



Laramie Energy, LLC

**Mesa County, CO
Currier 0993-16-07 Pad
Currier 0993-16-01M**

**OH
Design #3**

KLX Anticollision Report

23 September, 2025





Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---|-----------------------|---------------------|
| Reference | Design #3 | | |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| Interpolation Method: | MD Interval 100.0usft | Error Model: | ISCWSA |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum ellipse separation of 1,000.0 usft | Error Surface: | Pedal Curve |
| Warning Levels Evaluated at: | 2.00 Sigma | | |

| | | | | |
|----------------------------|------------------|--------------------------|--------------------|---------------------|
| Survey Tool Program | Date | 9/23/2025 | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 0.0 | 9,067.2 | Design #3 (OH) | OWSG (REV5) MWD HD | OWSG MWD - Standard |

| Summary | | | | | | |
|--|---------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| Currier 0993-16-07 Pad | | | | | | |
| (Offset) Buzzard Creek 15-12 - Wellbore #1 - Wellbore # | 147.7 | 7.3 | 2,727.9 | 2,726.8 | 2,384.053 | CC |
| (Offset) Buzzard Creek 15-12 - Wellbore #1 - Wellbore # | 300.0 | 151.2 | 2,729.3 | 2,726.1 | 851.025 | ES |
| (Offset) Buzzard Creek 15-12 - Wellbore #1 - Wellbore # | 8,980.6 | 8,610.0 | 4,539.5 | 4,472.3 | 67.625 | SF |
| (Offset) Buzzard Creek 16-1 - Wellbore #1 - Wellbore #1 | 2,000.0 | 1,913.3 | 1,895.0 | 1,867.7 | 69.317 | CC |
| (Offset) Buzzard Creek 16-1 - Wellbore #1 - Wellbore #1 | 2,100.0 | 2,005.1 | 1,895.4 | 1,867.2 | 67.122 | ES |
| (Offset) Buzzard Creek 16-1 - Wellbore #1 - Wellbore #1 | 8,900.0 | 8,590.0 | 1,985.8 | 1,918.1 | 29.311 | SF |
| (Offset) Buzzard Creek 16-10 - Wellbore #1 - Wellbore # | 200.0 | 61.1 | 2,713.9 | 2,712.2 | 1,517.478 | CC |
| (Offset) Buzzard Creek 16-10 - Wellbore #1 - Wellbore # | 300.0 | 162.6 | 2,715.0 | 2,711.9 | 887.038 | ES |
| (Offset) Buzzard Creek 16-10 - Wellbore #1 - Wellbore # | 8,900.0 | 8,710.9 | 3,189.6 | 3,115.8 | 43.246 | SF |
| (Offset) Buzzard Creek 16-12 - Wellbore #1 - Wellbore # | 209.6 | 0.0 | 2,594.2 | 2,592.8 | 1,773.756 | CC |
| (Offset) Buzzard Creek 16-12 - Wellbore #1 - Wellbore # | 400.0 | 145.5 | 2,598.5 | 2,592.1 | 404.136 | ES |
| (Offset) Buzzard Creek 16-12 - Wellbore #1 - Wellbore # | 8,900.0 | 8,325.0 | 3,630.6 | 3,552.8 | 46.687 | SF |
| (Offset) Buzzard Creek 16-8 - Wellbore #1 - Wellbore #1 | 2,256.2 | 2,256.9 | 1,868.7 | 1,849.5 | 97.653 | CC |
| (Offset) Buzzard Creek 16-8 - Wellbore #1 - Wellbore #1 | 2,300.0 | 2,294.8 | 1,868.8 | 1,849.3 | 95.834 | ES |
| (Offset) Buzzard Creek 16-8 - Wellbore #1 - Wellbore #1 | 8,100.0 | 7,820.0 | 2,630.5 | 2,573.0 | 45.697 | SF |
| (Offset) Buzzard Creek 21-1 - Wellbore #1 - Wellbore #1 | 140.0 | 0.0 | 2,700.1 | 2,699.0 | 2,593.458 | CC |
| (Offset) Buzzard Creek 21-1 - Wellbore #1 - Wellbore #1 | 200.0 | 56.2 | 2,700.1 | 2,698.4 | 1,562.355 | ES |
| (Offset) Buzzard Creek 21-1 - Wellbore #1 - Wellbore #1 | 4,900.0 | 2,979.8 | 4,962.4 | 4,925.4 | 134.108 | SF |
| (Offset) Currier 9-15 - Wellbore #1 - Wellbore #1 | 2,727.6 | 2,355.6 | 631.1 | 605.7 | 24.837 | CC, ES |
| (Offset) Currier 9-15 - Wellbore #1 - Wellbore #1 | 5,300.0 | 4,909.8 | 767.0 | 712.8 | 14.156 | SF |
| (Offset) Currier Family 16-3 - Wellbore #1 - Wellbore #1 | 3,872.5 | 3,601.0 | 300.1 | 260.9 | 7.653 | CC |
| (Offset) Currier Family 16-3 - Wellbore #1 - Wellbore #1 | 3,900.0 | 3,626.3 | 300.3 | 260.8 | 7.601 | ES |
| (Offset) Currier Family 16-3 - Wellbore #1 - Wellbore #1 | 4,000.0 | 3,718.8 | 303.9 | 263.4 | 7.502 | SF |
| Currier 0993-16-03M - OH - Design #2 | 200.0 | 200.0 | 10.0 | 7.2 | 3.532 | CC, ES |
| Currier 0993-16-03M - OH - Design #2 | 500.0 | 500.6 | 17.8 | 10.7 | 2.512 | SF |
| Currier 0993-16-04M - OH - Design #4 | 200.0 | 200.0 | 20.0 | 17.2 | 7.072 | CC, ES |
| Currier 0993-16-04M - OH - Design #4 | 400.0 | 400.2 | 24.9 | 19.7 | 4.828 | SF |
| Currier BCU 0993-16-05M - OH - Design #2 | 200.0 | 200.0 | 40.0 | 37.2 | 14.135 | CC, ES |
| Currier BCU 0993-16-05M - OH - Design #2 | 500.0 | 499.5 | 53.1 | 46.6 | 8.065 | SF |
| Currier BCU 0993-16-06W - OH - Design #3 | 200.0 | 200.0 | 50.0 | 47.2 | 17.674 | CC, ES |
| Currier BCU 0993-16-06W - OH - Design #3 | 500.0 | 499.2 | 63.1 | 56.7 | 9.888 | SF |
| Currier BCU 0993-16-07M - OH - Design #2 | 200.0 | 200.0 | 60.0 | 57.2 | 21.206 | CC, ES |
| Currier BCU 0993-16-07M - OH - Design #2 | 600.0 | 595.4 | 87.3 | 79.6 | 11.264 | SF |
