



Project: Mesa County, CO
 Site: Gunderson 13-11 Pad
 Well: Gunderson 0994-13-15W
 Wellbore: Wellbore #1
 Design: Design #1
 Latitude: 39.273795
 Longitude: -107.834974
 Ground Level: 7272.0
 well @ 7302.0usft (H&P #522)



PROJECT DETAILS: Mesa County, CO

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

SECTION DETAILS

| MD | Inc | Azi | TVD | +N-S | +E-W | Diag | TFace | VSecl | Annotation |
|--------|------|--------|--------|------|-------|------|--------|-------|--------------------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | KOP (Build 3" / 100') |
| 832.6 | 0.98 | 320.47 | 832.8 | 0.2 | -0.2 | 3.00 | 320.47 | 0.3 | EOB @ 0.98" Inc. / 320.47" Azm |
| 6700.0 | 0.98 | 320.47 | 6699.2 | 64.6 | -63.3 | 0.00 | 0.00 | 83.8 | Drop 3" / 100' |
| 6732.7 | 0.00 | 0.00 | 6732.0 | 64.6 | -63.5 | 3.00 | 180.00 | 84.1 | EOD @ Vertical |
| 7582.7 | 0.00 | 0.00 | 7582.0 | 64.6 | -63.5 | 0.00 | 0.00 | 84.1 | TD @ 7582.7" MD / 7582.0" TVD |

DESIGN TARGET DETAILS

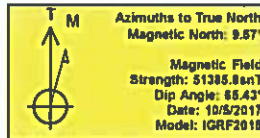
| Name | TVD | +N-S | +E-W | Northing | Easting | Latitude | Longitude |
|------------------------------|--------|------|-------|------------|------------|-----------|-------------|
| PBHL - Gunderson 0994-13-15W | 7582.0 | 64.6 | -63.5 | 1833173.91 | 2339010.90 | 39.273793 | -107.835163 |

WELL DETAILS: Gunderson 0994-13-15W

| | | 7272.0 | | | | | |
|------|------|------------|------------|-----------|-------------|--|--|
| +N-S | +E-W | Northing | Easting | Latitude | Longitude | | |
| 0.0 | 0.0 | 1833107.72 | 2339061.82 | 39.273795 | -107.834974 | | |

