



Laramie Energy, LLC

Mesa County, CO

Bruton 30-01 Pad

Bruton 19-20W

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

22 June, 2017





Survey Report - Geographic



| | | | |
|------------------|---------------------|-------------------------------------|------------------------------|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Bruton 19-20W |
| Project: | Mesa County, CO | TVD Reference: | well @ 7449.0usft (H&P #290) |
| Site: | Bruton 30-01 Pad | MD Reference: | well @ 7449.0usft (H&P #290) |
| Well: | Bruton 19-20W | North Reference: | True |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM5002 |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | Mesa County, CO | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Central Zone | | |

| | | | | | |
|-----------------------|------------------|--------------|-------------------|-------------------|-------------|
| Site | Bruton 30-01 Pad | | | | |
| Site Position: | | Northing: | 1,526,078.02 usft | Latitude: | 39.255061 |
| From: | Lat/Long | Easting: | 2,347,056.81 usft | Longitude: | -107.806111 |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | -1.45 ° |

| Well | Bruton 19-20W | | | | | |
|----------------------|---------------|----------|---------------------|-------------------|---------------|--------------|
| Well Position | +N/-S | 0.0 usft | Northing: | 1,526,123.07 usft | Latitude: | 39.255183 |
| | +E/-W | 0.0 usft | Easting: | 2,347,035.92 usft | Longitude: | -107.806189 |
| Position Uncertainty | | 0.0 usft | Wellhead Elevation: | 0.0 usft | Ground Level: | 7,425.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 6/14/2017 | 9.59 | 65.42 | 51,413 |

| | | | | | |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|-----|
| Design | Wellbore #1 | | | | |
| Audit Notes: | | | | | |
| Version: | 1.0 | Phase: | ACTUAL | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) | |
| | 0.0 | 0.0 | 0.0 | 279.64 | |

| | | | | | |
|-----------------------|------------------|---------------------------|------------------|--------------------|--|
| Survey Program | Date | 6/22/2017 | | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description | |
| 203.0 | 8,557.0 | MWD Surveys (Wellbore #1) | MWD default | MWD - Standard | |

| | | | | | | | | | |
|---|------------------------|--------------------|------------------------------|---------------------|---------------------|----------------------------|---------------------------|-----------------|------------------|
| Survey | | | | | | | | | |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 1,526,123.07 | 2,347,035.92 | 39.255183 | -107.806189 |
| 203.0 | 0.40 | 200.80 | 203.0 | -0.7 | -0.3 | 1,526,122.41 | 2,347,035.65 | 39.255182 | -107.806190 |
| First MWD Survey @ 203.0' MD / TVD | | | | | | | | | |
| 295.0 | 0.50 | 205.30 | 295.0 | -1.3 | -0.5 | 1,526,121.76 | 2,347,035.35 | 39.255180 | -107.806191 |
| 386.0 | 0.60 | 194.80 | 386.0 | -2.1 | -0.8 | 1,526,120.95 | 2,347,035.04 | 39.255178 | -107.806192 |
| 477.0 | 0.30 | 356.90 | 477.0 | -2.4 | -1.0 | 1,526,120.73 | 2,347,034.90 | 39.255177 | -107.806193 |
| 567.0 | 1.60 | 283.60 | 567.0 | -1.8 | -2.2 | 1,526,121.29 | 2,347,033.68 | 39.255178 | -107.806197 |
| 657.0 | 4.10 | 290.10 | 656.9 | -0.4 | -6.4 | 1,526,122.80 | 2,347,029.47 | 39.255182 | -107.806212 |
| 748.0 | 6.20 | 282.80 | 747.5 | 1.8 | -14.3 | 1,526,125.20 | 2,347,021.68 | 39.255188 | -107.806240 |
| 839.0 | 8.50 | 284.40 | 837.7 | 4.5 | -25.6 | 1,526,128.25 | 2,347,010.45 | 39.255196 | -107.806280 |
| 929.0 | 11.20 | 280.40 | 926.4 | 7.8 | -40.6 | 1,526,131.86 | 2,346,995.49 | 39.255205 | -107.806333 |
| 1,024.0 | 14.00 | 274.80 | 1,019.1 | 10.4 | -61.2 | 1,526,135.01 | 2,346,975.04 | 39.255212 | -107.806405 |