| Currier BCU 0993-16-08M - OH - Design #3 | 200.0 | 200.0 | 79.9 | 77.1 | 28.247 | CC, ES |
| Currier BCU 0993-16-08M - OH - Design #3 | 600.0 | 598.7 | 103.2 | 95.6 | 13.674 | SF |
| Currier BCU 0993-16-09M - OH - Design #2 | 200.0 | 200.0 | 60.8 | 58.0 | 21.500 | CC, ES |
| Currier BCU 0993-16-09M - OH - Design #2 | 500.0 | 493.3 | 83.6 | 76.0 | 10.939 | SF |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|--|---------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| Currier 0993-16-07 Pad | | | | | | |
| Currier BCU 0993-16-11E - OH - Design #3 | 200.0 | 200.0 | 10.1 | 7.3 | 3.572 | CC, ES |
| Currier BCU 0993-16-11E - OH - Design #3 | 300.0 | 299.4 | 13.4 | 9.1 | 3.159 | SF |
| Currier BCU 0993-16-13E - OH - Design #3 | 200.0 | 200.0 | 14.1 | 11.3 | 4.999 | CC, ES |
| Currier BCU 0993-16-13E - OH - Design #3 | 400.0 | 398.7 | 24.8 | 18.7 | 4.094 | SF |
| Currier BCU 0993-16-13W - OH - Design #2 | 200.0 | 200.0 | 70.7 | 67.9 | 24.997 | CC, ES |
| Currier BCU 0993-16-13W - OH - Design #2 | 500.0 | 489.0 | 99.2 | 90.8 | 11.807 | SF |
| Currier BCU 0993-16-14E - OH - Design #2 | 108.4 | 108.4 | 22.4 | 20.7 | 13.312 | CC |
| Currier BCU 0993-16-14E - OH - Design #2 | 200.0 | 199.9 | 22.4 | 19.8 | 8.461 | ES |
| Currier BCU 0993-16-14E - OH - Design #2 | 400.0 | 397.3 | 37.1 | 30.2 | 5.369 | SF |
| Currier BCU 0993-16-14W - OH - Design #3 | 200.0 | 200.0 | 51.0 | 48.2 | 18.024 | CC, ES |
| Currier BCU 0993-16-14W - OH - Design #3 | 400.0 | 395.3 | 64.5 | 57.8 | 9.609 | SF |
| Currier BCU 0993-16-15E - OH - Design #3 | 200.0 | 200.0 | 31.6 | 28.8 | 11.178 | CC, ES |
| Currier BCU 0993-16-15E - OH - Design #3 | 400.0 | 397.3 | 44.1 | 37.6 | 6.754 | SF |
| Currier BCU 0993-16-15W - OH - Design #2 | 113.0 | 113.0 | 41.2 | 39.5 | 23.701 | CC |
| Currier BCU 0993-16-15W - OH - Design #2 | 200.0 | 199.9 | 41.2 | 38.5 | 15.092 | ES |
| Currier BCU 0993-16-15W - OH - Design #2 | 400.0 | 396.3 | 54.6 | 47.8 | 8.009 | SF |
| Currier BCU Fed 0993-16-12W - OH - Design #3 | 113.0 | 113.0 | 80.6 | 78.9 | 46.355 | CC |
| Currier BCU Fed 0993-16-12W - OH - Design #3 | 200.0 | 199.7 | 80.7 | 77.9 | 29.512 | ES |
| Currier BCU Fed 0993-16-12W - OH - Design #3 | 400.0 | 393.7 | 93.7 | 87.2 | 14.378 | SF |

| Offset Design | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|-------------------------------------|-------------------------------------|---------------------------------|----------------------------------|--------------------|----------|
| Currier 0993-16-07 Pad - (Offset) Buzzard Creek 15-12 - Wellbore #1 - Wellbore #1 | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Survey Program: 219-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | Offset Wellbore Centre +E/-W (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 135.06 | -1,930.8 | 1,927.0 | 2,731.5 | | | |
| 100.0 | 100.0 | 0.0 | 0.0 | 0.8 | 0.0 | 135.06 | -1,930.8 | 1,927.0 | 2,728.2 | 2,727.4 | 3,441.629 | |
| 147.7 | 147.7 | 7.3 | 7.3 | 1.1 | 0.1 | 135.06 | -1,930.8 | 1,927.0 | 2,727.9 | 2,726.8 | 2,384.053 | CC |
| 200.0 | 200.0 | 56.7 | 56.7 | 1.4 | 0.4 | 135.06 | -1,930.9 | 1,927.0 | 2,728.0 | 2,726.1 | 1,479.887 | |
| 300.0 | 300.0 | 151.2 | 151.2 | 2.3 | 1.1 | 130.07 | -1,931.1 | 1,927.1 | 2,729.3 | 2,726.1 | 851.025 | ES |
| 400.0 | 399.8 | 239.2 | 239.2 | 3.5 | 1.8 | 130.08 | -1,931.5 | 1,927.3 | 2,733.1 | 2,728.6 | 597.189 | |
| 500.0 | 499.5 | 311.7 | 311.7 | 4.4 | 2.2 | 130.07 | -1,931.9 | 1,928.1 | 2,740.0 | 2,734.5 | 496.114 | |
| 600.0 | 598.7 | 490.2 | 490.2 | 5.2 | 2.9 | 130.26 | -1,930.1 | 1,928.9 | 2,746.9 | 2,740.2 | 407.756 | |
| 700.0 | 697.5 | 546.6 | 546.6 | 5.8 | 3.0 | 134.34 | -1,929.3 | 1,929.4 | 2,757.1 | 2,749.6 | 367.941 | |
| 800.0 | 795.7 | 625.0 | 624.9 | 6.5 | 3.4 | 137.11 | -1,928.4 | 1,931.6 | 2,771.8 | 2,763.3 | 328.307 | |
| 900.0 | 893.2 | 735.5 | 735.3 | 7.1 | 3.9 | 139.14 | -1,925.5 | 1,935.6 | 2,789.1 | 2,779.6 | 294.497 | |
| 1,000.0 | 989.9 | 814.5 | 814.1 | 7.7 | 4.1 | 140.59 | -1,923.0 | 1,939.3 | 2,809.8 | 2,799.6 | 275.852 | |
| 1,100.0 | 1,085.7 | 898.1 | 897.6 | 8.2 | 4.2 | 141.70 | -1,920.5 | 1,943.9 | 2,834.1 | 2,823.2 | 260.107 | |
| 1,200.0 | 1,180.4 | 1,002.4 | 1,001.6 | 8.8 | 4.4 | 142.61 | -1,916.5 | 1,950.4 | 2,861.4 | 2,849.8 | 245.100 | |
| 1,300.0 | 1,273.9 | 1,097.6 | 1,096.6 | 9.4 | 4.7 | 143.33 | -1,912.7 | 1,956.3 | 2,891.6 | 2,879.1 | 232.013 | |
| 1,400.0 | 1,366.2 | 1,188.2 | 1,187.0 | 9.9 | 4.9 | 143.90 | -1,909.1 | 1,961.9 | 2,924.7 | 2,911.5 | 221.558 | |