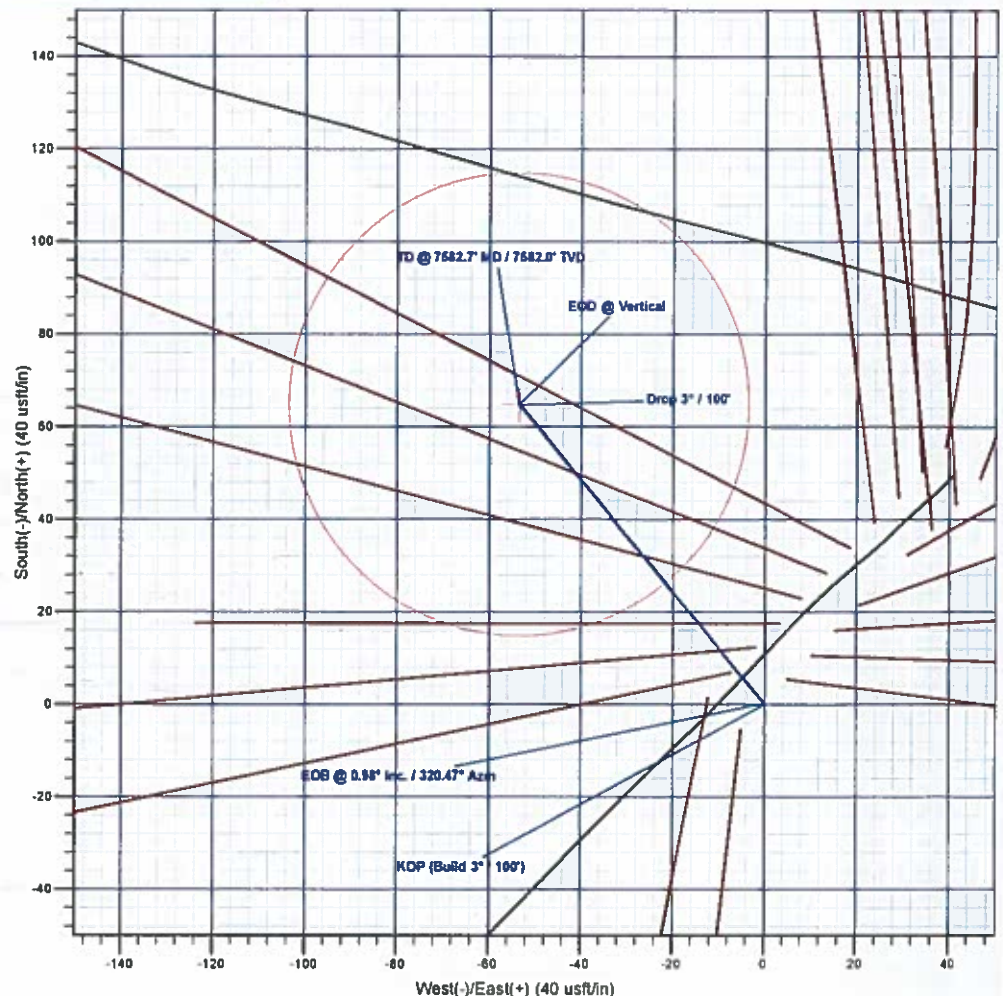
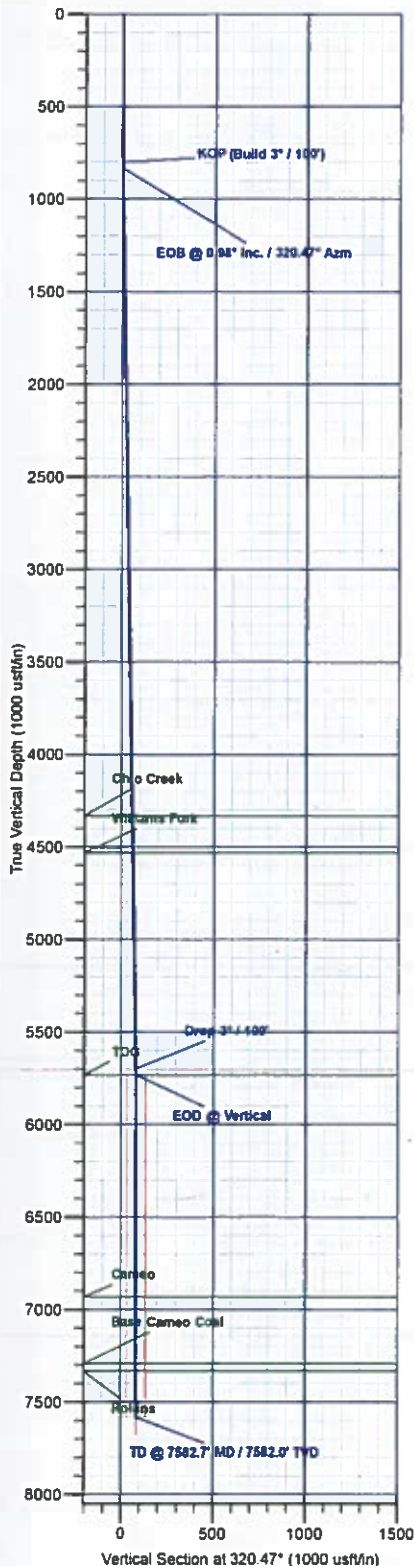
REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Gunderson 0994-13-15W, True North
 Vertical (TVD) Reference: well @ 7302.0usft (H&P #522)
 Section (VS) Reference: Slot -(0.0N, 0.0E)
 Measured Depth Reference: well @ 7302.0usft (H&P #522)
 Calculation Method: Minimum Curvature



FORMATION TOP DETAILS

| TVDPth | MDPth | Formation |
|--------|--------|-----------------|
| 4332.0 | 4332.6 | Ohio Creek |
| 4532.0 | 4532.6 | Williams Fork |
| 5732.0 | 5732.7 | TOG |
| 6932.0 | 6932.7 | Cameo |
| 7282.0 | 7282.7 | Base Cameo Coal |
| 7332.0 | 7332.7 | Rollins |



Plan: Design #1 (Gunderson 0994-13-15W/Wellbore #1)