Survey Report - Geographic



| | | | |
|------------------|---------------------|-------------------------------------|------------------------------|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Bruton 19-20W |
| Project: | Mesa County, CO | TVD Reference: | well @ 7449.0usft (H&P #290) |
| Site: | Bruton 30-01 Pad | MD Reference: | well @ 7449.0usft (H&P #290) |
| Well: | Bruton 19-20W | North Reference: | True |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM5002 |

| Survey | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|-----------|-------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 1,118.0 | 16.50 | 272.80 | 1,109.8 | 12.0 | -85.8 | 1,526,137.24 | 2,346,950.42 | 39.255216 | -107.806492 |
| 1,213.0 | 18.10 | 273.60 | 1,200.5 | 13.6 | -114.0 | 1,526,139.54 | 2,346,922.26 | 39.255221 | -107.806592 |
| 1,307.0 | 21.10 | 272.80 | 1,289.0 | 15.3 | -145.5 | 1,526,142.09 | 2,346,890.84 | 39.255225 | -107.806703 |
| 1,402.0 | 23.50 | 274.70 | 1,376.9 | 17.7 | -181.5 | 1,526,145.38 | 2,346,854.95 | 39.255232 | -107.806830 |
| 1,496.0 | 25.80 | 275.20 | 1,462.4 | 21.1 | -220.5 | 1,526,149.77 | 2,346,815.99 | 39.255241 | -107.806968 |
| 1,655.0 | 27.20 | 277.50 | 1,604.6 | 29.0 | -291.0 | 1,526,159.43 | 2,346,745.72 | 39.255263 | -107.807217 |
| 1,749.0 | 29.60 | 280.10 | 1,687.3 | 35.9 | -335.2 | 1,526,167.43 | 2,346,701.75 | 39.255282 | -107.807373 |
| 1,843.0 | 31.80 | 282.50 | 1,768.2 | 45.3 | -382.2 | 1,526,178.05 | 2,346,654.96 | 39.255308 | -107.807539 |
| 1,938.0 | 35.40 | 283.30 | 1,847.3 | 57.0 | -433.5 | 1,526,191.10 | 2,346,604.04 | 39.255340 | -107.807720 |
| 2,032.0 | 37.30 | 282.60 | 1,923.0 | 69.5 | -487.8 | 1,526,204.95 | 2,346,550.08 | 39.255374 | -107.807912 |
| 2,127.0 | 38.60 | 281.90 | 1,997.9 | 81.9 | -544.9 | 1,526,218.79 | 2,346,493.32 | 39.255408 | -107.808113 |
| 2,221.0 | 37.70 | 281.00 | 2,071.8 | 93.4 | -601.8 | 1,526,231.76 | 2,346,436.72 | 39.255440 | -107.808314 |
| 2,316.0 | 39.30 | 282.10 | 2,146.2 | 105.3 | -659.7 | 1,526,245.08 | 2,346,379.11 | 39.255472 | -107.808519 |
| 2,411.0 | 38.00 | 281.10 | 2,220.3 | 117.2 | -717.8 | 1,526,258.48 | 2,346,321.31 | 39.255505 | -107.808724 |
| 2,506.0 | 39.30 | 281.90 | 2,294.5 | 129.1 | -776.0 | 1,526,271.79 | 2,346,263.49 | 39.255538 | -107.808929 |
