

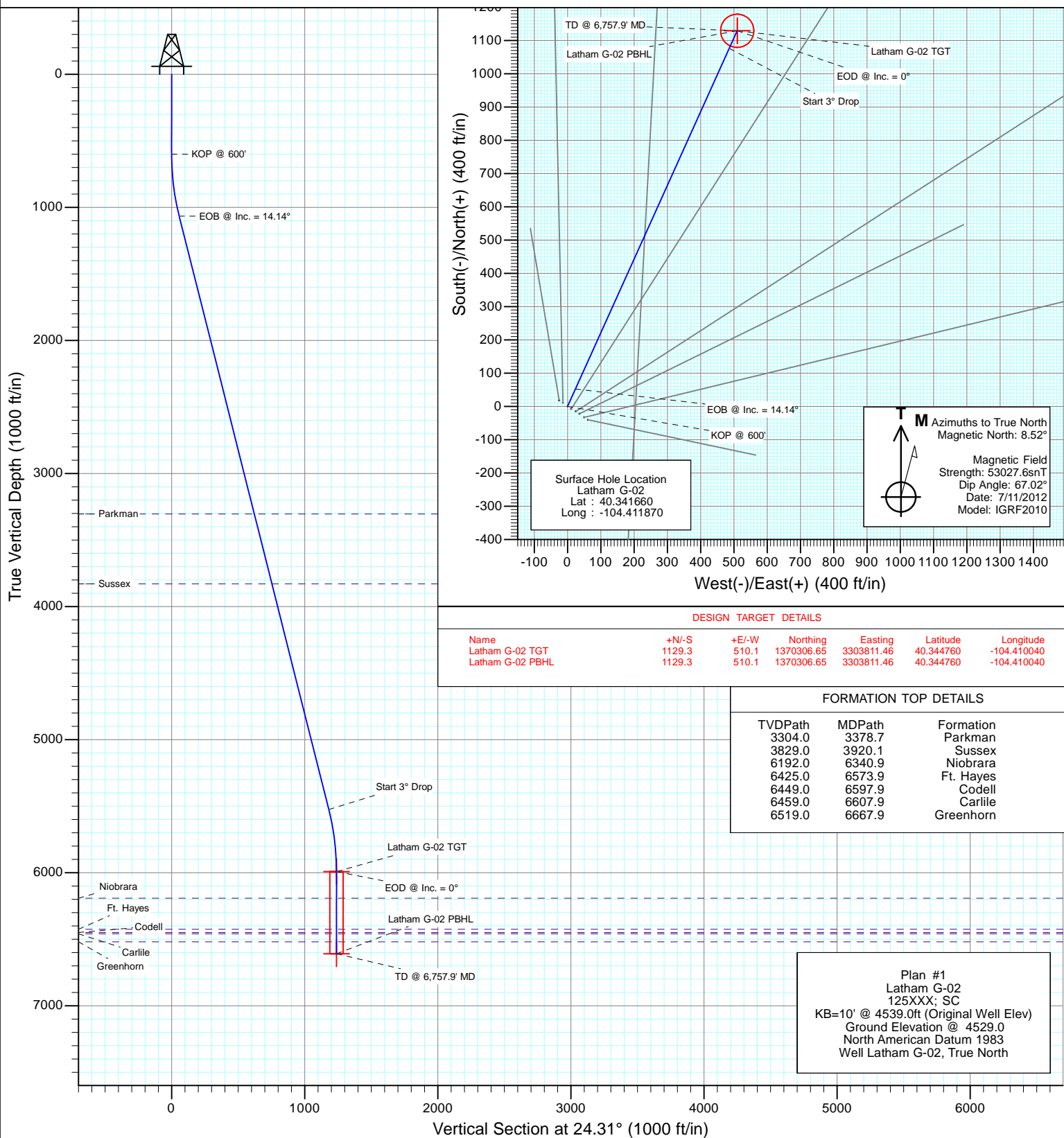


Project: Weld County
Site: Latham 12-02 Pad
Well: Latham G-02
Wellbore: OH
Design: Plan #1



SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSec | Target |
|-----|--------|-------|-------|--------|--------|-------|------|--------|--------|------------------|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1071.4 | 14.14 | 24.31 | 1066.6 | 52.7 | 23.8 | 3.00 | 24.31 | 57.9 | |
| 4 | 5669.5 | 14.14 | 24.31 | 5525.4 | 1076.6 | 486.3 | 0.00 | 0.00 | 1181.3 | |
| 5 | 6140.9 | 0.00 | 0.00 | 5992.0 | 1129.3 | 510.1 | 3.00 | 180.00 | 1239.2 | Latham G-02 TGT |
| 6 | 6757.9 | 0.00 | 0.00 | 6609.0 | 1129.3 | 510.1 | 0.00 | 0.00 | 1239.2 | Latham G-02 PBHL |



DESIGN TARGET DETAILS

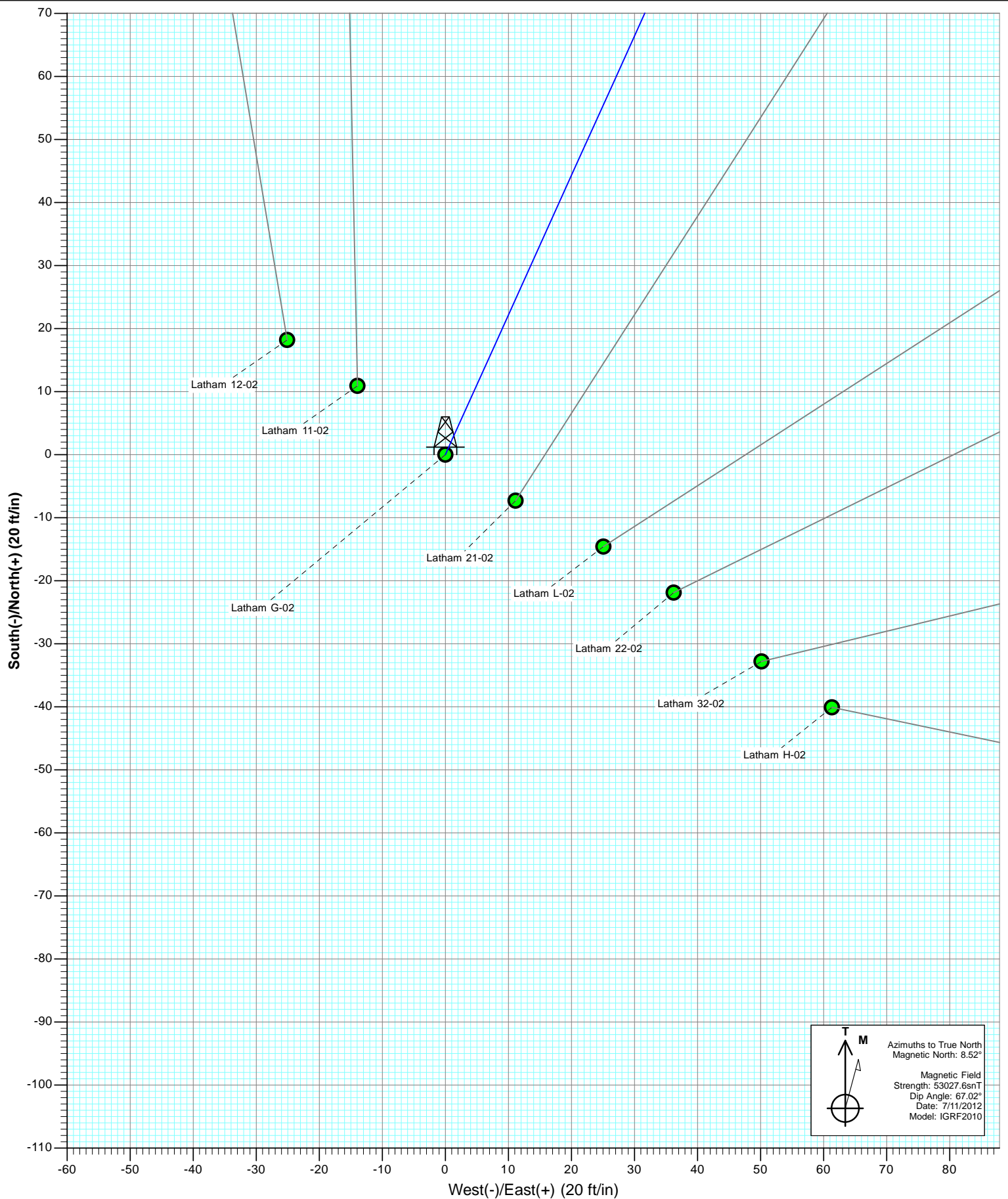
| Name | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|------------------|--------|-------|------------|------------|-----------|-------------|
| Latham G-02 TGT | 1129.3 | 510.1 | 1370306.65 | 3303811.46 | 40.344760 | -104.410040 |
| Latham G-02 PBHL | 1129.3 | 510.1 | 1370306.65 | 3303811.46 | 40.344760 | -104.410040 |

FORMATION TOP DETAILS

| TVDPath | MDPath | Formation |
|---------|--------|-----------|
| 3304.0 | 3378.7 | Parkman |
| 3829.0 | 3920.1 | Sussex |
| 6192.0 | 6340.9 | Niobrara |
| 6425.0 | 6573.9 | Ft. Hayes |
| 6449.0 | 6597.9 | Codell |
| 6459.0 | 6607.9 | Carlile |
| 6519.0 | 6667.9 | Greenhorn |