| 1,500.0 | 1,457.2 | 1,293.7 | 1,292.1 | 10.3 | 5.3 | 144.38 | -1,904.7 | 1,968.6 | 2,960.7 | 2,946.8 | 213.536 | |
| 1,600.0 | 1,547.7 | 1,424.0 | 1,421.9 | 10.7 | 5.8 | 144.81 | -1,896.9 | 1,977.1 | 2,996.2 | 2,981.6 | 205.121 | |
| 1,700.0 | 1,638.3 | 1,500.0 | 1,497.7 | 11.1 | 6.1 | 145.05 | -1,892.3 | 1,982.0 | 3,031.7 | 3,016.5 | 199.129 | |
| 1,800.0 | 1,728.8 | 1,597.6 | 1,594.8 | 11.4 | 6.5 | 145.36 | -1,886.7 | 1,988.3 | 3,067.6 | 3,051.7 | 192.706 | |
| 1,900.0 | 1,819.4 | 1,696.1 | 1,693.0 | 11.8 | 6.9 | 145.66 | -1,880.6 | 1,994.6 | 3,103.3 | 3,086.7 | 186.697 | |
| 2,000.0 | 1,910.0 | 1,787.6 | 1,784.1 | 12.3 | 7.3 | 145.93 | -1,874.9 | 2,000.5 | 3,139.0 | 3,121.6 | 181.330 | |
| 2,100.0 | 2,000.5 | 1,869.8 | 1,865.9 | 12.7 | 7.6 | 146.17 | -1,869.8 | 2,006.0 | 3,174.9 | 3,156.9 | 176.592 | |
| 2,200.0 | 2,091.1 | 1,958.0 | 1,953.8 | 13.1 | 8.0 | 146.42 | -1,864.5 | 2,012.0 | 3,211.1 | 3,192.4 | 171.990 | |
| 2,300.0 | 2,181.6 | 2,044.2 | 2,039.7 | 13.6 | 8.3 | 146.65 | -1,859.3 | 2,018.0 | 3,247.4 | 3,228.1 | 167.749 | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft | |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|-----------------------------|--------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|--|
| Survey Program: 219-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 2,400.0 | 2,272.2 | 2,122.9 | 2,118.0 | 14.0 | 8.6 | 146.86 | -1,854.8 | 2,023.7 | 3,284.1 | 3,264.1 | 163.996 | | | |
| 2,500.0 | 2,362.8 | 2,207.9 | 2,202.6 | 14.5 | 9.0 | 147.09 | -1,850.1 | 2,030.0 | 3,321.2 | 3,300.5 | 160.326 | | | |
| 2,600.0 | 2,453.3 | 2,291.7 | 2,286.1 | 15.0 | 9.3 | 147.30 | -1,845.7 | 2,036.2 | 3,358.5 | 3,337.1 | 156.915 | | | |
| 2,700.0 | 2,543.9 | 2,370.7 | 2,364.7 | 15.5 | 9.6 | 147.50 | -1,841.8 | 2,042.2 | 3,396.1 | 3,374.0 | 153.838 | | | |
| 2,800.0 | 2,634.4 | 2,498.0 | 2,491.4 | 16.0 | 10.1 | 147.82 | -1,835.0 | 2,051.9 | 3,433.6 | 3,410.7 | 149.875 | | | |
| 2,900.0 | 2,725.0 | 2,596.4 | 2,589.5 | 16.5 | 10.5 | 148.05 | -1,829.2 | 2,059.1 | 3,470.4 | 3,446.8 | 146.730 | | | |
| 3,000.0 | 2,815.6 | 2,684.8 | 2,677.5 | 17.1 | 10.9 | 148.26 | -1,823.9 | 2,065.4 | 3,507.3 | 3,482.9 | 143.968 | | | |
| 3,100.0 | 2,906.1 | 2,770.0 | 2,762.2 | 17.8 | 11.2 | 148.45 | -1,818.7 | 2,071.9 | 3,544.4 | 3,519.3 | 141.430 | | | |
| 3,200.0 | 2,996.7 | 2,862.6 | 2,854.4 | 18.4 | 11.6 | 148.65 | -1,813.2 | 2,079.0 | 3,581.5 | 3,555.8 | 138.885 | | | |
| 3,300.0 | 3,087.2 | 2,955.9 | 2,947.3 | 19.1 | 11.9 | 148.84 | -1,807.5 | 2,086.2 | 3,618.7 | 3,592.2 | 136.453 | | | |
| 3,400.0 | 3,177.8 | 3,054.9 | 3,045.7 | 19.8 | 12.3 | 149.04 | -1,801.1 | 2,094.3 | 3,655.9 | 3,628.7 | 134.117 | | | |
| 3,500.0 | 3,268.4 | 3,157.8 | 3,148.0 | 20.5 | 12.7 | 149.22 | -1,793.8 | 2,103.1 | 3,692.8 | 3,664.8 | 131.909 | | | |
| 3,600.0 | 3,358.9 | 3,246.8 | 3,236.3 | 21.2 | 13.1 | 149.36 | -1,786.6 | 2,111.5 | 3,729.7 | 3,701.0 | 129.905 | | | |
| 3,700.0 | 3,449.5 | 3,332.1 | 3,320.9 | 21.9 | 13.4 | 149.49 | -1,779.7 | 2,120.0 | 3,766.7 | 3,737.3 | 128.004 | | | |
| 3,800.0 | 3,540.0 | 3,450.9 | 3,438.6 | 22.6 | 13.9 | 149.64 | -1,769.2 | 2,132.5 | 3,803.6 | 3,773.4 | 125.740 | | | |
| 3,900.0 | 3,630.6 | 3,551.9 | 3,538.4 | 23.3 | 14.4 | 149.75 | -1,759.0 | 2,143.5 | 3,839.8 | 3,808.8 | 123.786 | | | |
| 4,000.0 | 3,721.2 | 3,634.8 | 3,620.2 | 24.0 | 14.7 | 149.81 | -1,749.8 | 2,154.3 | 3,876.4 | 3,844.6 | 122.121 | | | |
| 4,100.0 | 3,811.7 | 3,723.1 | 3,706.7 | 24.7 | 15.2 | 149.83 | -1,738.5 | 2,167.5 | 3,912.9 | 3,880.4 | 120.368 | | | |
| 4,200.0 | 3,902.3 | 3,784.0 | 3,766.1 | 25.4 | 15.5 | 149.82 | -1,730.1 | 2,177.9 | 3,949.9 | 3,916.7 | 119.079 | | | |
| 4,300.0 | 3,992.8 | 3,841.3 | 3,821.8 | 26.2 | 15.9 | 149.80 | -1,721.8 | 2,188.9 | 3,987.6 | 3,953.8 | 117.813 | | | |
| 4,400.0 | 4,083.4 | 3,899.1 | 3,877.6 | 26.9 | 16.2 | 149.76 | -1,713.5 | 2,201.1 | 4,026.3 | 3,991.8 | 116.602 | | | |
| 4,500.0 | 4,174.0 | 3,970.0 | 3,945.7 | 27.6 | 16.6 | 149.69 | -1,702.6 | 2,217.6 | 4,065.6 | 4,030.3 | 115.175 | | | |
| 4,600.0 | 4,264.5 | 4,056.3 | 4,028.0 | 28.3 | 17.0 | 149.57 | -1,688.5 | 2,239.4 | 4,105.3 | 4,069.1 | 113.555 | | | |
| 4,700.0 | 4,355.1 | 4,191.2 | 4,155.5 | 29.0 | 17.7 | 149.34 | -1,663.7 | 2,275.6 | 4,144.2 | 4,106.8 | 110.937 | | | |
| 4,800.0 | 4,445.6 | 4,271.4 | 4,230.7 | 29.7 | 18.1 | 149.17 | -1,647.4 | 2,298.6 | 4,183.0 | 4,144.7 | 109.301 | | | |