| 2,600.0 | 38.70 | 281.00 | 2,367.6 | 140.8 | -833.9 | 1,526,285.00 | 2,346,205.83 | 39.255570 | -107.809134 |
| 2,695.0 | 39.20 | 280.30 | 2,441.5 | 151.8 | -892.6 | 1,526,297.53 | 2,346,147.44 | 39.255600 | -107.809341 |
| 2,789.0 | 39.10 | 279.40 | 2,514.4 | 162.0 | -951.1 | 1,526,309.16 | 2,346,089.24 | 39.255628 | -107.809548 |
| 2,884.0 | 38.50 | 278.40 | 2,588.4 | 171.2 | -1,009.9 | 1,526,319.86 | 2,346,030.69 | 39.255653 | -107.809756 |
| 2,978.0 | 39.00 | 279.00 | 2,661.7 | 180.1 | -1,068.1 | 1,526,330.24 | 2,345,972.77 | 39.255678 | -107.809961 |
| 3,073.0 | 39.10 | 278.00 | 2,735.5 | 189.0 | -1,127.3 | 1,526,340.58 | 2,345,913.83 | 39.255702 | -107.810170 |
| 3,168.0 | 38.70 | 277.20 | 2,809.4 | 196.9 | -1,186.4 | 1,526,349.97 | 2,345,854.92 | 39.255724 | -107.810379 |
| 3,262.0 | 38.70 | 277.70 | 2,882.8 | 204.5 | -1,244.7 | 1,526,359.07 | 2,345,796.85 | 39.255745 | -107.810585 |
| 3,357.0 | 39.60 | 278.20 | 2,956.5 | 212.8 | -1,304.1 | 1,526,368.87 | 2,345,737.68 | 39.255767 | -107.810794 |
| 3,452.0 | 39.80 | 281.60 | 3,029.6 | 223.2 | -1,363.8 | 1,526,380.82 | 2,345,678.21 | 39.255796 | -107.811006 |
| 3,546.0 | 39.70 | 283.00 | 3,101.8 | 236.0 | -1,422.5 | 1,526,395.11 | 2,345,619.82 | 39.255831 | -107.811213 |
| 3,641.0 | 39.10 | 282.10 | 3,175.2 | 249.1 | -1,481.4 | 1,526,409.70 | 2,345,561.32 | 39.255867 | -107.811421 |
| 3,735.0 | 39.80 | 284.70 | 3,247.8 | 263.0 | -1,539.5 | 1,526,425.02 | 2,345,503.60 | 39.255905 | -107.811626 |
| 3,830.0 | 39.80 | 284.20 | 3,320.8 | 278.1 | -1,598.4 | 1,526,441.69 | 2,345,445.12 | 39.255947 | -107.811834 |
| 3,924.0 | 39.40 | 283.80 | 3,393.2 | 292.6 | -1,656.5 | 1,526,457.65 | 2,345,387.37 | 39.255987 | -107.812039 |
| 4,019.0 | 38.00 | 283.60 | 3,467.4 | 306.7 | -1,714.2 | 1,526,473.18 | 2,345,330.04 | 39.256025 | -107.812243 |
| 4,113.0 | 39.70 | 283.80 | 3,540.6 | 320.7 | -1,771.5 | 1,526,488.60 | 2,345,273.13 | 39.256064 | -107.812445 |
| 4,208.0 | 39.10 | 283.00 | 3,614.0 | 334.6 | -1,830.2 | 1,526,504.06 | 2,345,214.84 | 39.256102 | -107.812652 |
| 4,303.0 | 38.40 | 282.50 | 3,688.1 | 347.8 | -1,888.2 | 1,526,518.65 | 2,345,157.20 | 39.256138 | -107.812857 |
| 4,397.0 | 38.10 | 282.20 | 3,761.9 | 360.2 | -1,945.0 | 1,526,532.54 | 2,345,100.69 | 39.256172 | -107.813058 |