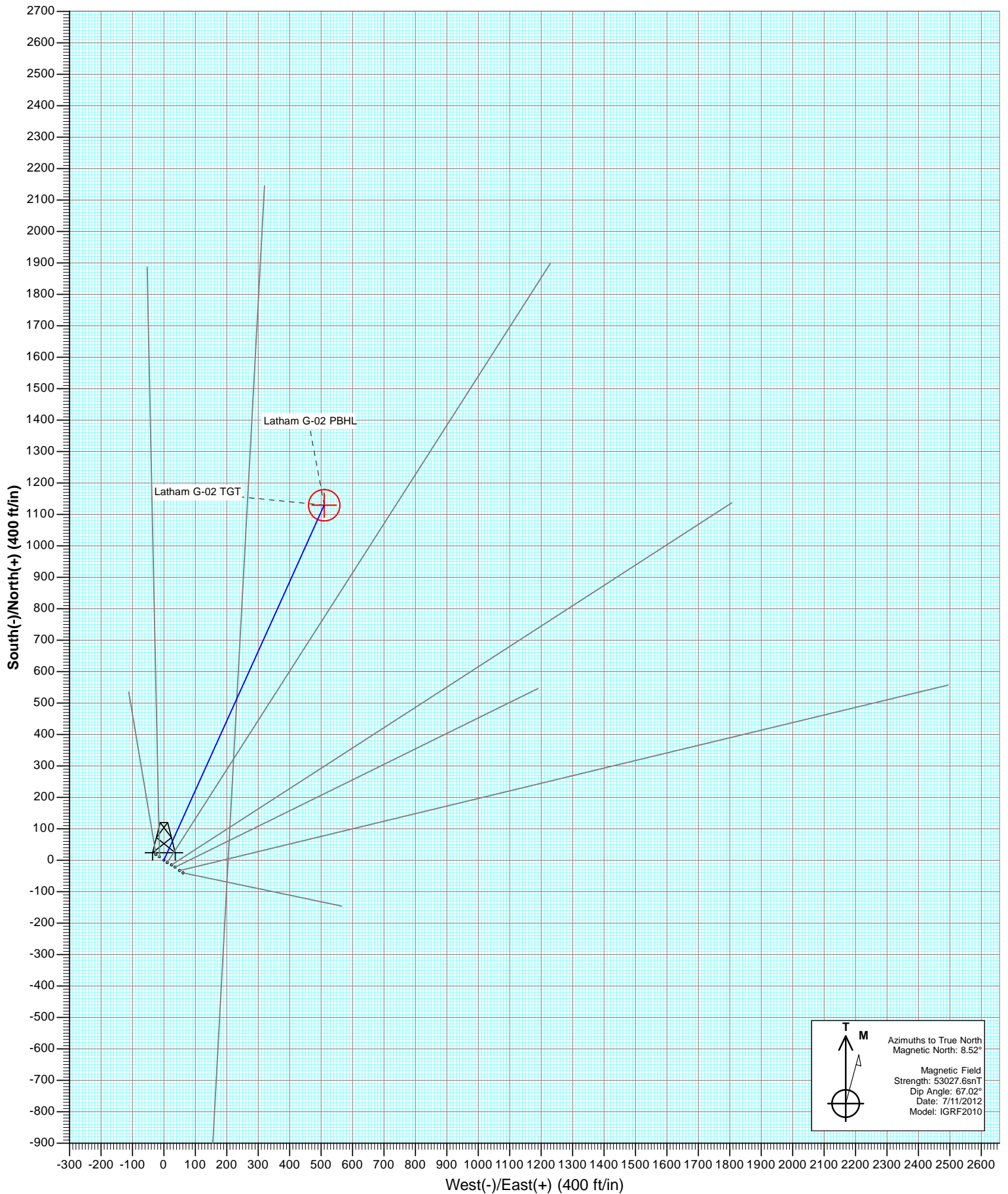


Project: Weld County
Site: Latham 12-02 Pad
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Plan: Plan #1



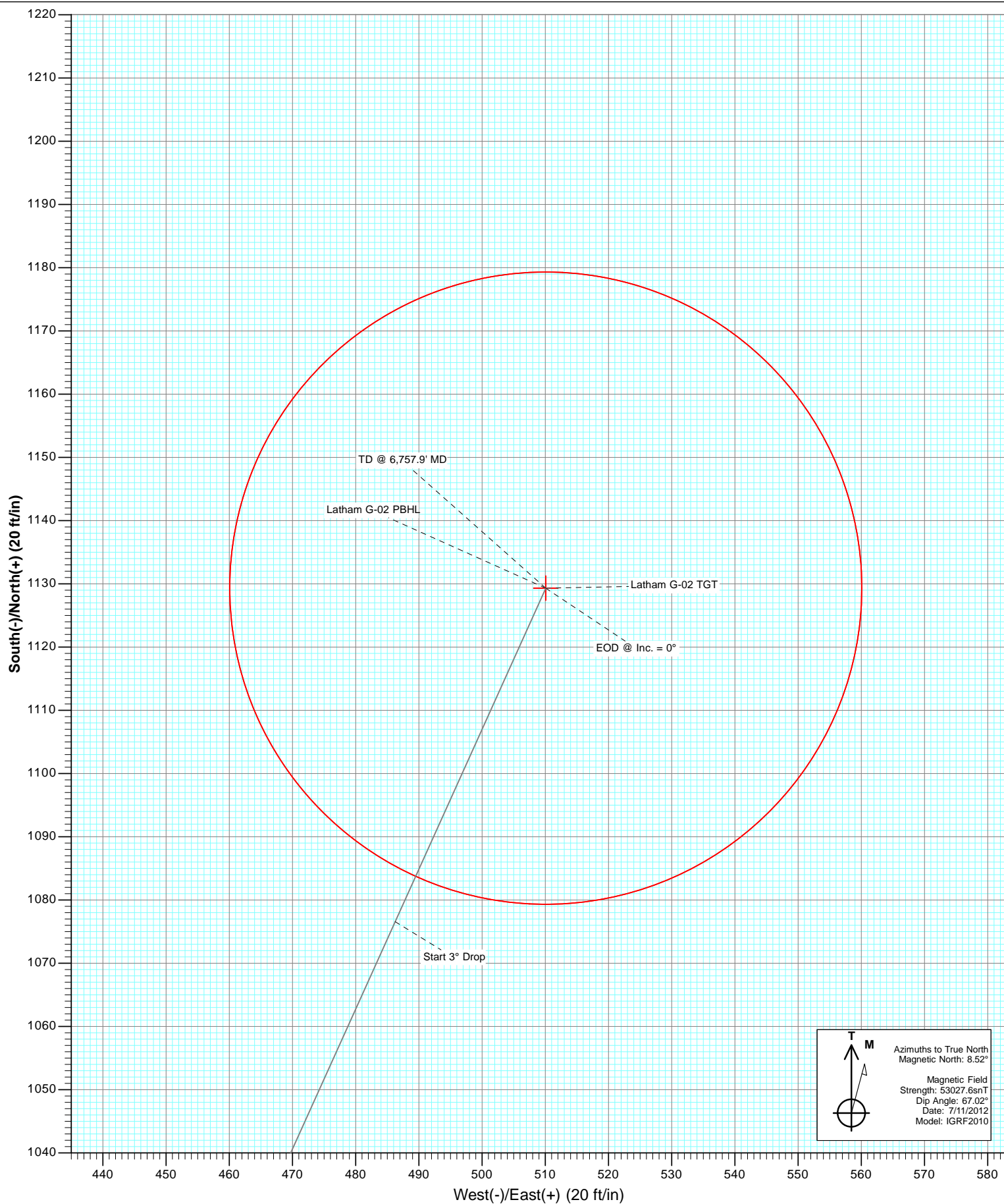


Project: Weld County
Site: Latham 12-02 Pad
Well: Latham G-02
Wellbore: OH
Plan: Plan #1





Project: Weld County
Site: Latham 12-02 Pad
Well: Latham G-02
Wellbore: OH
Plan: Plan #1



Cathedral Energy Services

Planning Report

| | | | |
|------------------|---|-------------------------------------|--|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Latham G-02 |
| Company: | Bonanza Creek Energy Operating Company, LLC | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Project: | Weld County | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site: | Latham 12-02 Pad | North Reference: | True |
| Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | Plan #1 | | |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | Weld County | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Northern Zone | | |

| | | | | | |
|-----------------------|----------|------------------|-----------------|-------------------|-------------|
| Site | | Latham 12-02 Pad | | | |
| Site Position: | | Northing: | 1,369,181.91 ft | Latitude: | 40.341690 |
| From: | Lat/Long | Easting: | 3,303,301.19 ft | Longitude: | -104.411920 |
| Position Uncertainty: | 0.0 ft | Slot Radius: | 13.200 in | Grid Convergence: | 0.70 ° |

| | | | | | | |
|----------------------|-------------|--------|---------------------|-----------------|---------------|-------------|
| Well | Latham G-02 | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,369,171.14 ft | Latitude: | 40.341660 |
| | +E/-W | 0.0 ft | Easting: | 3,303,315.26 ft | Longitude: | -104.411870 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 4,529.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| Wellbore | OH | | | | |
| Magnetics | Model Name | Sample Date | Declination | Dip Angle | Field Strength |
| | | | (°) | (°) | (nT) |
| | IGRF2010 | 7/11/2012 | 8.52 | 67.02 | 53,028 |

| | | | | | |
|--------------------------|-------------------------|--------------|--------------|----------------------|-----|
| Design | Plan #1 | | | | |
| Audit Notes: | | | | | |
| Version: | Phase: | PLAN | | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) | +N/-S | +E/-W | Direction | |
| | (ft) | (ft) | (ft) | (°) | |
| | 0.0 | 0.0 | 0.0 | 24.31 | |

| | | | | | | | | | | |
|-----------------------|--------------------|----------------|-----------------------|--------------|--------------|--------------------|-------------------|------------------|------------|------------------|
| Plan Sections | | | | | | | | | | |
| Measured Depth | Inclination | Azimuth | Vertical Depth | +N/-S | +E/-W | Dogleg Rate | Build Rate | Turn Rate | TFO | Target |
| (ft) | (°) | (°) | (ft) | (ft) | (ft) | (°/100ft) | (°/100ft) | (°/100ft) | (°) | |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,071.4 | 14.14 | 24.31 | 1,066.6 | 52.7 | 23.8 | 3.00 | 3.00 | 0.00 | 24.31 | |
| 5,669.5 | 14.14 | 24.31 | 5,525.4 | 1,076.6 | 486.3 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,140.9 | 0.00 | 0.00 | 5,992.0 | 1,129.3 | 510.1 | 3.00 | -3.00 | 0.00 | 180.00 | Latham G-02 TGT |
| 6,757.9 | 0.00 | 0.00 | 6,609.0 | 1,129.3 | 510.1 | 0.00 | 0.00 | 0.00 | 0.00 | Latham G-02 PBHL |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|---|-------------------------------------|--|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Latham G-02 |
| Company: | Bonanza Creek Energy Operating Company, LLC | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Project: | Weld County | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site: | Latham 12-02 Pad | North Reference: | True |
| Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | Plan #1 | | |