| 4,900.0 | 4,536.2 | 4,345.9 | 4,300.3 | 30.4 | 18.5 | 149.02 | -1,632.4 | 2,320.3 | 4,222.2 | 4,183.1 | 107.823 | | | |
| 5,000.0 | 4,626.8 | 4,431.4 | 4,380.3 | 31.1 | 18.9 | 148.84 | -1,615.4 | 2,345.4 | 4,261.7 | 4,221.6 | 106.154 | | | |
| 5,100.0 | 4,717.9 | 4,594.7 | 4,532.8 | 31.8 | 19.8 | 148.85 | -1,581.7 | 2,393.2 | 4,299.8 | 4,258.1 | 103.039 | | | |
| 5,200.0 | 4,810.3 | 4,735.2 | 4,663.5 | 32.5 | 20.5 | 148.87 | -1,550.3 | 2,433.8 | 4,333.7 | 4,290.5 | 100.320 | | | |
| 5,300.0 | 4,904.1 | 4,789.6 | 4,714.1 | 33.1 | 20.7 | 149.06 | -1,538.1 | 2,449.8 | 4,364.7 | 4,320.7 | 99.182 | | | |
| 5,400.0 | 4,999.0 | 4,838.0 | 4,759.1 | 33.6 | 21.0 | 149.23 | -1,527.4 | 2,464.1 | 4,393.7 | 4,348.9 | 98.214 | | | |
| 5,500.0 | 5,094.9 | 4,903.0 | 4,819.4 | 34.1 | 21.3 | 149.31 | -1,513.4 | 2,483.7 | 4,420.6 | 4,375.0 | 96.943 | | | |
| 5,600.0 | 5,191.8 | 4,961.0 | 4,873.2 | 34.5 | 21.6 | 149.38 | -1,501.3 | 2,501.7 | 4,445.6 | 4,399.3 | 95.865 | | | |
| 5,700.0 | 5,289.5 | 5,054.1 | 4,959.5 | 34.9 | 22.1 | 149.29 | -1,482.2 | 2,531.0 | 4,468.4 | 4,420.9 | 94.208 | | | |
| 5,800.0 | 5,387.8 | 5,153.9 | 5,052.0 | 35.2 | 22.6 | 149.12 | -1,461.5 | 2,562.2 | 4,488.1 | 4,439.6 | 92.528 | | | |
| 5,900.0 | 5,486.8 | 5,296.3 | 5,183.7 | 35.5 | 23.3 | 148.73 | -1,430.6 | 2,606.6 | 4,504.4 | 4,454.5 | 90.241 | | | |
| 6,000.0 | 5,586.1 | 5,521.5 | 5,392.5 | 35.7 | 24.4 | 147.93 | -1,378.4 | 2,673.0 | 4,515.2 | 4,463.2 | 86.874 | | | |
| 6,100.0 | 5,685.8 | 5,606.4 | 5,471.1 | 35.8 | 24.9 | 147.65 | -1,358.0 | 2,697.5 | 4,522.9 | 4,470.1 | 85.645 | | | |
| 6,200.0 | 5,785.8 | 5,674.6 | 5,534.6 | 35.9 | 25.2 | 147.41 | -1,342.3 | 2,717.0 | 4,528.5 | 4,475.0 | 84.721 | | | |
| 6,300.0 | 5,885.8 | 5,751.1 | 5,606.1 | 35.9 | 25.6 | 137.62 | -1,325.6 | 2,738.4 | 4,532.0 | 4,478.0 | 84.002 | | | |
| 6,400.0 | 5,985.8 | 5,834.0 | 5,684.0 | 36.0 | 26.1 | 137.27 | -1,308.5 | 2,760.9 | 4,535.3 | 4,480.9 | 83.335 | | | |
| 6,500.0 | 6,085.8 | 5,922.6 | 5,767.9 | 36.0 | 26.6 | 136.91 | -1,291.4 | 2,783.9 | 4,539.0 | 4,484.1 | 82.642 | | | |
| 6,600.0 | 6,185.8 | 6,012.2 | 5,853.3 | 36.0 | 27.2 | 136.57 | -1,275.6 | 2,805.7 | 4,543.1 | 4,487.7 | 81.988 | | | |
| 6,700.0 | 6,285.8 | 6,100.6 | 5,938.1 | 36.0 | 27.6 | 136.25 | -1,261.1 | 2,826.4 | 4,547.5 | 4,491.7 | 81.432 | | | |
| 6,800.0 | 6,385.8 | 6,203.9 | 6,037.8 | 36.0 | 28.1 | 135.92 | -1,246.0 | 2,848.8 | 4,552.2 | 4,495.9 | 80.793 | | | |
| 6,900.0 | 6,485.8 | 6,391.7 | 6,220.1 | 36.1 | 29.0 | 135.36 | -1,219.6 | 2,885.1 | 4,555.7 | 4,498.3 | 79.445 | | | |
| 7,000.0 | 6,585.8 | 6,524.1 | 6,349.5 | 36.1 | 29.7 | 135.01 | -1,202.2 | 2,907.4 | 4,558.3 | 4,500.4 | 78.682 | | | |
| 7,100.0 | 6,685.8 | 6,625.2 | 6,448.7 | 36.1 | 30.1 | 134.77 | -1,190.3 | 2,922.2 | 4,560.4 | 4,502.1 | 78.234 | | | |
| 7,200.0 | 6,785.8 | 6,765.6 | 6,587.1 | 36.2 | 30.7 | 134.47 | -1,175.3 | 2,940.6 | 4,562.4 | 4,503.5 | 77.567 | | | |
| 7,300.0 | 6,885.8 | 6,931.7 | 6,751.5 | 36.2 | 31.5 | 134.17 | -1,158.8 | 2,958.0 | 4,562.9 | 4,503.5 | 76.804 | | | |
| 7,400.0 | 6,985.8 | 7,092.0 | 6,910.5 | 36.2 | 32.2 | 133.92 | -1,143.5 | 2,971.2 | 4,562.1 | 4,502.2 | 76.080 | | | |
| 7,500.0 | 7,085.8 | 7,178.5 | 6,996.4 | 36.2 | 32.7 | 133.80 | -1,135.8 | 2,977.1 | 4,561.0 | 4,500.6 | 75.618 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft | |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|--|
| Currier 0993-16-07 Pad - (Offset) Buzzard Creek 15-12 - Wellbore #1 - Wellbore #1 | | | | | | | | | | | | Offset Well Error: | 0.0 usft | |
| Survey Program: 219-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 7,600.0 | 7,185.8 | 7,272.8 | 7,090.2 | 36.3 | 33.2 | 133.68 | -1,128.5 | 2,982.8 | 4,559.9 | 4,499.2 | 75.139 | | | |
| 7,700.0 | 7,285.8 | 7,367.3 | 7,184.5 | 36.3 | 33.7 | 133.58 | -1,122.2 | 2,987.6 | 4,559.0 | 4,497.9 | 74.667 | | | |
| 7,800.0 | 7,385.8 | 7,483.0 | 7,299.8 | 36.3 | 34.3 | 133.49 | -1,115.8 | 2,992.2 | 4,558.1 | 4,496.5 | 74.067 | | | |
| 7,900.0 | 7,485.8 | 7,613.9 | 7,430.6 | 36.3 | 34.9 | 133.40 | -1,109.4 | 2,995.5 | 4,556.6 | 4,494.5 | 73.375 | | | |
| 8,000.0 | 7,585.8 | 7,745.0 | 7,561.5 | 36.4 | 35.6 | 133.33 | -1,103.8 | 2,996.8 | 4,554.4 | 4,491.7 | 72.687 | | | |
| 8,100.0 | 7,685.8 | 7,833.1 | 7,649.6 | 36.4 | 35.9 | 133.31 | -1,100.6 | 2,996.9 | 4,551.9 | 4,489.0 | 72.348 | | | |
| 8,200.0 | 7,785.8 | 7,917.7 | 7,734.1 | 36.4 | 36.2 | 133.28 | -1,098.2 | 2,996.7 | 4,549.8 | 4,486.7 | 72.046 | | | |