| 4,492.0 | 37.60 | 280.90 | 3,836.9 | 371.9 | -2,002.1 | 1,526,545.66 | 2,345,043.89 | 39.256204 | -107.813260 |
| 4,587.0 | 37.60 | 281.70 | 3,912.2 | 383.2 | -2,058.9 | 1,526,558.45 | 2,344,987.36 | 39.256235 | -107.813460 |
| 4,681.0 | 36.60 | 280.60 | 3,987.2 | 394.2 | -2,114.6 | 1,526,570.83 | 2,344,932.03 | 39.256266 | -107.813657 |
| 4,776.0 | 35.60 | 278.90 | 4,063.9 | 403.7 | -2,169.7 | 1,526,581.72 | 2,344,877.13 | 39.256292 | -107.813852 |
| 4,871.0 | 36.60 | 279.60 | 4,140.7 | 412.7 | -2,225.0 | 1,526,592.12 | 2,344,822.13 | 39.256316 | -107.814047 |
| 4,965.0 | 36.60 | 275.50 | 4,216.2 | 420.1 | -2,280.5 | 1,526,600.89 | 2,344,766.81 | 39.256336 | -107.814243 |
| 5,060.0 | 34.80 | 281.30 | 4,293.3 | 428.1 | -2,335.3 | 1,526,610.30 | 2,344,712.23 | 39.256358 | -107.814436 |
| 5,154.0 | 33.20 | 281.30 | 4,371.3 | 438.4 | -2,386.8 | 1,526,621.91 | 2,344,660.97 | 39.256387 | -107.814618 |
| 5,249.0 | 31.20 | 280.00 | 4,451.6 | 447.8 | -2,436.6 | 1,526,632.54 | 2,344,611.48 | 39.256412 | -107.814794 |
| 5,343.0 | 31.10 | 279.30 | 4,532.1 | 455.9 | -2,484.5 | 1,526,641.90 | 2,344,563.77 | 39.256435 | -107.814963 |
| 5,438.0 | 28.20 | 280.20 | 4,614.6 | 463.9 | -2,530.8 | 1,526,651.02 | 2,344,517.67 | 39.256457 | -107.815127 |
| 5,532.0 | 27.20 | 279.30 | 4,697.9 | 471.3 | -2,573.9 | 1,526,659.51 | 2,344,474.81 | 39.256477 | -107.815279 |
| 5,627.0 | 25.10 | 280.00 | 4,783.1 | 478.3 | -2,615.2 | 1,526,667.57 | 2,344,433.73 | 39.256496 | -107.815425 |
| 5,721.0 | 22.70 | 279.20 | 4,869.1 | 484.6 | -2,652.7 | 1,526,674.88 | 2,344,396.35 | 39.256514 | -107.815557 |
| 5,816.0 | 21.90 | 278.30 | 4,957.0 | 490.1 | -2,688.3 | 1,526,681.27 | 2,344,360.88 | 39.256529 | -107.815683 |
| 5,911.0 | 19.60 | 280.00 | 5,045.8 | 495.4 | -2,721.6 | 1,526,687.44 | 2,344,327.80 | 39.256543 | -107.815801 |
| 6,005.0 | 17.30 | 279.20 | 5,135.0 | 500.4 | -2,750.9 | 1,526,693.16 | 2,344,298.60 | 39.256557 | -107.815904 |
| 6,100.0 | 15.10 | 283.60 | 5,226.2 | 505.6 | -2,776.9 | 1,526,698.98 | 2,344,272.77 | 39.256571 | -107.815996 |
| 6,195.0 | 14.00 | 279.60 | 5,318.1 | 510.4 | -2,800.2 | 1,526,704.40 | 2,344,249.54 | 39.256584 | -107.816078 |
| 6,289.0 | 11.80 | 275.40 | 5,409.8 | 513.2 | -2,821.0 | 1,526,707.73 | 2,344,228.84 | 39.256592 | -107.816152 |