Planned Survey

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Comments / Formations |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | KOP @ 600' |
| 700.0 | 3.00 | 24.31 | 700.0 | 2.4 | 1.1 | 2.6 | 3.00 | 3.00 | |
| 800.0 | 6.00 | 24.31 | 799.6 | 9.5 | 4.3 | 10.5 | 3.00 | 3.00 | |
| 900.0 | 9.00 | 24.31 | 898.8 | 21.4 | 9.7 | 23.5 | 3.00 | 3.00 | |
| 1,000.0 | 12.00 | 24.31 | 997.1 | 38.0 | 17.2 | 41.7 | 3.00 | 3.00 | |
| 1,071.4 | 14.14 | 24.31 | 1,066.6 | 52.7 | 23.8 | 57.9 | 3.00 | 3.00 | EOB @ Inc. = 14.14° |
| 1,100.0 | 14.14 | 24.31 | 1,094.4 | 59.1 | 26.7 | 64.9 | 0.00 | 0.00 | |
| 1,200.0 | 14.14 | 24.31 | 1,191.3 | 81.4 | 36.8 | 89.3 | 0.00 | 0.00 | |
| 1,300.0 | 14.14 | 24.31 | 1,288.3 | 103.7 | 46.8 | 113.7 | 0.00 | 0.00 | |
| 1,400.0 | 14.14 | 24.31 | 1,385.3 | 125.9 | 56.9 | 138.2 | 0.00 | 0.00 | |
| 1,500.0 | 14.14 | 24.31 | 1,482.2 | 148.2 | 66.9 | 162.6 | 0.00 | 0.00 | |
| 1,600.0 | 14.14 | 24.31 | 1,579.2 | 170.5 | 77.0 | 187.0 | 0.00 | 0.00 | |
| 1,700.0 | 14.14 | 24.31 | 1,676.2 | 192.7 | 87.0 | 211.5 | 0.00 | 0.00 | |
| 1,800.0 | 14.14 | 24.31 | 1,773.1 | 215.0 | 97.1 | 235.9 | 0.00 | 0.00 | |
| 1,900.0 | 14.14 | 24.31 | 1,870.1 | 237.2 | 107.2 | 260.3 | 0.00 | 0.00 | |
| 2,000.0 | 14.14 | 24.31 | 1,967.1 | 259.5 | 117.2 | 284.8 | 0.00 | 0.00 | |
| 2,100.0 | 14.14 | 24.31 | 2,064.1 | 281.8 | 127.3 | 309.2 | 0.00 | 0.00 | |
| 2,200.0 | 14.14 | 24.31 | 2,161.0 | 304.0 | 137.3 | 333.6 | 0.00 | 0.00 | |
| 2,300.0 | 14.14 | 24.31 | 2,258.0 | 326.3 | 147.4 | 358.1 | 0.00 | 0.00 | |
| 2,400.0 | 14.14 | 24.31 | 2,355.0 | 348.6 | 157.4 | 382.5 | 0.00 | 0.00 | |
| 2,500.0 | 14.14 | 24.31 | 2,451.9 | 370.8 | 167.5 | 406.9 | 0.00 | 0.00 | |
| 2,600.0 | 14.14 | 24.31 | 2,548.9 | 393.1 | 177.6 | 431.4 | 0.00 | 0.00 | |
| 2,700.0 | 14.14 | 24.31 | 2,645.9 | 415.4 | 187.6 | 455.8 | 0.00 | 0.00 | |
| 2,800.0 | 14.14 | 24.31 | 2,742.8 | 437.6 | 197.7 | 480.2 | 0.00 | 0.00 | |
| 2,900.0 | 14.14 | 24.31 | 2,839.8 | 459.9 | 207.7 | 504.7 | 0.00 | 0.00 | |
| 3,000.0 | 14.14 | 24.31 | 2,936.8 | 482.2 | 217.8 | 529.1 | 0.00 | 0.00 | |
| 3,100.0 | 14.14 | 24.31 | 3,033.7 | 504.4 | 227.8 | 553.5 | 0.00 | 0.00 | |
| 3,200.0 | 14.14 | 24.31 | 3,130.7 | 526.7 | 237.9 | 577.9 | 0.00 | 0.00 | |
| 3,300.0 | 14.14 | 24.31 | 3,227.7 | 549.0 | 248.0 | 602.4 | 0.00 | 0.00 | |
| 3,378.7 | 14.14 | 24.31 | 3,304.0 | 566.5 | 255.9 | 621.6 | 0.00 | 0.00 | Parkman |
| 3,400.0 | 14.14 | 24.31 | 3,324.7 | 571.2 | 258.0 | 626.8 | 0.00 | 0.00 | |
| 3,500.0 | 14.14 | 24.31 | 3,421.6 | 593.5 | 268.1 | 651.2 | 0.00 | 0.00 | |
| 3,600.0 | 14.14 | 24.31 | 3,518.6 | 615.8 | 278.1 | 675.7 | 0.00 | 0.00 | |
| 3,700.0 | 14.14 | 24.31 | 3,615.6 | 638.0 | 288.2 | 700.1 | 0.00 | 0.00 | |
| 3,800.0 | 14.14 | 24.31 | 3,712.5 | 660.3 | 298.2 | 724.5 | 0.00 | 0.00 | |
| 3,900.0 | 14.14 | 24.31 | 3,809.5 | 682.6 | 308.3 | 749.0 | 0.00 | 0.00 | |
| 3,920.1 | 14.14 | 24.31 | 3,829.0 | 687.1 | 310.3 | 753.9 | 0.00 | 0.00 | Sussex |
| 4,000.0 | 14.14 | 24.31 | 3,906.5 | 704.8 | 318.4 | 773.4 | 0.00 | 0.00 | |
| 4,100.0 | 14.14 | 24.31 | 4,003.4 | 727.1 | 328.4 | 797.8 | 0.00 | 0.00 | |
| 4,200.0 | 14.14 | 24.31 | 4,100.4 | 749.4 | 338.5 | 822.3 | 0.00 | 0.00 | |
| 4,300.0 | 14.14 | 24.31 | 4,197.4 | 771.6 | 348.5 | 846.7 | 0.00 | 0.00 | |
| 4,400.0 | 14.14 | 24.31 | 4,294.4 | 793.9 | 358.6 | 871.1 | 0.00 | 0.00 | |
| 4,500.0 | 14.14 | 24.31 | 4,391.3 | 816.2 | 368.6 | 895.6 | 0.00 | 0.00 | |
| 4,600.0 | 14.14 | 24.31 | 4,488.3 | 838.4 | 378.7 | 920.0 | 0.00 | 0.00 | |
| 4,700.0 | 14.14 | 24.31 | 4,585.3 | 860.7 | 388.8 | 944.4 | 0.00 | 0.00 | |
| 4,800.0 | 14.14 | 24.31 | 4,682.2 | 883.0 | 398.8 | 968.9 | 0.00 | 0.00 | |

Cathedral Energy Services

Planning Report

| | | | |
|------------------|---|-------------------------------------|--|
| Database: | USA EDM 5000 Multi Users DB | Local Co-ordinate Reference: | Well Latham G-02 |
| Company: | Bonanza Creek Energy Operating Company, LLC | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Project: | Weld County | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site: | Latham 12-02 Pad | North Reference: | True |
| Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | Plan #1 | | |

| Planned Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|-----------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Comments / Formations |
| 4,900.0 | 14.14 | 24.31 | 4,779.2 | 905.2 | 408.9 | 993.3 | 0.00 | 0.00 | |
| 5,000.0 | 14.14 | 24.31 | 4,876.2 | 927.5 | 418.9 | 1,017.7 | 0.00 | 0.00 | |
| 5,100.0 | 14.14 | 24.31 | 4,973.1 | 949.8 | 429.0 | 1,042.2 | 0.00 | 0.00 | |
| 5,200.0 | 14.14 | 24.31 | 5,070.1 | 972.0 | 439.0 | 1,066.6 | 0.00 | 0.00 | |
| 5,300.0 | 14.14 | 24.31 | 5,167.1 | 994.3 | 449.1 | 1,091.0 | 0.00 | 0.00 | |
| 5,400.0 | 14.14 | 24.31 | 5,264.0 | 1,016.6 | 459.2 | 1,115.5 | 0.00 | 0.00 | |
| 5,500.0 | 14.14 | 24.31 | 5,361.0 | 1,038.8 | 469.2 | 1,139.9 | 0.00 | 0.00 | |
| 5,600.0 | 14.14 | 24.31 | 5,458.0 | 1,061.1 | 479.3 | 1,164.3 | 0.00 | 0.00 | |
| 5,669.5 | 14.14 | 24.31 | 5,525.4 | 1,076.6 | 486.3 | 1,181.3 | 0.00 | 0.00 | Start 3° Drop |
| 5,700.0 | 13.23 | 24.31 | 5,555.0 | 1,083.2 | 489.2 | 1,188.5 | 3.00 | -3.00 | |
| 5,800.0 | 10.23 | 24.31 | 5,652.9 | 1,101.7 | 497.6 | 1,208.8 | 3.00 | -3.00 | |
| 5,900.0 | 7.23 | 24.31 | 5,751.7 | 1,115.5 | 503.8 | 1,224.0 | 3.00 | -3.00 | |
| 6,000.0 | 4.23 | 24.31 | 5,851.2 | 1,124.6 | 508.0 | 1,234.0 | 3.00 | -3.00 | |
| 6,100.0 | 1.23 | 24.31 | 5,951.1 | 1,128.9 | 509.9 | 1,238.7 | 3.00 | -3.00 | |
| 6,140.9 | 0.00 | 0.00 | 5,992.0 | 1,129.3 | 510.1 | 1,239.2 | 3.00 | -3.00 | EOD @ Inc. = 0° |
| 6,200.0 | 0.00 | 0.00 | 6,051.1 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | |
| 6,300.0 | 0.00 | 0.00 | 6,151.1 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | |
| 6,340.9 | 0.00 | 0.00 | 6,192.0 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | Niobrara |
| 6,400.0 | 0.00 | 0.00 | 6,251.1 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | |
| 6,500.0 | 0.00 | 0.00 | 6,351.1 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | |
| 6,573.9 | 0.00 | 0.00 | 6,425.0 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | Ft. Hayes |
| 6,597.9 | 0.00 | 0.00 | 6,449.0 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | Codell |
| 6,600.0 | 0.00 | 0.00 | 6,451.1 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | |
| 6,607.9 | 0.00 | 0.00 | 6,459.0 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | Carlile |
| 6,667.9 | 0.00 | 0.00 | 6,519.0 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | Greenhorn |
| 6,700.0 | 0.00 | 0.00 | 6,551.1 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | |
| 6,757.9 | 0.00 | 0.00 | 6,609.0 | 1,129.3 | 510.1 | 1,239.2 | 0.00 | 0.00 | TD @ 6,757.9' MD |

| Targets | | | | | | | | | |
|---------------------------|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| - hit/miss target | | | | | | | | | |
| - Shape | | | | | | | | | |
| Latham G-02 TGT | 0.00 | 0.00 | 5,992.0 | 1,129.3 | 510.1 | 1,370,306.65 | 3,303,811.46 | 40.344760 | -104.410040 |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |
| Latham G-02 PBHL | 0.00 | 0.00 | 6,609.0 | 1,129.3 | 510.1 | 1,370,306.65 | 3,303,811.46 | 40.344760 | -104.410040 |
| - plan hits target center | | | | | | | | | |
| - Circle (radius 50.0) | | | | | | | | | |

Cathedral Energy Services

Planning Report

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|------------------|---|-------------------------------------|--|
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| Project: | Weld County | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site: | Latham 12-02 Pad | North Reference: | True |
| Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | OH | | |
| Design: | Plan #1 | | |

| Formations | | | | | | |
|---------------------|---------------------|-----------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 3,378.7 | 3,304.0 | Parkman | | | | |
| 3,920.1 | 3,829.0 | Sussex | | | | |
| 6,340.9 | 6,192.0 | Niobrara | | | | |
| 6,573.9 | 6,425.0 | Ft. Hayes | | | | |
| 6,597.9 | 6,449.0 | Codell | | | | |
| 6,607.9 | 6,459.0 | Carlile | | | | |
| 6,667.9 | 6,519.0 | Greenhorn | | | | |

| Plan Annotations | | | | | |
|---------------------|---------------------|-------------------|------------|---------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | | |
| | | +N/-S (ft) | +E/-W (ft) | Comment | |
| 600.0 | 600.0 | 0.0 | 0.0 | KOP @ 600' | |
| 1,071.4 | 1,066.6 | 52.7 | 23.8 | EOB @ Inc. = 14.14° | |
| 5,669.5 | 5,525.4 | 1,076.6 | 486.3 | Start 3° Drop | |
| 6,140.9 | 5,992.0 | 1,129.3 | 510.1 | EOD @ Inc. = 0° | |
| 6,757.9 | 6,609.0 | 1,129.3 | 510.1 | TD @ 6,757.9' MD | |