| 8,300.0 | 7,885.8 | 8,002.3 | 7,818.7 | 36.4 | 36.4 | 133.27 | -1,096.4 | 2,996.3 | 4,548.0 | 4,484.6 | 71.753 | | | |
| 8,400.0 | 7,985.8 | 8,088.2 | 7,904.6 | 36.5 | 36.7 | 133.27 | -1,095.3 | 2,995.7 | 4,546.6 | 4,482.9 | 71.426 | | | |
| 8,500.0 | 8,085.8 | 8,188.1 | 8,004.6 | 36.5 | 37.3 | 133.26 | -1,094.2 | 2,994.9 | 4,545.3 | 4,481.0 | 70.647 | | | |
| 8,600.0 | 8,185.8 | 8,288.1 | 8,104.5 | 36.5 | 37.8 | 133.26 | -1,093.2 | 2,994.1 | 4,544.0 | 4,479.0 | 69.885 | | | |
| 8,700.0 | 8,285.8 | 8,388.1 | 8,204.5 | 36.6 | 38.4 | 133.26 | -1,092.2 | 2,993.3 | 4,542.7 | 4,477.0 | 69.142 | | | |
| 8,800.0 | 8,385.8 | 8,488.1 | 8,304.5 | 36.6 | 39.0 | 133.26 | -1,091.1 | 2,992.5 | 4,541.4 | 4,475.0 | 68.416 | | | |
| 8,900.0 | 8,485.8 | 8,588.1 | 8,404.5 | 36.6 | 39.5 | 133.25 | -1,090.1 | 2,991.7 | 4,540.1 | 4,473.1 | 67.706 | | | |
| 8,980.6 | 8,566.4 | 8,610.0 | 8,426.4 | 36.6 | 39.7 | 133.25 | -1,089.9 | 2,991.5 | 4,539.5 | 4,472.3 | 67.625 SF | | | |
| 9,000.0 | 8,585.8 | 8,610.0 | 8,426.4 | 36.6 | 39.7 | 133.25 | -1,089.9 | 2,991.5 | 4,539.5 | 4,472.4 | 67.653 | | | |
| 9,067.2 | 8,653.0 | 8,610.0 | 8,426.4 | 36.7 | 39.7 | 133.25 | -1,089.9 | 2,991.5 | 4,540.3 | 4,473.3 | 67.773 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 200-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 67.24 | 764.4 | 1,822.1 | 1,976.0 | | | | |
| 100.0 | 100.0 | 91.8 | 91.8 | 0.8 | 0.7 | 67.24 | 764.5 | 1,822.0 | 1,975.9 | 1,974.5 | 1,370.194 | | |
| 200.0 | 200.0 | 192.8 | 192.8 | 1.4 | 1.4 | 67.23 | 764.7 | 1,821.9 | 1,975.9 | 1,973.1 | 711.026 | | |
| 300.0 | 300.0 | 292.8 | 292.8 | 2.3 | 2.3 | 62.28 | 765.1 | 1,821.6 | 1,974.9 | 1,970.7 | 461.454 | | |
| 400.0 | 399.8 | 392.7 | 392.7 | 3.5 | 3.4 | 62.45 | 765.4 | 1,821.4 | 1,972.4 | 1,966.6 | 336.529 | | |
| 500.0 | 499.5 | 493.0 | 493.0 | 4.4 | 5.4 | 62.73 | 765.9 | 1,821.1 | 1,968.3 | 1,959.9 | 234.193 | | |
| 600.0 | 598.7 | 592.9 | 592.9 | 5.2 | 7.5 | 63.13 | 766.4 | 1,820.7 | 1,962.6 | 1,951.7 | 180.273 | | |
| 700.0 | 697.5 | 692.5 | 692.5 | 5.8 | 9.5 | 67.72 | 767.1 | 1,820.2 | 1,955.9 | 1,942.6 | 147.043 | | |
| 800.0 | 795.7 | 791.5 | 791.5 | 6.5 | 11.6 | 71.09 | 767.8 | 1,819.7 | 1,949.0 | 1,933.3 | 124.435 | | |
| 900.0 | 893.2 | 889.9 | 889.9 | 7.1 | 13.6 | 73.78 | 768.7 | 1,819.0 | 1,941.9 | 1,923.9 | 107.881 | | |
| 1,000.0 | 989.9 | 987.1 | 987.1 | 7.7 | 15.4 | 76.07 | 769.7 | 1,818.3 | 1,934.7 | 1,914.7 | 96.462 | | |
| 1,100.0 | 1,085.7 | 1,082.0 | 1,082.0 | 8.2 | 15.6 | 78.12 | 770.5 | 1,817.8 | 1,927.8 | 1,907.2 | 93.638 | | |
| 1,200.0 | 1,180.4 | 1,171.5 | 1,171.5 | 8.8 | 15.7 | 79.98 | 771.1 | 1,817.5 | 1,921.3 | 1,900.2 | 90.968 | | |
| 1,300.0 | 1,273.9 | 1,261.6 | 1,261.5 | 9.4 | 15.9 | 81.76 | 771.8 | 1,817.4 | 1,915.4 | 1,893.7 | 88.283 | | |
| 1,400.0 | 1,366.2 | 1,352.7 | 1,352.6 | 9.9 | 16.1 | 83.49 | 772.7 | 1,817.3 | 1,910.3 | 1,888.0 | 85.506 | | |
| 1,500.0 | 1,457.2 | 1,450.0 | 1,450.0 | 10.3 | 16.4 | 85.12 | 773.8 | 1,817.1 | 1,905.9 | 1,882.9 | 82.627 | | |
| 1,600.0 | 1,547.7 | 1,547.1 | 1,547.1 | 10.7 | 16.7 | 86.32 | 775.0 | 1,816.5 | 1,902.2 | 1,878.3 | 79.698 | | |
| 1,700.0 | 1,638.3 | 1,640.2 | 1,640.2 | 11.1 | 17.0 | 87.47 | 776.2 | 1,815.7 | 1,899.0 | 1,874.3 | 76.862 | | |
| 1,800.0 | 1,728.8 | 1,731.0 | 1,730.9 | 11.4 | 17.2 | 88.60 | 777.5 | 1,814.9 | 1,896.8 | 1,871.2 | 74.183 | | |
| 1,900.0 | 1,819.4 | 1,821.8 | 1,821.7 | 11.8 | 17.5 | 89.72 | 778.8 | 1,814.2 | 1,895.5 | 1,869.0 | 71.663 | | |
| 2,000.0 | 1,910.0 | 1,913.3 | 1,913.2 | 12.3 | 17.8 | 90.85 | 780.2 | 1,813.3 | 1,895.0 | 1,867.7 | 69.317 | CC | |
| 2,004.4 | 1,914.0 | 1,917.4 | 1,917.3 | 12.3 | 17.8 | 90.90 | 780.3 | 1,813.3 | 1,895.0 | 1,867.6 | 69.216 | | |
| 2,100.0 | 2,000.5 | 2,005.1 | 2,004.9 | 12.7 | 18.0 | 91.98 | 781.9 | 1,812.5 | 1,895.4 | 1,867.2 | 67.122 | ES | |
| 2,200.0 | 2,091.1 | 2,096.8 | 2,096.7 | 13.1 | 18.3 | 93.10 | 783.7 | 1,811.6 | 1,896.7 | 1,867.5 | 65.073 | | |
| 2,300.0 | 2,181.6 | 2,187.5 | 2,187.3 | 13.6 | 18.6 | 94.21 | 785.6 | 1,810.7 | 1,898.8 | 1,868.7 | 63.182 | | |
| 2,400.0 | 2,272.2 | 2,278.4 | 2,278.2 | 14.0 | 18.9 | 95.31 | 787.7 | 1,809.8 | 1,901.8 | 1,870.9 | 61.417 | | |
| 2,500.0 | 2,362.8 | 2,368.2 | 2,368.0 | 14.5 | 19.1 | 96.39 | 789.8 | 1,809.0 | 1,905.7 | 1,873.9 | 59.783 | | |
| 2,600.0 | 2,453.3 | 2,456.3 | 2,456.0 | 15.0 | 19.4 | 97.44 | 791.9 | 1,808.3 | 1,910.6 | 1,877.8 | 58.283 | | |
| 2,700.0 | 2,543.9 | 2,544.3 | 2,544.0 | 15.5 | 19.6 | 98.50 | 794.0 | 1,807.8 | 1,916.5 | 1,882.8 | 56.888 | | |