Created By: Will Jircik

Date: 14:44, October 10 2017



Laramie Energy, LLC

Mesa County, CO

Gunderson 13-11 Pad

Gunderson 0994-13-15W

Wellbore #1

Plan: Design #1

QES Well Planning Report

10 October, 2017





Well Planning Report



| | | | |
|------------------|---------------------------|-------------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well Gunderson 0894-13-15W |
| Company: | Laramie Energy, LLC | TVD Reference: | well @ 7302.0usft (H&P #522) |
| Project: | Mesa County, CO | MD Reference: | well @ 7302.0usft (H&P #522) |
| Site: | Gunderson 13-11 Pad | North Reference: | True |
| Well: | Gunderson 0894-13-15W | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

| | | | |
|-------------|---------------------------|---------------|----------------|
| 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 | | Gunderson 13-11 Pad | | | |
| Site Position: | | Northing: | 1,533,162.26 usft | Latitude: | 39.273948 |
| From: | Lat/Long | Easting: | 2,339,102.68 usft | Longitude: | -107.834835 |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | -1.47 " |

| | | | | | | |
|----------------------|-----------------------|------------|---------------------|-------------------|---------------|--------------|
| Well | Gunderson 0994-13-15W | | | | | |
| Well Position | +N/-S | -55.6 usft | Northing: | 1,533,107.72 usft | Latitude: | 39.273795 |
| | +E/-W | -39.4 usft | Easting: | 2,339,061.83 usft | Longitude: | -107.834974 |
| Position Uncertainty | | 0.0 usft | Wellhead Elevation: | | Ground Level: | 7,272.0 usft |

| | | | | | |
|-----------|-------------|-------------|-----------------|---------------|---------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2015 | 10/5/2017 | 9.57 | 65.43 | 51,385.78551367 |

| | | | | |
|-------------------|----------------------------|-----------------|-----------------|------------------|
| Design | Design #1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 320.47 |

| Plan Sections | | | | | | | | | | |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|---------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Buidl Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 832.8 | 0.98 | 320.47 | 832.8 | 0.2 | -0.2 | 3.00 | 3.00 | 0.00 | 320.47 | |
| 5,700.0 | 0.98 | 320.47 | 5,699.2 | 64.6 | -53.3 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,732.7 | 0.00 | 0.00 | 5,732.0 | 64.8 | -53.5 | 3.00 | -3.00 | 0.00 | 180.00 | |
| 7,582.7 | 0.00 | 0.00 | 7,582.0 | 64.8 | -53.5 | 0.00 | 0.00 | 0.00 | 0.00 | PBHL - Gunderson 08 |