Bonanza Creek Energy Operating Company, LLC

**Weld County
Latham 12-02 Pad
Latham G-02
OH
Plan #1**

Anticollision Report

11 July, 2012

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Reference | Plan #1 | | |
|------------------------------|---|----------------|---------------------|
| Filter type: | GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference | | |
| Interpolation Method: | MD Interval 100.0ft | Error Model: | Systematic Ellipse |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum center-center distance of 500.0ft | Error Surface: | Elliptical Conic |
| Warning Levels Evaluated at: | 2.00 Sigma | | |

| Survey Tool Program | | Date | 7/11/2012 | | |
|---------------------|------------|-------------------|-----------|-------------|--|
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description | |
| 0.0 | 6,757.9 | Plan #1 (OH) | MWD | Geolink MWD | |

| Summary | | | | | | |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|--------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| Latham 12-02 Pad | | | | | | |
| Latham 11-02 - OH - Plan #1 | 0.0 | 0.0 | 17.7 | | | |
| Latham 11-02 - OH - Plan #1 | 600.0 | 600.0 | 17.7 | 17.7 | 10,000.000 | CC, ES |
| Latham 12-02 - OH - Plan #1 | 0.0 | 0.0 | 31.0 | | | |
| Latham 12-02 - OH - Plan #1 | 600.0 | 600.0 | 31.0 | 31.0 | 10,000.000 | CC, ES |
| Latham 21-02 - OH - Plan #1 | 0.0 | 0.0 | 13.3 | | | |
| Latham 21-02 - OH - Plan #1 | 600.0 | 600.0 | 13.3 | 13.3 | 10,000.000 | CC, ES |
| Latham 22-02 - OH - Plan #1 | 0.0 | 0.0 | 42.3 | | | |
| Latham 22-02 - OH - Plan #1 | 600.0 | 600.0 | 42.3 | 42.3 | 10,000.000 | CC, ES |
| Latham 32-02 - OH - Plan #1 | 0.0 | 0.0 | 59.9 | | | |
| Latham 32-02 - OH - Plan #1 | 600.0 | 600.0 | 59.9 | 59.9 | 10,000.000 | CC, ES |
| Latham H-02 - OH - Plan #1 | 0.0 | 1.0 | 73.3 | | | |
| Latham H-02 - OH - Plan #1 | 566.3 | 567.3 | 73.3 | 73.3 | 10,000.000 | CC, ES |
| Latham L-02 - OH - Plan #1 | 0.0 | 1.0 | 29.0 | | | |
| Latham L-02 - OH - Plan #1 | 566.3 | 567.3 | 29.0 | 29.0 | 10,000.000 | CC, ES |
| Latham 14-02 Pad | | | | | | |
| Latham 14-11-2HZ (Ensign) - HZ - Plan #3 | | | | | | Out of range |
| Latham 14-11-2HZ (Ensign) - HZ - Plan #3 | 6,424.9 | 10,025.4 | 244.2 | 244.2 | 10,000.000 | CC, ES |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design Latham 12-02 Pad - Latham 11-02 - OH - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------|------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | Total | Separation | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Uncertainty Axis | Factor | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -51.89 | 10.9 | -13.9 | 17.7 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | -51.89 | 10.9 | -13.9 | 17.7 | 17.7 | 0.00 | N/A | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -51.89 | 10.9 | -13.9 | 17.7 | 17.7 | 0.00 | N/A | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -51.89 | 10.9 | -13.9 | 17.7 | 17.7 | 0.00 | N/A | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -51.89 | 10.9 | -13.9 | 17.7 | 17.7 | 0.00 | N/A | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.9 | 0.9 | -51.89 | 10.9 | -13.9 | 17.7 | 17.7 | 0.00 | N/A | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | -51.89 | 10.9 | -13.9 | 17.7 | 17.7 | 0.00 | N/A CC, ES | | |
| 700.0 | 700.0 | 699.4 | 699.4 | 1.2 | 1.2 | -77.77 | 13.5 | -14.0 | 18.7 | 18.7 | 0.00 | N/A | | |
| 800.0 | 799.6 | 798.7 | 798.4 | 1.4 | 1.4 | -81.58 | 21.3 | -14.2 | 21.9 | 21.9 | 0.00 | N/A | | |
| 900.0 | 898.8 | 897.9 | 896.7 | 1.6 | 1.6 | -85.91 | 34.1 | -14.4 | 27.3 | 27.3 | 0.00 | N/A | | |
| 1,000.0 | 997.1 | 996.8 | 994.0 | 2.0 | 1.9 | -89.63 | 52.0 | -14.8 | 35.0 | 35.0 | 0.00 | N/A | | |
| 1,100.0 | 1,094.4 | 1,095.5 | 1,090.0 | 2.3 | 2.3 | -92.29 | 74.8 | -15.3 | 45.0 | 45.0 | 0.00 | N/A | | |
| 1,200.0 | 1,191.3 | 1,193.7 | 1,184.2 | 2.7 | 2.8 | -90.64 | 102.5 | -15.8 | 57.1 | 57.1 | 0.00 | N/A | | |
| 1,300.0 | 1,288.3 | 1,291.1 | 1,276.1 | 3.1 | 3.3 | -85.91 | 134.6 | -16.5 | 71.5 | 71.5 | 0.00 | N/A | | |
| 1,400.0 | 1,385.3 | 1,388.5 | 1,366.6 | 3.6 | 3.9 | -80.45 | 170.6 | -17.3 | 88.5 | 88.5 | 0.00 | N/A | | |
| 1,500.0 | 1,482.2 | 1,486.7 | 1,457.7 | 4.0 | 4.5 | -76.54 | 207.3 | -18.0 | 106.4 | 106.4 | 0.00 | N/A | | |
| 1,600.0 | 1,579.2 | 1,584.9 | 1,548.7 | 4.5 | 5.2 | -73.76 | 244.0 | -18.8 | 124.6 | 124.6 | 0.00 | N/A | | |
| 1,700.0 | 1,676.2 | 1,683.1 | 1,639.8 | 4.9 | 5.8 | -71.69 | 280.8 | -19.5 | 143.0 | 143.0 | 0.00 | N/A | | |
| 1,800.0 | 1,773.1 | 1,781.2 | 1,730.8 | 5.3 | 6.5 | -70.09 | 317.5 | -20.3 | 161.5 | 161.5 | 0.00 | N/A | | |
| 1,900.0 | 1,870.1 | 1,879.4 | 1,821.9 | 5.8 | 7.1 | -68.82 | 354.2 | -21.1 | 180.1 | 180.1 | 0.00 | N/A | | |
| 2,000.0 | 1,967.1 | 1,977.6 | 1,912.9 | 6.3 | 7.8 | -67.79 | 390.9 | -21.8 | 198.8 | 198.8 | 0.00 | N/A | | |
| 2,100.0 | 2,064.1 | 2,075.8 | 2,004.0 | 6.7 | 8.4 | -66.93 | 427.6 | -22.6 | 217.6 | 217.6 | 0.00 | N/A | | |
| 2,200.0 | 2,161.0 | 2,174.0 | 2,095.0 | 7.2 | 9.1 | -66.22 | 464.3 | -23.4 | 236.4 | 236.4 | 0.00 | N/A | | |
| 2,300.0 | 2,258.0 | 2,272.1 | 2,186.1 | 7.6 | 9.7 | -65.60 | 501.0 | -24.1 | 255.2 | 255.2 | 0.00 | N/A | | |
| 2,400.0 | 2,355.0 | 2,370.3 | 2,277.2 | 8.1 | 10.4 | -65.08 | 537.8 | -24.9 | 274.0 | 274.0 | 0.00 | N/A | | |
| 2,500.0 | 2,451.9 | 2,468.5 | 2,368.2 | 8.5 | 11.0 | -64.62 | 574.5 | -25.7 | 292.9 | 292.9 | 0.00 | N/A | | |
| 2,600.0 | 2,548.9 | 2,566.7 | 2,459.3 | 9.0 | 11.7 | -64.21 | 611.2 | -26.4 | 311.8 | 311.8 | 0.00 | N/A | | |
| 2,700.0 | 2,645.9 | 2,664.8 | 2,550.3 | 9.4 | 12.3 | -63.85 | 647.9 | -27.2 | 330.7 | 330.7 | 0.00 | N/A | | |
| 2,800.0 | 2,742.8 | 2,763.0 | 2,641.4 | 9.9 | 13.0 | -63.53 | 684.6 | -27.9 | 349.6 | 349.6 | 0.00 | N/A | | |
| 2,900.0 | 2,839.8 | 2,861.2 | 2,732.4 | 10.4 | 13.7 | -63.25 | 721.3 | -28.7 | 368.5 | 368.5 | 0.00 | N/A | | |
| 3,000.0 | 2,936.8 | 2,959.4 | 2,823.5 | 10.8 | 14.3 | -62.99 | 758.0 | -29.5 | 387.4 | 387.4 | 0.00 | N/A | | |
| 3,100.0 | 3,033.7 | 3,057.6 | 2,914.5 | 11.3 | 15.0 | -62.75 | 794.8 | -30.2 | 406.3 | 406.3 | 0.00 | N/A | | |
| 3,200.0 | 3,130.7 | 3,155.7 | 3,005.6 | 11.7 | 15.6 | -62.54 | 831.5 | -31.0 | 425.3 | 425.3 | 0.00 | N/A | | |
| 3,300.0 | 3,227.7 | 3,253.9 | 3,096.6 | 12.2 | 16.3 | -62.34 | 868.2 | -31.8 | 444.2 | 444.2 | 0.00 | N/A | | |
| 3,400.0 | 3,324.7 | 3,352.1 | 3,187.7 | 12.7 | 17.0 | -62.16 | 904.9 | -32.5 | 463.2 | 463.2 | 0.00 | N/A | | |
| 3,500.0 | 3,421.6 | 3,450.3 | 3,278.7 | 13.1 | 17.6 | -62.00 | 941.6 | -33.3 | 482.1 | 482.1 | 0.00 | N/A | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design Latham 12-02 Pad - Latham 12-02 - OH - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------|------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | Total | Separation | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Uncertainty Axis | Factor | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -54.02 | 18.2 | -25.1 | 31.0 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | -54.02 | 18.2 | -25.1 | 31.0 | 31.0 | 0.00 | N/A | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -54.02 | 18.2 | -25.1 | 31.0 | 31.0 | 0.00 | N/A | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -54.02 | 18.2 | -25.1 | 31.0 | 31.0 | 0.00 | N/A | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -54.02 | 18.2 | -25.1 | 31.0 | 31.0 | 0.00 | N/A | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.9 | 0.9 | -54.02 | 18.2 | -25.1 | 31.0 | 31.0 | 0.00 | N/A | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | -54.02 | 18.2 | -25.1 | 31.0 | 31.0 | 0.00 | N/A CC, ES | | |