| 2,800.0 | 2,634.4 | 2,633.1 | 2,632.8 | 16.0 | 19.9 | 99.56 | 796.0 | 1,807.5 | 1,923.4 | 1,888.8 | 55.593 | | |
| 2,900.0 | 2,725.0 | 2,722.6 | 2,722.2 | 16.5 | 20.2 | 100.62 | 798.0 | 1,807.2 | 1,931.2 | 1,895.6 | 54.387 | | |
| 3,000.0 | 2,815.6 | 2,812.1 | 2,811.7 | 17.1 | 20.4 | 101.67 | 800.0 | 1,807.0 | 1,939.8 | 1,903.4 | 53.267 | | |
| 3,100.0 | 2,906.1 | 2,903.5 | 2,903.1 | 17.8 | 20.7 | 102.74 | 802.0 | 1,806.9 | 1,949.4 | 1,912.1 | 52.267 | | |
| 3,200.0 | 2,996.7 | 2,995.6 | 2,995.2 | 18.4 | 20.9 | 103.80 | 803.9 | 1,806.8 | 1,959.7 | 1,921.5 | 51.351 | | |
| 3,300.0 | 3,087.2 | 3,093.0 | 3,092.6 | 19.1 | 21.1 | 104.93 | 806.0 | 1,806.5 | 1,970.7 | 1,931.7 | 50.533 | | |
| 3,400.0 | 3,177.8 | 3,207.1 | 3,206.6 | 19.8 | 21.3 | 106.17 | 810.4 | 1,805.7 | 1,981.8 | 1,942.0 | 49.803 | | |
| 3,500.0 | 3,268.4 | 3,339.9 | 3,338.9 | 20.5 | 21.7 | 107.45 | 821.2 | 1,803.3 | 1,992.1 | 1,951.5 | 49.047 | | |
| 3,600.0 | 3,358.9 | 3,465.8 | 3,463.7 | 21.2 | 22.1 | 108.50 | 837.5 | 1,799.6 | 2,001.0 | 1,959.6 | 48.286 | | |
| 3,700.0 | 3,449.5 | 3,568.3 | 3,564.8 | 21.9 | 22.3 | 109.24 | 854.4 | 1,796.5 | 2,009.6 | 1,967.4 | 47.574 | | |
| 3,800.0 | 3,540.0 | 3,709.1 | 3,702.5 | 22.6 | 22.8 | 110.11 | 882.8 | 1,791.7 | 2,017.6 | 1,974.5 | 46.834 | | |
| 3,900.0 | 3,630.6 | 3,845.8 | 3,834.8 | 23.3 | 23.2 | 110.78 | 916.7 | 1,784.9 | 2,023.2 | 1,979.3 | 46.051 | | |
| 4,000.0 | 3,721.2 | 3,966.9 | 3,951.1 | 24.0 | 23.5 | 111.29 | 950.0 | 1,778.1 | 2,027.8 | 1,983.0 | 45.277 | | |
| 4,100.0 | 3,811.7 | 4,076.7 | 4,055.5 | 24.7 | 23.9 | 111.66 | 983.0 | 1,771.4 | 2,031.4 | 1,985.8 | 44.500 | | |
| 4,200.0 | 3,902.3 | 4,187.9 | 4,160.8 | 25.4 | 24.2 | 111.99 | 1,018.2 | 1,764.5 | 2,034.7 | 1,988.2 | 43.733 | | |
| 4,300.0 | 3,992.8 | 4,290.7 | 4,257.8 | 26.2 | 24.5 | 112.27 | 1,051.7 | 1,758.0 | 2,037.7 | 1,990.3 | 42.972 | | |
| 4,400.0 | 4,083.4 | 4,391.4 | 4,352.7 | 26.9 | 24.7 | 112.53 | 1,084.7 | 1,751.7 | 2,040.7 | 1,992.4 | 42.229 | | |
| 4,500.0 | 4,174.0 | 4,503.5 | 4,458.6 | 27.6 | 25.1 | 112.86 | 1,120.4 | 1,743.3 | 2,042.7 | 1,993.5 | 41.457 | | |
| 4,600.0 | 4,264.5 | 4,576.8 | 4,527.9 | 28.3 | 25.3 | 113.07 | 1,143.9 | 1,738.7 | 2,045.9 | 1,995.7 | 40.753 | | |
| 4,700.0 | 4,355.1 | 4,699.5 | 4,643.6 | 29.0 | 25.7 | 113.40 | 1,183.9 | 1,730.7 | 2,048.8 | 1,997.6 | 40.045 | | |
| 4,800.0 | 4,445.6 | 4,808.5 | 4,746.3 | 29.7 | 26.0 | 113.69 | 1,219.5 | 1,722.8 | 2,051.1 | 1,999.0 | 39.351 | | |
| 4,900.0 | 4,536.2 | 4,920.8 | 4,852.1 | 30.4 | 26.4 | 114.00 | 1,256.0 | 1,714.1 | 2,053.0 | 1,999.9 | 38.659 | | |
| 5,000.0 | 4,626.8 | 5,023.5 | 4,948.9 | 31.1 | 26.7 | 114.29 | 1,289.4 | 1,705.6 | 2,054.4 | 2,000.3 | 37.982 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - (Offset) Buzzard Creek 16-1 - Wellbore #1 - Wellbore #1 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|--|--------------------|----------|
| Survey Program: 200-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,100.0 | 4,717.9 | 5,094.0 | 5,015.5 | 31.8 | 27.0 | 114.50 | 1,311.7 | 1,699.8 | 2,055.7 | 2,000.7 | 37.361 | | |
| 5,200.0 | 4,810.3 | 5,186.0 | 5,103.2 | 32.5 | 27.3 | 114.74 | 1,338.8 | 1,693.0 | 2,056.9 | 2,001.0 | 36.766 | | |
| 5,300.0 | 4,904.1 | 5,242.2 | 5,157.1 | 33.1 | 27.5 | 114.87 | 1,354.1 | 1,689.5 | 2,058.2 | 2,001.5 | 36.264 | | |
| 5,400.0 | 4,999.0 | 5,315.4 | 5,227.8 | 33.6 | 27.8 | 115.01 | 1,372.7 | 1,685.4 | 2,059.4 | 2,001.9 | 35.798 | | |
| 5,500.0 | 5,094.9 | 5,386.9 | 5,297.3 | 34.1 | 28.1 | 115.13 | 1,389.2 | 1,681.9 | 2,060.5 | 2,002.3 | 35.384 | | |
| 5,600.0 | 5,191.8 | 5,465.0 | 5,373.8 | 34.5 | 28.5 | 115.24 | 1,404.7 | 1,678.5 | 2,061.5 | 2,002.6 | 35.007 | | |
| 5,700.0 | 5,289.5 | 5,535.3 | 5,443.0 | 34.9 | 28.7 | 115.33 | 1,416.7 | 1,675.9 | 2,062.3 | 2,002.9 | 34.691 | | |
| 5,800.0 | 5,387.8 | 5,617.3 | 5,524.1 | 35.2 | 29.0 | 115.40 | 1,428.9 | 1,673.0 | 2,062.6 | 2,002.6 | 34.396 | | |
| 5,900.0 | 5,486.8 | 5,698.7 | 5,604.6 | 35.5 | 29.3 | 115.42 | 1,439.9 | 1,670.5 | 2,062.2 | 2,001.8 | 34.138 | | |
| 6,000.0 | 5,586.1 | 5,775.0 | 5,680.3 | 35.7 | 29.5 | 115.37 | 1,449.7 | 1,668.8 | 2,061.3 | 2,000.6 | 33.925 | | |
| 6,100.0 | 5,685.8 | 5,849.3 | 5,754.1 | 35.8 | 29.8 | 115.26 | 1,458.5 | 1,668.0 | 2,060.2 | 1,999.2 | 33.757 | | |
| 6,200.0 | 5,785.8 | 5,926.0 | 5,830.3 | 35.9 | 30.0 | 115.10 | 1,466.4 | 1,667.5 | 2,058.6 | 1,997.4 | 33.620 | | |
| 6,300.0 | 5,885.8 | 6,017.0 | 5,921.0 | 35.9 | 30.3 | 105.42 | 1,474.0 | 1,667.5 | 2,056.7 | 1,995.4 | 33.519 | | |