Well Planning Report



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|-----------|---------------------------|------------------------------|------------------------------|
| Database: | EDM 5000 1 Single User Db | Local Co-ordinate Reference: | Well Gunderson 0994-13-15W |
| Company: | Laramie Energy, LLC | TVD Reference: | well @ 7302 0usft (H&P #522) |
| Project: | Mesa County, CO | MD Reference: | well @ 7302 0usft (H&P #522) |
| Site: | Gunderson 13-11 Pad | North Reference: | True |
| Well: | Gunderson 0994-13-15W | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| KOP (Build 3° / 100') | | | | | | | | | |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| EOB @ 0.98° Inc. / 320.47° Azm | | | | | | | | | |
| 832.8 | 0.98 | 320.47 | 832.8 | 0.2 | -0.2 | 0.3 | 3.00 | 3.00 | 0.00 |
| 900.0 | 0.98 | 320.47 | 900.0 | 1.1 | -0.9 | 1.4 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 0.98 | 320.47 | 1,000.0 | 2.4 | -2.0 | 3.2 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 0.98 | 320.47 | 1,100.0 | 3.8 | -3.1 | 4.9 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 0.98 | 320.47 | 1,199.9 | 5.1 | -4.2 | 6.6 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 0.98 | 320.47 | 1,299.9 | 6.4 | -5.3 | 8.3 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 0.98 | 320.47 | 1,399.9 | 7.7 | -6.4 | 10.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 0.98 | 320.47 | 1,499.9 | 9.0 | -7.5 | 11.7 | 0.00 | 0.00 | 0.00 |
| 8 5/8" | | | | | | | | | |
| 1,530.0 | 0.98 | 320.47 | 1,529.9 | 9.4 | -7.8 | 12.2 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 0.98 | 320.47 | 1,599.9 | 10.4 | -8.6 | 13.4 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 0.98 | 320.47 | 1,699.9 | 11.7 | -9.6 | 15.2 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 0.98 | 320.47 | 1,799.9 | 13.0 | -10.7 | 16.9 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 0.98 | 320.47 | 1,899.8 | 14.3 | -11.8 | 18.6 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 0.98 | 320.47 | 1,999.8 | 15.7 | -12.9 | 20.3 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 0.98 | 320.47 | 2,099.8 | 17.0 | -14.0 | 22.0 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 0.98 | 320.47 | 2,199.8 | 18.3 | -15.1 | 23.7 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 0.98 | 320.47 | 2,299.8 | 19.6 | -16.2 | 25.5 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 0.98 | 320.47 | 2,399.8 | 21.0 | -17.3 | 27.2 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 0.98 | 320.47 | 2,499.8 | 22.3 | -18.4 | 28.9 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 0.98 | 320.47 | 2,599.7 | 23.6 | -19.5 | 30.6 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 0.98 | 320.47 | 2,699.7 | 24.9 | -20.6 | 32.3 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 0.98 | 320.47 | 2,799.7 | 26.2 | -21.7 | 34.0 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 0.98 | 320.47 | 2,899.7 | 27.6 | -22.8 | 35.7 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 0.98 | 320.47 | 2,999.7 | 28.9 | -23.8 | 37.5 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 0.98 | 320.47 | 3,099.7 | 30.2 | -24.9 | 39.2 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 0.98 | 320.47 | 3,199.6 | 31.5 | -26.0 | 40.9 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 0.98 | 320.47 | 3,299.6 | 32.9 | -27.1 | 42.6 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 0.98 | 320.47 | 3,399.6 | 34.2 | -28.2 | 44.3 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 0.98 | 320.47 | 3,499.6 | 35.5 | -29.3 | 46.0 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 0.98 | 320.47 | 3,599.6 | 36.8 | -30.4 | 47.8 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 0.98 | 320.47 | 3,699.6 | 38.2 | -31.5 | 49.5 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 0.98 | 320.47 | 3,799.6 | 39.5 | -32.6 | 51.2 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 0.98 | 320.47 | 3,899.5 | 40.8 | -33.7 | 52.9 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 0.98 | 320.47 | 3,999.5 | 42.1 | -34.8 | 54.6 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 0.98 | 320.47 | 4,099.5 | 43.5 | -35.9 | 56.3 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 0.98 | 320.47 | 4,199.5 | 44.8 | -36.9 | 58.1 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 0.98 | 320.47 | 4,299.5 | 46.1 | -38.0 | 59.8 | 0.00 | 0.00 | 0.00 |
| Ohio Creek | | | | | | | | | |
| 4,332.5 | 0.98 | 320.47 | 4,332.0 | 46.5 | -38.4 | 60.3 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 0.98 | 320.47 | 4,399.5 | 47.4 | -39.1 | 61.5 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 0.98 | 320.47 | 4,499.5 | 48.7 | -40.2 | 63.2 | 0.00 | 0.00 | 0.00 |
| Williams Fork | | | | | | | | | |



Well Planning Report



| | | | |
|-----------|---------------------------|------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well Gunderson 0994-13-15W |
| Company: | Laramie Energy, LLC | TVD Reference: | well @ 7302.0usft (H&P #522) |
| Project: | Mesa County, CO | MD Reference: | well @ 7302.0usft (H&P #522) |
| Site: | Gunderson 13-11 Pad | North Reference: | True |
| Well: | Gunderson 0994-13-15W | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