| 700.0 | 700.0 | 698.8 | 698.8 | 1.2 | 1.2 | -79.61 | 20.7 | -25.5 | 32.3 | 32.3 | 0.00 | N/A | | |
| 800.0 | 799.6 | 797.6 | 797.3 | 1.4 | 1.4 | -82.86 | 28.3 | -26.8 | 36.4 | 36.4 | 0.00 | N/A | | |
| 900.0 | 898.8 | 897.3 | 896.5 | 1.6 | 1.6 | -90.12 | 38.1 | -28.4 | 41.7 | 41.7 | 0.00 | N/A | | |
| 1,000.0 | 997.1 | 996.7 | 995.3 | 2.0 | 1.8 | -101.74 | 48.0 | -30.1 | 48.3 | 48.3 | 0.00 | N/A | | |
| 1,100.0 | 1,094.4 | 1,095.4 | 1,093.5 | 2.3 | 2.1 | -114.80 | 57.7 | -31.7 | 58.4 | 58.4 | 0.00 | N/A | | |
| 1,200.0 | 1,191.3 | 1,193.9 | 1,191.5 | 2.7 | 2.3 | -124.73 | 67.5 | -33.3 | 71.4 | 71.4 | 0.00 | N/A | | |
| 1,300.0 | 1,288.3 | 1,292.4 | 1,289.6 | 3.1 | 2.5 | -131.49 | 77.2 | -34.9 | 85.9 | 85.9 | 0.00 | N/A | | |
| 1,400.0 | 1,385.3 | 1,390.9 | 1,387.6 | 3.6 | 2.7 | -136.27 | 87.0 | -36.6 | 101.3 | 101.3 | 0.00 | N/A | | |
| 1,500.0 | 1,482.2 | 1,489.5 | 1,485.6 | 4.0 | 3.0 | -139.78 | 96.7 | -38.2 | 117.1 | 117.1 | 0.00 | N/A | | |
| 1,600.0 | 1,579.2 | 1,588.0 | 1,583.6 | 4.5 | 3.2 | -142.45 | 106.5 | -39.8 | 133.3 | 133.3 | 0.00 | N/A | | |
| 1,700.0 | 1,676.2 | 1,686.5 | 1,681.6 | 4.9 | 3.4 | -144.54 | 116.2 | -41.5 | 149.6 | 149.6 | 0.00 | N/A | | |
| 1,800.0 | 1,773.1 | 1,785.0 | 1,779.7 | 5.3 | 3.7 | -146.22 | 126.0 | -43.1 | 166.2 | 166.2 | 0.00 | N/A | | |
| 1,900.0 | 1,870.1 | 1,883.5 | 1,877.7 | 5.8 | 3.9 | -147.59 | 135.7 | -44.7 | 182.8 | 182.8 | 0.00 | N/A | | |
| 2,000.0 | 1,967.1 | 1,982.0 | 1,975.7 | 6.3 | 4.2 | -148.73 | 145.5 | -46.3 | 199.6 | 199.6 | 0.00 | N/A | | |
| 2,100.0 | 2,064.1 | 2,080.6 | 2,073.7 | 6.7 | 4.4 | -149.70 | 155.2 | -48.0 | 216.4 | 216.4 | 0.00 | N/A | | |
| 2,200.0 | 2,161.0 | 2,179.1 | 2,171.8 | 7.2 | 4.6 | -150.53 | 165.0 | -49.6 | 233.2 | 233.2 | 0.00 | N/A | | |
| 2,300.0 | 2,258.0 | 2,277.6 | 2,269.8 | 7.6 | 4.9 | -151.24 | 174.7 | -51.2 | 250.1 | 250.1 | 0.00 | N/A | | |
| 2,400.0 | 2,355.0 | 2,376.1 | 2,367.8 | 8.1 | 5.1 | -151.87 | 184.5 | -52.9 | 267.1 | 267.1 | 0.00 | N/A | | |
| 2,500.0 | 2,451.9 | 2,474.6 | 2,465.8 | 8.5 | 5.4 | -152.42 | 194.2 | -54.5 | 284.0 | 284.0 | 0.00 | N/A | | |
| 2,600.0 | 2,548.9 | 2,573.1 | 2,563.8 | 9.0 | 5.6 | -152.91 | 204.0 | -56.1 | 301.0 | 301.0 | 0.00 | N/A | | |
| 2,700.0 | 2,645.9 | 2,671.7 | 2,661.9 | 9.4 | 5.8 | -153.34 | 213.7 | -57.7 | 318.0 | 318.0 | 0.00 | N/A | | |
| 2,800.0 | 2,742.8 | 2,770.2 | 2,759.9 | 9.9 | 6.1 | -153.74 | 223.5 | -59.4 | 335.0 | 335.0 | 0.00 | N/A | | |
| 2,900.0 | 2,839.8 | 2,868.7 | 2,857.9 | 10.4 | 6.3 | -154.09 | 233.2 | -61.0 | 352.1 | 352.1 | 0.00 | N/A | | |
| 3,000.0 | 2,936.8 | 2,967.2 | 2,955.9 | 10.8 | 6.6 | -154.41 | 242.9 | -62.6 | 369.1 | 369.1 | 0.00 | N/A | | |
| 3,100.0 | 3,033.7 | 3,065.7 | 3,053.9 | 11.3 | 6.8 | -154.70 | 252.7 | -64.3 | 386.1 | 386.1 | 0.00 | N/A | | |
| 3,200.0 | 3,130.7 | 3,164.2 | 3,152.0 | 11.7 | 7.1 | -154.97 | 262.4 | -65.9 | 403.2 | 403.2 | 0.00 | N/A | | |
| 3,300.0 | 3,227.7 | 3,262.8 | 3,250.0 | 12.2 | 7.3 | -155.22 | 272.2 | -67.5 | 420.3 | 420.3 | 0.00 | N/A | | |
| 3,400.0 | 3,324.7 | 3,361.3 | 3,348.0 | 12.7 | 7.5 | -155.45 | 281.9 | -69.1 | 437.3 | 437.3 | 0.00 | N/A | | |
| 3,500.0 | 3,421.6 | 3,459.8 | 3,446.0 | 13.1 | 7.8 | -155.66 | 291.7 | -70.8 | 454.4 | 454.4 | 0.00 | N/A | | |
| 3,600.0 | 3,518.6 | 3,558.3 | 3,544.0 | 13.6 | 8.0 | -155.85 | 301.4 | -72.4 | 471.5 | 471.5 | 0.00 | N/A | | |
| 3,700.0 | 3,615.6 | 3,656.8 | 3,642.1 | 14.0 | 8.3 | -156.03 | 311.2 | -74.0 | 488.6 | 488.6 | 0.00 | N/A | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design Latham 12-02 Pad - Latham 21-02 - OH - Plan #1 | | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Distance | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 123.18 | -7.3 | 11.2 | 13.3 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 123.18 | -7.3 | 11.2 | 13.3 | 13.3 | 0.00 | N/A | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 123.18 | -7.3 | 11.2 | 13.3 | 13.3 | 0.00 | N/A | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 123.18 | -7.3 | 11.2 | 13.3 | 13.3 | 0.00 | N/A | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | 123.18 | -7.3 | 11.2 | 13.3 | 13.3 | 0.00 | N/A | | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.9 | 0.9 | 123.18 | -7.3 | 11.2 | 13.3 | 13.3 | 0.00 | N/A | | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | 123.18 | -7.3 | 11.2 | 13.3 | 13.3 | 0.00 | N/A CC, ES | | | |
| 700.0 | 700.0 | 700.0 | 700.0 | 1.2 | 1.2 | 98.73 | -5.1 | 12.6 | 13.7 | 13.7 | 0.00 | N/A | | | |
| 800.0 | 799.6 | 800.0 | 799.6 | 1.4 | 1.4 | 98.34 | 1.5 | 16.8 | 14.8 | 14.8 | 0.00 | N/A | | | |
| 900.0 | 898.8 | 900.0 | 898.8 | 1.6 | 1.6 | 97.81 | 12.5 | 23.8 | 16.7 | 16.7 | 0.00 | N/A | | | |
| 1,000.0 | 997.1 | 999.9 | 997.0 | 2.0 | 2.0 | 97.24 | 27.9 | 33.6 | 19.3 | 19.3 | 0.00 | N/A | | | |
| 1,100.0 | 1,094.4 | 1,099.9 | 1,094.2 | 2.3 | 2.3 | 96.17 | 47.5 | 46.2 | 22.7 | 22.7 | 0.00 | N/A | | | |
| 1,200.0 | 1,191.3 | 1,199.6 | 1,189.8 | 2.7 | 2.8 | 87.07 | 71.4 | 61.4 | 26.7 | 26.7 | 0.00 | N/A | | | |
| 1,300.0 | 1,288.3 | 1,298.5 | 1,283.1 | 3.1 | 3.4 | 71.95 | 99.1 | 79.2 | 33.1 | 33.1 | 0.00 | N/A | | | |
| 1,400.0 | 1,385.3 | 1,396.3 | 1,373.4 | 3.6 | 4.1 | 56.93 | 130.6 | 99.3 | 44.3 | 44.3 | 0.00 | N/A | | | |
| 1,500.0 | 1,482.2 | 1,492.4 | 1,460.3 | 4.0 | 4.8 | 45.34 | 165.2 | 121.4 | 61.2 | 61.2 | 0.00 | N/A | | | |
| 1,600.0 | 1,579.2 | 1,589.8 | 1,547.2 | 4.5 | 5.5 | 37.86 | 202.2 | 145.1 | 81.6 | 81.6 | 0.00 | N/A | | | |
| 1,700.0 | 1,676.2 | 1,687.3 | 1,634.2 | 4.9 | 6.3 | 33.40 | 239.2 | 168.7 | 102.9 | 102.9 | 0.00 | N/A | | | |
| 1,800.0 | 1,773.1 | 1,784.7 | 1,721.3 | 5.3 | 7.1 | 30.47 | 276.1 | 192.3 | 124.5 | 124.5 | 0.00 | N/A | | | |
| 1,900.0 | 1,870.1 | 1,882.2 | 1,808.3 | 5.8 | 7.9 | 28.41 | 313.1 | 216.0 | 146.4 | 146.4 | 0.00 | N/A | | | |
| 2,000.0 | 1,967.1 | 1,979.7 | 1,895.3 | 6.3 | 8.7 | 26.89 | 350.1 | 239.6 | 168.4 | 168.4 | 0.00 | N/A | | | |
| 2,100.0 | 2,064.1 | 2,077.1 | 1,982.3 | 6.7 | 9.5 | 25.72 | 387.1 | 263.3 | 190.5 | 190.5 | 0.00 | N/A | | | |
| 2,200.0 | 2,161.0 | 2,174.6 | 2,069.3 | 7.2 | 10.3 | 24.79 | 424.1 | 286.9 | 212.6 | 212.6 | 0.00 | N/A | | | |
| 2,300.0 | 2,258.0 | 2,272.0 | 2,156.3 | 7.6 | 11.1 | 24.04 | 461.1 | 310.6 | 234.8 | 234.8 | 0.00 | N/A | | | |
| 2,400.0 | 2,355.0 | 2,369.5 | 2,243.4 | 8.1 | 11.8 | 23.41 | 498.1 | 334.2 | 257.0 | 257.0 | 0.00 | N/A | | | |
| 2,500.0 | 2,451.9 | 2,467.0 | 2,330.4 | 8.5 | 12.6 | 22.89 | 535.1 | 357.9 | 279.3 | 279.3 | 0.00 | N/A | | | |
| 2,600.0 | 2,548.9 | 2,564.4 | 2,417.4 | 9.0 | 13.4 | 22.44 | 572.1 | 381.5 | 301.5 | 301.5 | 0.00 | N/A | | | |
| 2,700.0 | 2,645.9 | 2,661.9 | 2,504.4 | 9.4 | 14.2 | 22.06 | 609.1 | 405.2 | 323.8 | 323.8 | 0.00 | N/A | | | |
| 2,800.0 | 2,742.8 | 2,759.4 | 2,591.4 | 9.9 | 15.0 | 21.72 | 646.1 | 428.8 | 346.1 | 346.1 | 0.00 | N/A | | | |