Survey Report - Geographic



| | | | |
|------------------|---------------------|-------------------------------------|------------------------------|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Bruton 19-20W |
| Project: | Mesa County, CO | TVD Reference: | well @ 7449.0usft (H&P #290) |
| Site: | Bruton 30-01 Pad | MD Reference: | well @ 7449.0usft (H&P #290) |
| Well: | Bruton 19-20W | North Reference: | True |
| Wellbore: | Wellbore #1 | Survey Calculation Method: | Minimum Curvature |
| Design: | Wellbore #1 | Database: | EDM5002 |

Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|---------------------|--------------------|-----------|-------------|
| 6,384.0 | 9.50 | 274.40 | 5,503.1 | 514.7 | -2,838.5 | 1,526,709.69 | 2,344,211.39 | 39.256596 | -107.816214 |
| 6,479.0 | 7.90 | 278.00 | 5,597.0 | 516.2 | -2,852.8 | 1,526,711.56 | 2,344,197.15 | 39.256600 | -107.816264 |
| 6,574.0 | 6.50 | 284.00 | 5,691.3 | 518.5 | -2,864.5 | 1,526,714.06 | 2,344,185.53 | 39.256606 | -107.816305 |
| 6,668.0 | 4.20 | 300.60 | 5,784.9 | 521.5 | -2,872.6 | 1,526,717.31 | 2,344,177.48 | 39.256615 | -107.816334 |
| 6,763.0 | 2.20 | 290.80 | 5,879.7 | 523.9 | -2,877.3 | 1,526,719.85 | 2,344,172.84 | 39.256621 | -107.816351 |
| 6,858.0 | 0.70 | 227.90 | 5,974.7 | 524.2 | -2,879.4 | 1,526,720.16 | 2,344,170.72 | 39.256622 | -107.816358 |
| 6,952.0 | 1.30 | 191.90 | 6,068.7 | 522.7 | -2,880.1 | 1,526,718.75 | 2,344,170.03 | 39.256618 | -107.816360 |
| 7,047.0 | 1.10 | 185.40 | 6,163.6 | 520.8 | -2,880.4 | 1,526,716.79 | 2,344,169.68 | 39.256613 | -107.816361 |
| 7,142.0 | 0.40 | 309.20 | 6,258.6 | 520.1 | -2,880.7 | 1,526,716.10 | 2,344,169.32 | 39.256611 | -107.816363 |
| 7,236.0 | 1.10 | 344.50 | 6,352.6 | 521.2 | -2,881.2 | 1,526,717.19 | 2,344,168.85 | 39.256614 | -107.816364 |
| 7,331.0 | 0.70 | 349.40 | 6,447.6 | 522.6 | -2,881.6 | 1,526,718.65 | 2,344,168.53 | 39.256618 | -107.816366 |
| 7,426.0 | 0.60 | 317.50 | 6,542.6 | 523.5 | -2,882.0 | 1,526,719.60 | 2,344,168.12 | 39.256620 | -107.816367 |
| 7,520.0 | 0.40 | 279.50 | 6,636.6 | 524.0 | -2,882.7 | 1,526,720.03 | 2,344,167.47 | 39.256622 | -107.816370 |
| 7,615.0 | 0.60 | 271.80 | 6,731.6 | 524.0 | -2,883.5 | 1,526,720.12 | 2,344,166.65 | 39.256622 | -107.816372 |
| 7,710.0 | 1.20 | 227.50 | 6,826.6 | 523.4 | -2,884.7 | 1,526,719.50 | 2,344,165.40 | 39.256620 | -107.816377 |
| 7,804.0 | 1.50 | 225.40 | 6,920.6 | 521.8 | -2,886.3 | 1,526,718.01 | 2,344,163.76 | 39.256616 | -107.816382 |
| 7,899.0 | 1.40 | 206.50 | 7,015.5 | 519.9 | -2,887.7 | 1,526,716.14 | 2,344,162.31 | 39.256610 | -107.816387 |
| 7,994.0 | 0.80 | 213.50 | 7,110.5 | 518.3 | -2,888.6 | 1,526,714.57 | 2,344,161.39 | 39.256606 | -107.816391 |
| 8,088.0 | 0.70 | 217.10 | 7,204.5 | 517.3 | -2,889.3 | 1,526,713.58 | 2,344,160.65 | 39.256603 | -107.816393 |
| 8,182.0 | 0.70 | 231.80 | 7,298.5 | 516.5 | -2,890.1 | 1,526,712.79 | 2,344,159.83 | 39.256601 | -107.816396 |
| 8,277.0 | 2.10 | 236.20 | 7,393.5 | 515.2 | -2,892.0 | 1,526,711.51 | 2,344,157.90 | 39.256597 | -107.816403 |
| 8,371.0 | 2.40 | 239.10 | 7,487.4 | 513.2 | -2,895.2 | 1,526,709.62 | 2,344,154.73 | 39.256592 | -107.816414 |
| 8,466.0 | 2.60 | 231.10 | 7,582.3 | 510.9 | -2,898.5 | 1,526,707.33 | 2,344,151.29 | 39.256586 | -107.816426 |
| 8,504.0 | 3.00 | 232.70 | 7,620.3 | 509.7 | -2,900.0 | 1,526,706.23 | 2,344,149.80 | 39.256582 | -107.816431 |
| 8,557.0 | 3.00 | 232.70 | 7,673.2 | 508.0 | -2,902.2 | 1,526,704.60 | 2,344,147.55 | 39.256578 | -107.816438 |

Projecton to TD @ 8557.0' MD / 7673.2' TVD

Design Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------|-----------------------|-------------------|--------------|--|
| | | +N/-S (usft) | +E/-W (usft) | |
| 203.0 | 203.0 | -0.7 | -0.3 | First MWD Survey @ 203.0' MD / TVD |
| 8,557.0 | 7,673.2 | 508.0 | -2,902.2 | Projecton to TD @ 8557.0' MD / 7673.2' TVD |