Planned Survey

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| 4,532.5 | 0.98 | 320.47 | 4,532.0 | 49.2 | -40.6 | 63.8 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 0.98 | 320.47 | 4,599.4 | 50.1 | -41.3 | 64.9 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 0.98 | 320.47 | 4,699.4 | 51.4 | -42.4 | 66.6 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 0.98 | 320.47 | 4,799.4 | 52.7 | -43.5 | 68.3 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 0.98 | 320.47 | 4,899.4 | 54.0 | -44.6 | 70.1 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 0.98 | 320.47 | 4,999.4 | 55.4 | -45.7 | 71.8 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 0.98 | 320.47 | 5,099.4 | 56.7 | -46.8 | 73.5 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 0.98 | 320.47 | 5,199.4 | 58.0 | -47.9 | 75.2 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 0.98 | 320.47 | 5,299.3 | 59.3 | -49.0 | 76.9 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 0.98 | 320.47 | 5,399.3 | 60.7 | -50.0 | 78.6 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 0.98 | 320.47 | 5,499.3 | 62.0 | -51.1 | 80.4 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 0.98 | 320.47 | 5,599.3 | 63.3 | -52.2 | 82.1 | 0.00 | 0.00 | 0.00 |
| Drop 3" / 100' | | | | | | | | | |
| 5,700.0 | 0.98 | 320.47 | 5,699.2 | 64.6 | -53.3 | 83.8 | 0.00 | 0.00 | 0.00 |
| EOD @ Vertical - TOG | | | | | | | | | |
| 5,732.7 | 0.00 | 0.00 | 5,732.0 | 64.8 | -53.5 | 84.1 | 3.00 | -3.00 | 0.00 |
| 5,800.0 | 0.00 | 0.00 | 5,799.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 0.00 | 0.00 | 5,899.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 0.00 | 0.00 | 5,999.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 0.00 | 0.00 | 6,099.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 0.00 | 0.00 | 6,199.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 0.00 | 0.00 | 6,299.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 0.00 | 0.00 | 6,399.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 0.00 | 0.00 | 6,499.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 0.00 | 0.00 | 6,599.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 0.00 | 0.00 | 6,699.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 0.00 | 0.00 | 6,799.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 0.00 | 0.00 | 6,899.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| Cameo | | | | | | | | | |
| 6,932.7 | 0.00 | 0.00 | 6,932.0 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 0.00 | 0.00 | 6,999.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 7,100.0 | 0.00 | 0.00 | 7,099.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 0.00 | 0.00 | 7,199.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| Base Cameo Coal | | | | | | | | | |
| 7,292.7 | 0.00 | 0.00 | 7,292.0 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 0.00 | 0.00 | 7,299.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| Rollins | | | | | | | | | |
| 7,332.7 | 0.00 | 0.00 | 7,332.0 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 0.00 | 0.00 | 7,399.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 0.00 | 0.00 | 7,499.3 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |
| TD @ 7582.7' MD / 7582.0' TVD | | | | | | | | | |
| 7,582.7 | 0.00 | 0.00 | 7,582.0 | 64.8 | -53.5 | 84.1 | 0.00 | 0.00 | 0.00 |

Design Targets

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|--|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| PBHL - Gunderson 0994 - plan hits target center - Circle (radius 50.0) | 0.00 | 0.00 | 7,582.0 | 64.8 | -53.5 | 1,533,173.92 | 2,339,010.01 | 39.273973 | -107.835163 |



Well Planning Report



| | | | |
|------------------|---------------------------|-------------------------------------|------------------------------|
| Database: | EDM 5000.1 Single User Db | Local Co-ordinate Reference: | Well Gunderson 0994-13-15W |
| Company: | Laramie Energy, LLC | TVD Reference: | well @ 7302.0usft (H&P #522) |
| Project: | Mesa County, CO | MD Reference: | well @ 7302.0usft (H&P #522) |
| Site: | Gunderson 13-11 Pad | North Reference: | True |
| Well: | Gunderson 0994-13-15W | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

Casing Points

| Measured Depth (usft) | Vertical Depth (usft) | Name | Casing Diameter (") | Hole Diameter (") |
|-----------------------|-----------------------|--------|---------------------|-------------------|
| 1,530.0 | 1,529.9 | 8 5/8" | 8-5/8 | 11 |

Formations

| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|-----------------|-----------|---------|-------------------|
| 4,332.5 | 4,332.0 | Ohio Creek | | | |
| 4,532.5 | 4,532.0 | Williams Fork | | | |
| 5,732.7 | 5,732.0 | TOG | | | |
| 6,932.7 | 6,932.0 | Cameo | | | |
| 7,292.7 | 7,292.0 | Base Cameo Coal | | | |
| 7,332.7 | 7,332.0 | Rollins | | | |

Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------|-----------------------|-------------------|--------------|--------------------------------|
| | | +N/-S (usft) | +E/-W (usft) | |
| 800.0 | 800.0 | 0.0 | 0.0 | KOP (Build 3" / 100') |
| 832.8 | 832.8 | 0.2 | -0.2 | EOB @ 0.98" Inc. / 320.47" Azm |
| 5,700.0 | 5,699.2 | 64.6 | -53.3 | Drop 3" / 100' |
| 5,732.7 | 5,732.0 | 64.8 | -53.5 | EOD @ Vertical |
| 7,582.7 | 7,582.0 | 64.8 | -53.5 | TD @ 7582.7' MD / 7582.0' TVD |