71     | 17.80      | 21.19                 | 3.56                  | 3.48                 | 25.93               |  |
| 2,187.00            | 7.19            | 141.24      | 2,186.32            | -21.06     | 23.43      | 30.41                 | 3.38                  | 3.36                 | -3.82               |  |
| 2,282.00            | 10.81           | 144.37      | 2,280.14            | -32.94     | 32.34      | 45.23                 | 3.84                  | 3.81                 | 3.29                |  |
| 2,378.00            | 12.63           | 148.24      | 2,374.14            | -49.19     | 43.11      | 64.72                 | 2.06                  | 1.90                 | 4.03                |  |
| 2,476.00            | 15.88           | 148.74      | 2,469.11            | -69.76     | 55.71      | 88.84                 | 3.32                  | 3.32                 | 0.51                |  |
| 2,571.00            | 19.06           | 149.62      | 2,559.71            | -94.26     | 70.31      | 117.34                | 3.36                  | 3.35                 | 0.93                |  |
| 2,666.00            | 23.13           | 147.37      | 2,648.33            | -123.37    | 88.22      | 151.51                | 4.37                  | 4.28                 | -2.37               |  |
| 2,762.00            | 26.38           | 147.74      | 2,735.50            | -157.29    | 109.78     | 191.70                | 3.39                  | 3.39                 | 0.39                |  |
| 2,856.00            | 29.56           | 146.62      | 2,818.51            | -194.32    | 133.69     | 235.78                | 3.43                  | 3.38                 | -1.19               |  |
| 2,951.00            | 32.75           | 148.74      | 2,899.80            | -235.87    | 159.92     | 284.91                | 3.55                  | 3.36                 | 2.23                |  |
| LAKE 34-29 T-1      |                 |             |                     |            |            |                       |                       |                      |                     |  |
| 3,039.62            | 35.78           | 148.63      | 2,973.02            | -278.49    | 185.85     | 334.78                | 3.42                  | 3.42                 | -0.13               |  |
| 3,046.00            | 36.00           | 148.62      | 2,978.19            | -281.68    | 187.80     | 338.52                | 3.42                  | 3.42                 | -0.12               |  |
| 3,142.00            | 40.56           | 149.37      | 3,053.53            | -332.65    | 218.41     | 397.94                | 4.77                  | 4.75                 | 0.78                |  |
| 3,237.00            | 40.69           | 149.37      | 3,125.64            | -385.88    | 249.93     | 459.74                | 0.14                  | 0.14                 | 0.00                |  |
| 3,331.00            | 40.38           | 148.49      | 3,197.08            | -438.21    | 281.45     | 520.80                | 0.69                  | -0.33                | -0.94               |  |
| LAKE 34-29 T-2      |                 |             |                     |            |            |                       |                       |                      |                     |  |
| 3,505.51            | 39.61           | 146.75      | 3,330.77            | -532.93    | 341.51     | 632.95                | 0.78                  | -0.44                | -1.00               |  |
| LAST SVY            |                 |             |                     |            |            |                       |                       |                      |                     |  |
| 3,518.00            | 39.56           | 146.62      | 3,340.40            | -539.58    | 345.88     | 640.91                | 0.78                  | -0.43                | -1.02               |  |
| PBHL LAKE 34-29     |                 |             |                     |            |            |                       |                       |                      |                     |  |
| 3,568.62            | 39.56           | 146.62      | 3,379.42            | -566.50    | 363.61     | 673.15                | 0.00                  | 0.00                 | 0.00                |  |
| PROJ SVY            |                 |             |                     |            |            |                       |                       |                      |                     |  |
| 3,600.00            | 39.56           | 146.62      | 3,403.62            | -583.19    | 374.61     | 693.13                | 0.00                  | 0.00                 | 0.00                |  |

| Survey Annotations  |                     |                   |            |          |  |
|---------------------|---------------------|-------------------|------------|----------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates |            |          |  |
|                     |                     | +N/-S (ft)        | +E/-W (ft) | Comment  |  |
| 3,518.00            | 3,340.40            | -539.58           | 345.88     | LAST SVY |  |
| 3,600.00            | 3,403.62            | -583.19           | 374.61     | PROJ SVY |  |

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