| 6,400.0 | 5,985.8 | 6,083.4 | 5,987.3 | 36.0 | 30.5 | 105.31 | 1,477.8 | 1,667.9 | 2,055.7 | 1,994.3 | 33.508 | | |
| 6,500.0 | 6,085.8 | 6,187.7 | 6,091.6 | 36.0 | 30.7 | 105.22 | 1,481.2 | 1,668.4 | 2,055.2 | 1,993.8 | 33.438 | | |
| 6,600.0 | 6,185.8 | 6,286.0 | 6,189.8 | 36.0 | 30.9 | 105.17 | 1,483.3 | 1,668.1 | 2,054.4 | 1,992.8 | 33.368 | | |
| 6,700.0 | 6,285.8 | 6,378.8 | 6,282.6 | 36.0 | 31.1 | 105.11 | 1,485.4 | 1,668.1 | 2,053.8 | 1,992.2 | 33.318 | | |
| 6,800.0 | 6,385.8 | 6,495.8 | 6,399.6 | 36.0 | 31.5 | 105.03 | 1,488.3 | 1,668.1 | 2,053.2 | 1,991.3 | 33.140 | | |
| 6,900.0 | 6,485.8 | 6,617.0 | 6,520.7 | 36.1 | 31.9 | 104.96 | 1,491.3 | 1,666.9 | 2,051.6 | 1,989.3 | 32.931 | | |
| 7,000.0 | 6,585.8 | 6,738.1 | 6,641.7 | 36.1 | 32.2 | 104.89 | 1,494.5 | 1,664.4 | 2,049.0 | 1,986.3 | 32.711 | | |
| 7,100.0 | 6,685.8 | 6,835.4 | 6,739.0 | 36.1 | 32.5 | 104.84 | 1,496.9 | 1,662.1 | 2,046.0 | 1,983.1 | 32.530 | | |
| 7,200.0 | 6,785.8 | 6,931.3 | 6,834.9 | 36.2 | 32.8 | 104.80 | 1,499.1 | 1,659.7 | 2,043.0 | 1,979.8 | 32.356 | | |
| 7,300.0 | 6,885.8 | 7,019.9 | 6,923.4 | 36.2 | 33.0 | 104.76 | 1,500.8 | 1,657.8 | 2,040.4 | 1,977.1 | 32.208 | | |
| 7,400.0 | 6,985.8 | 7,108.5 | 7,012.0 | 36.2 | 33.3 | 104.74 | 1,502.1 | 1,656.3 | 2,038.4 | 1,974.8 | 32.069 | | |
| 7,500.0 | 7,085.8 | 7,199.8 | 7,103.3 | 36.2 | 33.4 | 104.73 | 1,502.7 | 1,655.0 | 2,036.9 | 1,973.2 | 31.958 | | |
| 7,600.0 | 7,185.8 | 7,292.0 | 7,195.5 | 36.3 | 33.5 | 104.76 | 1,501.9 | 1,653.8 | 2,035.8 | 1,971.9 | 31.857 | | |
| 7,700.0 | 7,285.8 | 7,429.2 | 7,332.6 | 36.3 | 33.9 | 104.83 | 1,500.1 | 1,651.1 | 2,034.4 | 1,970.1 | 31.660 | | |
| 7,800.0 | 7,385.8 | 7,575.1 | 7,478.4 | 36.3 | 34.4 | 104.80 | 1,502.6 | 1,645.6 | 2,030.2 | 1,965.5 | 31.406 | | |
| 7,900.0 | 7,485.8 | 7,675.3 | 7,578.4 | 36.3 | 34.7 | 104.79 | 1,504.3 | 1,640.9 | 2,025.2 | 1,960.2 | 31.185 | | |
| 8,000.0 | 7,585.8 | 7,775.0 | 7,678.1 | 36.4 | 35.1 | 104.82 | 1,504.8 | 1,635.8 | 2,020.1 | 1,954.9 | 30.966 | | |
| 8,100.0 | 7,685.8 | 7,870.6 | 7,773.5 | 36.4 | 35.3 | 104.84 | 1,505.0 | 1,631.0 | 2,015.2 | 1,949.7 | 30.764 | | |
| 8,200.0 | 7,785.8 | 7,966.1 | 7,868.9 | 36.4 | 35.4 | 104.85 | 1,505.8 | 1,626.6 | 2,010.5 | 1,944.8 | 30.567 | | |
| 8,300.0 | 7,885.8 | 8,055.5 | 7,958.2 | 36.4 | 35.6 | 104.85 | 1,506.9 | 1,622.8 | 2,006.2 | 1,940.2 | 30.391 | | |
| 8,400.0 | 7,985.8 | 8,143.1 | 8,045.7 | 36.5 | 35.8 | 104.85 | 1,507.9 | 1,619.7 | 2,002.4 | 1,936.2 | 30.231 | | |
| 8,500.0 | 8,085.8 | 8,236.6 | 8,139.2 | 36.5 | 36.1 | 104.84 | 1,509.0 | 1,616.9 | 1,999.2 | 1,932.7 | 30.049 | | |
| 8,600.0 | 8,185.8 | 8,341.6 | 8,244.2 | 36.5 | 36.4 | 104.81 | 1,510.6 | 1,613.8 | 1,996.0 | 1,929.0 | 29.809 | | |
| 8,700.0 | 8,285.8 | 8,446.7 | 8,349.1 | 36.6 | 36.8 | 104.78 | 1,512.8 | 1,610.6 | 1,992.5 | 1,925.1 | 29.569 | | |
| 8,800.0 | 8,385.8 | 8,551.7 | 8,454.0 | 36.6 | 37.2 | 104.72 | 1,515.6 | 1,607.2 | 1,988.7 | 1,920.9 | 29.328 | | |
| 8,900.0 | 8,485.8 | 8,590.0 | 8,492.4 | 36.6 | 37.3 | 104.70 | 1,516.7 | 1,606.0 | 1,985.8 | 1,918.1 | 29.311 SF | | |
| 8,915.6 | 8,501.4 | 8,590.0 | 8,492.4 | 36.6 | 37.3 | 104.70 | 1,516.7 | 1,606.0 | 1,985.7 | 1,918.0 | 29.328 | | |
| 9,000.0 | 8,585.8 | 8,590.0 | 8,492.4 | 36.6 | 37.3 | 104.70 | 1,516.7 | 1,606.0 | 1,987.5 | 1,920.1 | 29.474 | | |
| 9,067.2 | 8,653.0 | 8,590.0 | 8,492.4 | 36.7 | 37.3 | 104.70 | 1,516.7 | 1,606.0 | 1,991.5 | 1,924.4 | 29.659 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|-----------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|--------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 157-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 135.35 | -1,930.8 | 1,907.2 | 2,717.6 | | | | |
| 100.0 | 100.0 | 0.0 | 0.0 | 0.8 | 0.0 | 135.35 | -1,930.8 | 1,907.2 | 2,714.3 | 2,713.5 | 3,423.982 | | |
| 156.5 | 156.5 | 16.8 | 16.8 | 1.1 | 0.1 | 135.35 | -1,930.8 | 1,907.2 | 2,714.0 | 2,712.7 | 2,177.814 | | |
| 200.0 | 200.0 | 61.1 | 61.1 | 1.4 | 0.4 | 135.35 | -1,930.9 | 1,907.1 | 2,713.9 | 2,712.2 | 1,517.478 CC | | |
| 204.4 | 204.4 | 65.6 | 65.6 | 1.5 | 0.4 | 130.35 | -1,930.9 | 1,907.1 | 2,713.9 | 2,712.1 | 1,470.129 | | |
| 300.0 | 300.0 | 162.6 | 162.6 | 2.3 | 1.0 | 130.38 | -1,931.2 | 1,906.7 | 2,715.0 | 2,711.9 | 887.038 ES | | |
| 400.0 | 399.8 | 274.3 | 274.3 | 3.5 | 1.6 | 130.44 | -1,931.5 | 1,906.2 | 2,718.3 | 2,713.9 | 614.252 | | |
| 500.0 | 499.5 | 408.0 | 408.0 | 4.4 | 2.2 | 130.58 | -1,931.1 | 1,904.0 | 2,722.5 | 2,716.9 | 491.365 | | |