| 2,900.0 | 2,839.8 | 2,856.8 | 2,678.4 | 10.4 | 15.9 | 21.43 | 683.0 | 452.5 | 368.4 | 368.4 | 0.00 | N/A | | | |
| 3,000.0 | 2,936.8 | 2,954.3 | 2,765.5 | 10.8 | 16.7 | 21.17 | 720.0 | 476.1 | 390.7 | 390.7 | 0.00 | N/A | | | |
| 3,100.0 | 3,033.7 | 3,051.8 | 2,852.5 | 11.3 | 17.5 | 20.93 | 757.0 | 499.8 | 413.0 | 413.0 | 0.00 | N/A | | | |
| 3,200.0 | 3,130.7 | 3,149.2 | 2,939.5 | 11.7 | 18.3 | 20.72 | 794.0 | 523.4 | 435.4 | 435.4 | 0.00 | N/A | | | |
| 3,300.0 | 3,227.7 | 3,246.7 | 3,026.5 | 12.2 | 19.1 | 20.54 | 831.0 | 547.1 | 457.7 | 457.7 | 0.00 | N/A | | | |
| 3,400.0 | 3,324.7 | 3,344.2 | 3,113.5 | 12.7 | 19.9 | 20.36 | 868.0 | 570.7 | 480.0 | 480.0 | 0.00 | N/A | | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design Latham 12-02 Pad - Latham 22-02 - OH - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 121.10 | -21.9 | 36.2 | 42.3 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 121.10 | -21.9 | 36.2 | 42.3 | 42.3 | 0.00 | N/A | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 121.10 | -21.9 | 36.2 | 42.3 | 42.3 | 0.00 | N/A | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 121.10 | -21.9 | 36.2 | 42.3 | 42.3 | 0.00 | N/A | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | 121.10 | -21.9 | 36.2 | 42.3 | 42.3 | 0.00 | N/A | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.9 | 0.9 | 121.10 | -21.9 | 36.2 | 42.3 | 42.3 | 0.00 | N/A | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | 121.10 | -21.9 | 36.2 | 42.3 | 42.3 | 0.00 | N/A | CC, ES | |
| 700.0 | 700.0 | 698.8 | 698.7 | 1.2 | 1.2 | 97.29 | -20.7 | 38.5 | 44.0 | 44.0 | 0.00 | N/A | | |
| 800.0 | 799.6 | 797.4 | 797.0 | 1.4 | 1.4 | 98.55 | -17.4 | 45.4 | 49.2 | 49.2 | 0.00 | N/A | | |
| 900.0 | 898.8 | 895.7 | 894.5 | 1.6 | 1.6 | 100.11 | -11.8 | 56.7 | 57.7 | 57.7 | 0.00 | N/A | | |
| 1,000.0 | 997.1 | 993.4 | 990.6 | 2.0 | 1.9 | 101.60 | -4.0 | 72.5 | 69.8 | 69.8 | 0.00 | N/A | | |
| 1,100.0 | 1,094.4 | 1,090.7 | 1,085.4 | 2.3 | 2.3 | 102.81 | 5.8 | 92.5 | 85.1 | 85.1 | 0.00 | N/A | | |
| 1,200.0 | 1,191.3 | 1,189.0 | 1,180.4 | 2.7 | 2.7 | 103.32 | 16.9 | 114.9 | 101.9 | 101.9 | 0.00 | N/A | | |
| 1,300.0 | 1,288.3 | 1,287.6 | 1,275.7 | 3.1 | 3.2 | 103.69 | 27.9 | 137.4 | 118.7 | 118.7 | 0.00 | N/A | | |
| 1,400.0 | 1,385.3 | 1,386.2 | 1,371.1 | 3.6 | 3.6 | 103.97 | 39.0 | 159.8 | 135.5 | 135.5 | 0.00 | N/A | | |
| 1,500.0 | 1,482.2 | 1,484.7 | 1,466.4 | 4.0 | 4.0 | 104.18 | 50.1 | 182.3 | 152.3 | 152.3 | 0.00 | N/A | | |
| 1,600.0 | 1,579.2 | 1,583.3 | 1,561.8 | 4.5 | 4.5 | 104.35 | 61.1 | 204.8 | 169.1 | 169.1 | 0.00 | N/A | | |
| 1,700.0 | 1,676.2 | 1,681.9 | 1,657.1 | 4.9 | 5.0 | 104.50 | 72.2 | 227.3 | 185.9 | 185.9 | 0.00 | N/A | | |
| 1,800.0 | 1,773.1 | 1,780.5 | 1,752.5 | 5.3 | 5.4 | 104.61 | 83.3 | 249.7 | 202.7 | 202.7 | 0.00 | N/A | | |
| 1,900.0 | 1,870.1 | 1,879.1 | 1,847.8 | 5.8 | 5.9 | 104.71 | 94.4 | 272.2 | 219.5 | 219.5 | 0.00 | N/A | | |
| 2,000.0 | 1,967.1 | 1,977.6 | 1,943.1 | 6.3 | 6.4 | 104.80 | 105.4 | 294.7 | 236.2 | 236.2 | 0.00 | N/A | | |
| 2,100.0 | 2,064.1 | 2,076.2 | 2,038.5 | 6.7 | 6.8 | 104.87 | 116.5 | 317.2 | 253.0 | 253.0 | 0.00 | N/A | | |
| 2,200.0 | 2,161.0 | 2,174.8 | 2,133.8 | 7.2 | 7.3 | 104.94 | 127.6 | 339.6 | 269.8 | 269.8 | 0.00 | N/A | | |
| 2,300.0 | 2,258.0 | 2,273.4 | 2,229.2 | 7.6 | 7.8 | 104.99 | 138.6 | 362.1 | 286.6 | 286.6 | 0.00 | N/A | | |
| 2,400.0 | 2,355.0 | 2,372.0 | 2,324.5 | 8.1 | 8.3 | 105.05 | 149.7 | 384.6 | 303.4 | 303.4 | 0.00 | N/A | | |
| 2,500.0 | 2,451.9 | 2,470.5 | 2,419.9 | 8.5 | 8.7 | 105.09 | 160.8 | 407.1 | 320.2 | 320.2 | 0.00 | N/A | | |
| 2,600.0 | 2,548.9 | 2,569.1 | 2,515.2 | 9.0 | 9.2 | 105.13 | 171.8 | 429.5 | 337.0 | 337.0 | 0.00 | N/A | | |
| 2,700.0 | 2,645.9 | 2,667.7 | 2,610.5 | 9.4 | 9.7 | 105.17 | 182.9 | 452.0 | 353.8 | 353.8 | 0.00 | N/A | | |
| 2,800.0 | 2,742.8 | 2,766.3 | 2,705.9 | 9.9 | 10.2 | 105.20 | 194.0 | 474.5 | 370.6 | 370.6 | 0.00 | N/A | | |
| 2,900.0 | 2,839.8 | 2,864.8 | 2,801.2 | 10.4 | 10.6 | 105.23 | 205.0 | 497.0 | 387.4 | 387.4 | 0.00 | N/A | | |
| 3,000.0 | 2,936.8 | 2,963.4 | 2,896.6 | 10.8 | 11.1 | 105.26 | 216.1 | 519.4 | 404.2 | 404.2 | 0.00 | N/A | | |
| 3,100.0 | 3,033.7 | 3,062.0 | 2,991.9 | 11.3 | 11.6 | 105.29 | 227.2 | 541.9 | 421.0 | 421.0 | 0.00 | N/A | | |
| 3,200.0 | 3,130.7 | 3,160.6 | 3,087.2 | 11.7 | 12.1 | 105.31 | 238.2 | 564.4 | 437.8 | 437.8 | 0.00 | N/A | | |
| 3,300.0 | 3,227.7 | 3,259.2 | 3,182.6 | 12.2 | 12.5 | 105.34 | 249.3 | 586.9 | 454.6 | 454.6 | 0.00 | N/A | | |
| 3,400.0 | 3,324.7 | 3,357.7 | 3,277.9 | 12.7 | 13.0 | 105.36 | 260.4 | 609.3 | 471.4 | 471.4 | 0.00 | N/A | | |
| 3,500.0 | 3,421.6 | 3,456.3 | 3,373.3 | 13.1 | 13.5 | 105.38 | 271.5 | 631.8 | 488.2 | 488.2 | 0.00 | N/A | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design Latham 12-02 Pad - Latham 32-02 - OH - Plan #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | Warning | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 123.16 | -32.8 | 50.2 | 59.9 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.2 | 0.2 | 123.16 | -32.8 | 50.2 | 59.9 | 59.9 | 0.00 | N/A | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 123.16 | -32.8 | 50.2 | 59.9 | 59.9 | 0.00 | N/A | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 123.16 | -32.8 | 50.2 | 59.9 | 59.9 | 0.00 | N/A | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | 123.16 | -32.8 | 50.2 | 59.9 | 59.9 | 0.00 | N/A | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.9 | 0.9 | 123.16 | -32.8 | 50.2 | 59.9 | 59.9 | 0.00 | N/A | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | 123.16 | -32.8 | 50.2 | 59.9 | 59.9 | 0.00 | N/A CC, ES | | |
| 700.0 | 700.0 | 697.8 | 697.8 | 1.2 | 1.2 | 99.44 | -32.2 | 52.6 | 62.1 | 62.1 | 0.00 | N/A | | |
| 800.0 | 799.6 | 795.4 | 795.1 | 1.4 | 1.4 | 100.97 | -30.4 | 59.9 | 68.6 | 68.6 | 0.00 | N/A | | |
| 900.0 | 898.8 | 892.4 | 891.2 | 1.6 | 1.6 | 102.91 | -27.5 | 71.9 | 79.5 | 79.5 | 0.00 | N/A | | |
| 1,000.0 | 997.1 | 988.4 | 985.8 | 2.0 | 1.9 | 104.80 | -23.5 | 88.4 | 94.9 | 94.9 | 0.00 | N/A | | |
| 1,100.0 | 1,094.4 | 1,083.4 | 1,078.3 | 2.3 | 2.3 | 106.46 | -18.5 | 109.3 | 114.5 | 114.5 | 0.00 | N/A | | |
| 1,200.0 | 1,191.3 | 1,177.4 | 1,168.6 | 2.7 | 2.7 | 106.76 | -12.5 | 134.4 | 137.3 | 137.3 | 0.00 | N/A | | |
| 1,300.0 | 1,288.3 | 1,269.9 | 1,256.3 | 3.1 | 3.3 | 105.60 | -5.5 | 163.2 | 162.7 | 162.7 | 0.00 | N/A | | |
| 1,400.0 | 1,385.3 | 1,360.7 | 1,340.8 | 3.6 | 3.9 | 103.65 | 2.3 | 195.5 | 191.0 | 191.0 | 0.00 | N/A | | |
| 1,500.0 | 1,482.2 | 1,449.4 | 1,421.7 | 4.0 | 4.5 | 101.31 | 10.8 | 230.8 | 222.2 | 222.2 | 0.00 | N/A | | |
| 1,600.0 | 1,579.2 | 1,535.7 | 1,498.7 | 4.5 | 5.3 | 98.86 | 19.9 | 268.6 | 256.6 | 256.6 | 0.00 | N/A | | |
| 1,700.0 | 1,676.2 | 1,621.7 | 1,573.8 | 4.9 | 6.1 | 96.38 | 29.8 | 309.4 | 294.1 | 294.1 | 0.00 | N/A | | |
| 1,800.0 | 1,773.1 | 1,713.3 | 1,653.1 | 5.3 | 6.9 | 94.18 | 40.5 | 353.8 | 332.8 | 332.8 | 0.00 | N/A | | |
| 1,900.0 | 1,870.1 | 1,804.8 | 1,732.4 | 5.8 | 7.8 | 92.44 | 51.2 | 398.2 | 371.8 | 371.8 | 0.00 | N/A | | |
| 2,000.0 | 1,967.1 | 1,896.3 | 1,811.7 | 6.3 | 8.7 | 91.02 | 62.0 | 442.6 | 411.1 | 411.1 | 0.00 | N/A | | |
| 2,100.0 | 2,064.1 | 1,987.8 | 1,891.1 | 6.7 | 9.6 | 89.85 | 72.7 | 487.0 | 450.6 | 450.6 | 0.00 | N/A | | |
| 2,200.0 | 2,161.0 | 2,079.4 | 1,970.4 | 7.2 | 10.4 | 88.87 | 83.4 | 531.3 | 490.2 | 490.2 | 0.00 | N/A | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design Latham 12-02 Pad - Latham H-02 - OH - Plan #1 | | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Distance | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 1.0 | 1.0 | 0.0 | 0.0 | 123.16 | -40.1 | 61.3 | 73.3 | | | | | | |
| 100.0 | 100.0 | 101.0 | 101.0 | 0.2 | 0.2 | 123.16 | -40.1 | 61.3 | 73.3 | 73.3 | 0.00 | N/A | | | |
| 200.0 | 200.0 | 201.0 | 201.0 | 0.3 | 0.3 | 123.16 | -40.1 | 61.3 | 73.3 | 73.3 | 0.00 | N/A | | | |
| 300.0 | 300.0 | 301.0 | 301.0 | 0.5 | 0.5 | 123.16 | -40.1 | 61.3 | 73.3 | 73.3 | 0.00 | N/A | | | |
| 400.0 | 400.0 | 401.0 | 401.0 | 0.7 | 0.7 | 123.16 | -40.1 | 61.3 | 73.3 | 73.3 | 0.00 | N/A | | | |
| 500.0 | 500.0 | 501.0 | 501.0 | 0.9 | 0.9 | 123.16 | -40.1 | 61.3 | 73.3 | 73.3 | 0.00 | N/A | | | |
| 566.3 | 566.3 | 567.3 | 567.3 | 1.0 | 1.0 | 123.16 | -40.1 | 61.3 | 73.3 | 73.3 | 0.00 | N/A CC, ES | | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | 123.16 | -40.1 | 61.3 | 73.3 | 73.3 | 0.00 | N/A | | | |
| 700.0 | 700.0 | 697.4 | 697.4 | 1.2 | 1.2 | 99.97 | -40.6 | 63.8 | 76.1 | 76.1 | 0.00 | N/A | | | |
| 800.0 | 799.6 | 793.5 | 793.1 | 1.4 | 1.4 | 102.88 | -42.1 | 70.9 | 84.6 | 84.6 | 0.00 | N/A | | | |
| 900.0 | 898.8 | 892.4 | 891.6 | 1.6 | 1.6 | 107.55 | -44.1 | 80.4 | 96.8 | 96.8 | 0.00 | N/A | | | |
| 1,000.0 | 997.1 | 990.6 | 989.3 | 2.0 | 1.8 | 113.50 | -46.1 | 89.9 | 111.5 | 111.5 | 0.00 | N/A | | | |
| 1,100.0 | 1,094.4 | 1,087.9 | 1,086.2 | 2.3 | 2.0 | 119.93 | -48.0 | 99.3 | 129.7 | 129.7 | 0.00 | N/A | | | |
| 1,200.0 | 1,191.3 | 1,184.9 | 1,182.7 | 2.7 | 2.3 | 125.42 | -50.0 | 108.6 | 150.0 | 150.0 | 0.00 | N/A | | | |
| 1,300.0 | 1,288.3 | 1,282.0 | 1,279.3 | 3.1 | 2.5 | 129.60 | -51.9 | 118.0 | 171.4 | 171.4 | 0.00 | N/A | | | |
| 1,400.0 | 1,385.3 | 1,379.0 | 1,375.8 | 3.6 | 2.7 | 132.85 | -53.9 | 127.3 | 193.4 | 193.4 | 0.00 | N/A | | | |
| 1,500.0 | 1,482.2 | 1,476.0 | 1,472.3 | 4.0 | 2.9 | 135.43 | -55.8 | 136.7 | 215.9 | 215.9 | 0.00 | N/A | | | |
| 1,600.0 | 1,579.2 | 1,573.0 | 1,568.9 | 4.5 | 3.2 | 137.53 | -57.8 | 146.0 | 238.7 | 238.7 | 0.00 | N/A | | | |
| 1,700.0 | 1,676.2 | 1,670.0 | 1,665.4 | 4.9 | 3.4 | 139.26 | -59.8 | 155.4 | 261.8 | 261.8 | 0.00 | N/A | | | |
| 1,800.0 | 1,773.1 | 1,767.0 | 1,762.0 | 5.3 | 3.6 | 140.71 | -61.7 | 164.7 | 285.1 | 285.1 | 0.00 | N/A | | | |
| 1,900.0 | 1,870.1 | 1,864.1 | 1,858.5 | 5.8 | 3.9 | 141.95 | -63.7 | 174.1 | 308.5 | 308.5 | 0.00 | N/A | | | |
| 2,000.0 | 1,967.1 | 1,961.1 | 1,955.1 | 6.3 | 4.1 | 143.00 | -65.6 | 183.4 | 332.1 | 332.1 | 0.00 | N/A | | | |
| 2,100.0 | 2,064.1 | 2,058.1 | 2,051.6 | 6.7 | 4.3 | 143.92 | -67.6 | 192.8 | 355.7 | 355.7 | 0.00 | N/A | | | |
| 2,200.0 | 2,161.0 | 2,155.1 | 2,148.2 | 7.2 | 4.6 | 144.73 | -69.6 | 202.1 | 379.4 | 379.4 | 0.00 | N/A | | | |
| 2,300.0 | 2,258.0 | 2,252.1 | 2,244.7 | 7.6 | 4.8 | 145.44 | -71.5 | 211.5 | 403.2 | 403.2 | 0.00 | N/A | | | |
| 2,400.0 | 2,355.0 | 2,349.2 | 2,341.3 | 8.1 | 5.0 | 146.07 | -73.5 | 220.8 | 427.0 | 427.0 | 0.00 | N/A | | | |
| 2,500.0 | 2,451.9 | 2,446.2 | 2,437.8 | 8.5 | 5.3 | 146.63 | -75.4 | 230.2 | 450.9 | 450.9 | 0.00 | N/A | | | |
| 2,600.0 | 2,548.9 | 2,543.2 | 2,534.4 | 9.0 | 5.5 | 147.14 | -77.4 | 239.5 | 474.8 | 474.8 | 0.00 | N/A | | | |
| 2,700.0 | 2,645.9 | 2,640.2 | 2,630.9 | 9.4 | 5.7 | 147.60 | -79.3 | 248.9 | 498.8 | 498.8 | 0.00 | N/A | | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design Latham 12-02 Pad - Latham L-02 - OH - Plan #1 | | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|---------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | Distance | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 1.0 | 1.0 | 0.0 | 0.0 | 120.15 | -14.6 | 25.1 | 29.0 | | | | | | |
| 100.0 | 100.0 | 101.0 | 101.0 | 0.2 | 0.2 | 120.15 | -14.6 | 25.1 | 29.0 | 29.0 | 0.00 | N/A | | | |
| 200.0 | 200.0 | 201.0 | 201.0 | 0.3 | 0.3 | 120.15 | -14.6 | 25.1 | 29.0 | 29.0 | 0.00 | N/A | | | |
| 300.0 | 300.0 | 301.0 | 301.0 | 0.5 | 0.5 | 120.15 | -14.6 | 25.1 | 29.0 | 29.0 | 0.00 | N/A | | | |
| 400.0 | 400.0 | 401.0 | 401.0 | 0.7 | 0.7 | 120.15 | -14.6 | 25.1 | 29.0 | 29.0 | 0.00 | N/A | | | |
| 500.0 | 500.0 | 501.0 | 501.0 | 0.9 | 0.9 | 120.15 | -14.6 | 25.1 | 29.0 | 29.0 | 0.00 | N/A | | | |
| 566.3 | 566.3 | 567.3 | 567.3 | 1.0 | 1.0 | 120.15 | -14.6 | 25.1 | 29.0 | 29.0 | 0.00 | N/A CC, ES | | | |
| 600.0 | 600.0 | 601.0 | 601.0 | 1.0 | 1.0 | 120.15 | -14.6 | 25.1 | 29.0 | 29.0 | 0.00 | N/A | | | |
| 700.0 | 700.0 | 700.0 | 700.0 | 1.2 | 1.2 | 96.25 | -13.2 | 27.3 | 30.5 | 30.5 | 0.00 | N/A | | | |
| 800.0 | 799.6 | 799.4 | 799.1 | 1.4 | 1.4 | 97.40 | -8.9 | 33.8 | 34.8 | 34.8 | 0.00 | N/A | | | |
| 900.0 | 898.8 | 898.4 | 897.1 | 1.6 | 1.6 | 98.81 | -1.9 | 44.6 | 42.1 | 42.1 | 0.00 | N/A | | | |
| 1,000.0 | 997.1 | 996.9 | 994.0 | 2.0 | 1.9 | 100.08 | 7.7 | 59.6 | 52.3 | 52.3 | 0.00 | N/A | | | |
| 1,100.0 | 1,094.4 | 1,094.9 | 1,089.4 | 2.3 | 2.3 | 101.01 | 20.0 | 78.6 | 65.3 | 65.3 | 0.00 | N/A | | | |
| 1,200.0 | 1,191.3 | 1,192.4 | 1,183.0 | 2.7 | 2.8 | 99.35 | 34.9 | 101.6 | 80.4 | 80.4 | 0.00 | N/A | | | |
| 1,300.0 | 1,288.3 | 1,288.9 | 1,274.0 | 3.1 | 3.4 | 95.54 | 52.1 | 128.3 | 97.6 | 97.6 | 0.00 | N/A | | | |
| 1,400.0 | 1,385.3 | 1,383.9 | 1,362.0 | 3.6 | 4.0 | 90.83 | 71.5 | 158.3 | 117.6 | 117.6 | 0.00 | N/A | | | |
| 1,500.0 | 1,482.2 | 1,478.8 | 1,448.4 | 4.0 | 4.7 | 86.01 | 93.0 | 191.5 | 140.7 | 140.7 | 0.00 | N/A | | | |
| 1,600.0 | 1,579.2 | 1,575.4 | 1,535.9 | 4.5 | 5.4 | 82.31 | 115.2 | 225.8 | 164.8 | 164.8 | 0.00 | N/A | | | |
| 1,700.0 | 1,676.2 | 1,671.9 | 1,623.4 | 4.9 | 6.2 | 79.55 | 137.3 | 260.1 | 189.5 | 189.5 | 0.00 | N/A | | | |
| 1,800.0 | 1,773.1 | 1,768.5 | 1,710.8 | 5.3 | 6.9 | 77.42 | 159.5 | 294.4 | 214.5 | 214.5 | 0.00 | N/A | | | |
| 1,900.0 | 1,870.1 | 1,865.0 | 1,798.3 | 5.8 | 7.7 | 75.74 | 181.7 | 328.7 | 239.7 | 239.7 | 0.00 | N/A | | | |
| 2,000.0 | 1,967.1 | 1,961.6 | 1,885.8 | 6.3 | 8.4 | 74.38 | 203.9 | 363.0 | 265.1 | 265.1 | 0.00 | N/A | | | |
| 2,100.0 | 2,064.1 | 2,058.2 | 1,973.3 | 6.7 | 9.2 | 73.26 | 226.0 | 397.3 | 290.6 | 290.6 | 0.00 | N/A | | | |
| 2,200.0 | 2,161.0 | 2,154.7 | 2,060.8 | 7.2 | 10.0 | 72.32 | 248.2 | 431.6 | 316.2 | 316.2 | 0.00 | N/A | | | |
| 2,300.0 | 2,258.0 | 2,251.3 | 2,148.3 | 7.6 | 10.7 | 71.52 | 270.4 | 465.9 | 341.8 | 341.8 | 0.00 | N/A | | | |
| 2,400.0 | 2,355.0 | 2,347.8 | 2,235.8 | 8.1 | 11.5 | 70.83 | 292.5 | 500.2 | 367.5 | 367.5 | 0.00 | N/A | | | |
| 2,500.0 | 2,451.9 | 2,444.4 | 2,323.3 | 8.5 | 12.3 | 70.23 | 314.7 | 534.5 | 393.3 | 393.3 | 0.00 | N/A | | | |
| 2,600.0 | 2,548.9 | 2,540.9 | 2,410.8 | 9.0 | 13.0 | 69.70 | 336.9 | 568.8 | 419.0 | 419.0 | 0.00 | N/A | | | |
| 2,700.0 | 2,645.9 | 2,637.5 | 2,498.3 | 9.4 | 13.8 | 69.23 | 359.0 | 603.1 | 444.9 | 444.9 | 0.00 | N/A | | | |
| 2,800.0 | 2,742.8 | 2,734.0 | 2,585.8 | 9.9 | 14.6 | 68.82 | 381.2 | 637.4 | 470.7 | 470.7 | 0.00 | N/A | | | |
| 2,900.0 | 2,839.8 | 2,830.6 | 2,673.2 | 10.4 | 15.3 | 68.45 | 403.4 | 671.7 | 496.5 | 496.5 | 0.00 | N/A | | | |

Cathedral Energy Services

Anticollision Report

| | | | |
|---------------------------|---|-------------------------------------|--|
| Company: | Bonanza Creek Energy Operating Company, LLC | Local Co-ordinate Reference: | Well Latham G-02 |
| Project: | Weld County | TVD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Reference Site: | Latham 12-02 Pad | MD Reference: | KB=10' @ 4539.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Latham G-02 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | USA EDM 5000 Multi Users DB |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design Latham 14-02 Pad - Latham 14-11-2HZ (Ensign) - HZ - Plan #3 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|------------------------|------------------------|------------------------|-------------------|----------------|-----------------------------|---|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | |
| 6,000.0 | 5,851.2 | 10,020.6 | 6,291.0 | 24.1 | 60.8 | -117.73 | 1,137.7 | 266.0 | 489.0 | 489.0 | 0.00 | N/A | | |
| 6,100.0 | 5,951.1 | 10,025.0 | 6,291.0 | 24.2 | 60.8 | -112.72 | 1,142.1 | 266.2 | 406.3 | 406.3 | 0.00 | N/A | | |
| 6,200.0 | 6,051.1 | 10,025.4 | 6,291.0 | 24.3 | 60.8 | -86.91 | 1,142.5 | 266.2 | 332.0 | 332.0 | 0.00 | N/A | | |
| 6,300.0 | 6,151.1 | 10,025.4 | 6,291.0 | 24.4 | 60.8 | -86.91 | 1,142.5 | 266.2 | 274.3 | 274.3 | 0.00 | N/A | | |
| 6,400.0 | 6,251.1 | 10,025.4 | 6,291.0 | 24.4 | 60.8 | -86.91 | 1,142.5 | 266.2 | 245.5 | 245.5 | 0.00 | N/A | | |
| 6,424.9 | 6,276.0 | 10,025.4 | 6,291.0 | 24.5 | 60.8 | -86.91 | 1,142.5 | 266.2 | 244.2 | 244.2 | 0.00 | N/A CC, ES | | |
| 6,500.0 | 6,351.1 | 10,025.4 | 6,291.0 | 24.5 | 60.8 | -86.91 | 1,142.5 | 266.2 | 255.5 | 255.5 | 0.00 | N/A | | |
| 6,600.0 | 6,451.1 | 10,025.4 | 6,291.0 | 24.6 | 60.8 | -86.91 | 1,142.5 | 266.2 | 300.5 | 300.5 | 0.00 | N/A | | |
| 6,700.0 | 6,551.1 | 10,025.4 | 6,291.0 | 24.7 | 60.8 | -86.91 | 1,142.5 | 266.2 | 367.9 | 367.9 | 0.00 | N/A | | |
| 6,757.9 | 6,609.0 | 10,025.4 | 6,291.0 | 24.7 | 60.8 | -86.91 | 1,142.5 | 266.2 | 413.0 | 413.0 | 0.00 | N/A | | |

Cathedral Energy Services

Anticollision Report

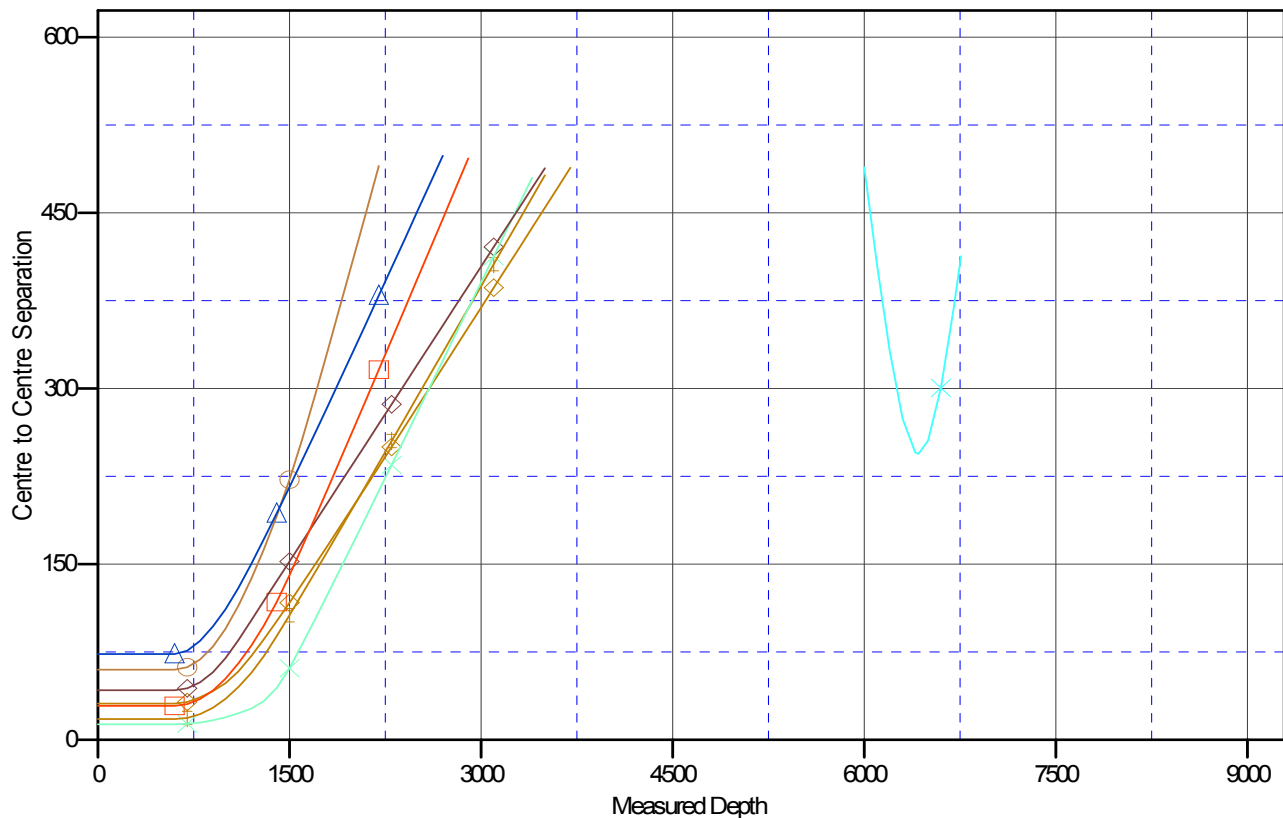
Company: Bonanza Creek Energy Operating Company, LLC
Project: Weld County
Reference Site: Latham 12-02 Pad
Site Error: 0.0ft
Reference Well: Latham G-02
Well Error: 0.0ft
Reference Wellbore: OH
Reference Design: Plan #1

Local Co-ordinate Reference: Well Latham G-02
TVD Reference: KB=10' @ 4539.0ft (Original Well Elev)
MD Reference: KB=10' @ 4539.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB=10' @ 4539.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Latham G-02
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.70°

Ladder Plot



LEGEND

- Latham 11-02, OH, Plan #1 V0
- Latham 12-02, OH, Plan #1 V0
- Latham 21-02, OH, Plan #1 V0
- Latham 22-02, OH, Plan #1 V0
- Latham 32-02, OH, Plan #1 V0
- Latham H-02, OH, Plan #1 V0
- Latham L-02, OH, Plan #1 V0
- Latham 14-11-2HZ (Ensign), HZ, Plan #3 V0