| 600.0 | 598.7 | 524.8 | 524.7 | 5.2 | 2.6 | 130.76 | -1,930.8 | 1,900.8 | 2,728.4 | 2,721.9 | 420.378 | | |
| 700.0 | 697.5 | 661.6 | 661.4 | 5.8 | 3.1 | 135.13 | -1,929.0 | 1,896.2 | 2,735.8 | 2,728.3 | 366.402 | | |
| 800.0 | 795.7 | 781.8 | 781.5 | 6.5 | 3.5 | 138.14 | -1,926.5 | 1,891.6 | 2,745.5 | 2,737.1 | 326.690 | | |
| 900.0 | 893.2 | 910.4 | 909.9 | 7.1 | 3.9 | 140.42 | -1,922.8 | 1,886.0 | 2,757.4 | 2,748.0 | 293.555 | | |
| 1,000.0 | 989.9 | 1,058.4 | 1,057.5 | 7.7 | 4.5 | 142.32 | -1,917.9 | 1,877.1 | 2,771.0 | 2,760.5 | 262.963 | | |
| 1,100.0 | 1,085.7 | 1,243.7 | 1,242.0 | 8.2 | 5.3 | 144.15 | -1,910.8 | 1,860.4 | 2,785.7 | 2,773.8 | 233.945 | | |
| 1,200.0 | 1,180.4 | 1,394.6 | 1,391.6 | 8.8 | 6.0 | 145.66 | -1,902.8 | 1,843.1 | 2,800.7 | 2,787.6 | 213.148 | | |
| 1,300.0 | 1,273.9 | 1,509.3 | 1,505.3 | 9.4 | 6.5 | 146.83 | -1,895.3 | 1,828.9 | 2,817.6 | 2,803.4 | 197.856 | | |
| 1,400.0 | 1,366.2 | 1,583.7 | 1,579.0 | 9.9 | 6.8 | 147.67 | -1,890.7 | 1,819.6 | 2,838.1 | 2,822.9 | 187.101 | | |
| 1,500.0 | 1,457.2 | 1,706.4 | 1,700.4 | 10.3 | 7.3 | 148.62 | -1,883.7 | 1,803.8 | 2,861.9 | 2,845.7 | 177.363 | | |
| 1,600.0 | 1,547.7 | 1,930.9 | 1,921.6 | 10.7 | 8.3 | 149.91 | -1,866.2 | 1,770.2 | 2,883.9 | 2,866.4 | 164.302 | | |
| 1,700.0 | 1,638.3 | 2,192.4 | 2,176.8 | 11.1 | 9.6 | 151.41 | -1,836.8 | 1,721.1 | 2,901.3 | 2,882.0 | 150.321 | | |
| 1,800.0 | 1,728.8 | 2,396.4 | 2,373.4 | 11.4 | 10.6 | 152.60 | -1,808.0 | 1,674.9 | 2,914.5 | 2,893.7 | 140.299 | | |
| 1,900.0 | 1,819.4 | 2,642.9 | 2,607.7 | 11.8 | 11.9 | 154.07 | -1,766.5 | 1,610.7 | 2,923.8 | 2,901.3 | 130.029 | | |
| 2,000.0 | 1,910.0 | 2,869.6 | 2,819.2 | 12.3 | 13.1 | 155.49 | -1,723.5 | 1,541.5 | 2,929.0 | 2,904.9 | 121.235 | | |
| 2,100.0 | 2,000.5 | 3,014.4 | 2,952.2 | 12.7 | 13.8 | 156.45 | -1,694.0 | 1,492.3 | 2,931.1 | 2,905.7 | 115.269 | | |
| 2,200.0 | 2,091.1 | 3,110.5 | 3,040.1 | 13.1 | 14.3 | 157.11 | -1,674.5 | 1,458.7 | 2,933.1 | 2,906.7 | 110.803 | | |
| 2,300.0 | 2,181.6 | 3,214.3 | 3,134.8 | 13.6 | 14.8 | 157.82 | -1,653.5 | 1,421.9 | 2,935.4 | 2,907.8 | 106.502 | | |
| 2,400.0 | 2,272.2 | 3,310.7 | 3,222.8 | 14.0 | 15.3 | 158.47 | -1,633.5 | 1,387.9 | 2,937.6 | 2,909.0 | 102.608 | | |
| 2,500.0 | 2,362.8 | 3,391.3 | 3,296.2 | 14.5 | 15.7 | 159.02 | -1,617.3 | 1,359.2 | 2,940.6 | 2,911.0 | 99.230 | | |
| 2,600.0 | 2,453.3 | 3,470.1 | 3,368.2 | 15.0 | 16.1 | 159.57 | -1,601.9 | 1,330.9 | 2,944.5 | 2,913.8 | 96.108 | | |
| 2,700.0 | 2,543.9 | 3,561.2 | 3,451.3 | 15.5 | 16.5 | 160.22 | -1,584.8 | 1,297.8 | 2,949.0 | 2,917.3 | 93.015 | | |
| 2,800.0 | 2,634.4 | 3,670.3 | 3,550.7 | 16.0 | 17.1 | 161.00 | -1,564.5 | 1,257.5 | 2,953.9 | 2,921.0 | 89.856 | | |
| 2,900.0 | 2,725.0 | 3,776.4 | 3,647.0 | 16.5 | 17.6 | 161.77 | -1,544.3 | 1,217.9 | 2,958.5 | 2,924.5 | 86.913 | | |
| 3,000.0 | 2,815.6 | 3,864.6 | 3,727.1 | 17.1 | 18.1 | 162.40 | -1,527.5 | 1,184.8 | 2,963.6 | 2,928.5 | 84.372 | | |
| 3,100.0 | 2,906.1 | 3,955.2 | 3,809.2 | 17.8 | 18.5 | 163.06 | -1,510.7 | 1,150.5 | 2,969.3 | 2,933.0 | 81.954 | | |
| 3,200.0 | 2,996.7 | 4,042.9 | 3,888.7 | 18.4 | 19.0 | 163.70 | -1,494.5 | 1,117.0 | 2,975.4 | 2,938.1 | 79.709 | | |
| 3,300.0 | 3,087.2 | 4,124.3 | 3,962.4 | 19.1 | 19.4 | 164.29 | -1,479.8 | 1,086.1 | 2,982.5 | 2,944.1 | 77.674 | | |
| 3,400.0 | 3,177.8 | 4,222.8 | 4,051.8 | 19.8 | 19.9 | 165.01 | -1,462.1 | 1,048.5 | 2,990.0 | 2,950.4 | 75.568 | | |
| 3,500.0 | 3,268.4 | 4,316.7 | 4,136.8 | 20.5 | 20.4 | 165.69 | -1,445.3 | 1,012.5 | 2,997.8 | 2,957.1 | 73.620 | | |
| 3,600.0 | 3,358.9 | 4,387.0 | 4,200.5 | 21.2 | 20.9 | 166.21 | -1,432.7 | 985.4 | 3,006.3 | 2,964.5 | 72.014 | | |
| 3,700.0 | 3,449.5 | 4,462.9 | 4,269.2 | 21.9 | 21.4 | 166.76 | -1,419.7 | 956.1 | 3,015.7 | 2,972.9 | 70.455 | | |
| 3,800.0 | 3,540.0 | 4,514.0 | 4,315.8 | 22.6 | 21.8 | 167.14 | -1,411.5 | 936.5 | 3,026.8 | 2,983.1 | 69.257 | | |
| 3,900.0 | 3,630.6 | 4,574.0 | 4,370.7 | 23.3 | 22.2 | 167.57 | -1,402.7 | 914.0 | 3,039.7 | 2,995.0 | 68.077 | | |
| 4,000.0 | 3,721.2 | 4,637.0 | 4,428.6 | 24.0 | 22.7 | 168.02 | -1,393.9 | 890.9 | 3,053.9 | 3,008.3 | 66.966 | | |
| 4,100.0 | 3,811.7 | 4,741.5 | 4,524.9 | 24.7 | 23.4 | 168.75 | -1,378.9 | 853.2 | 3,068.7 | 3,021.9 | 65.540 | | |
| 4,200.0 | 3,902.3 | 4,856.6 | 4,631.4 | 25.4 | 24.2 | 169.50 | -1,360.7 | 813.5 | 3,083.3 | 3,035.2 | 64.100 | | |
| 4,300.0 | 3,992.8 | 4,955.9 | 4,723.4 | 26.2 | 24.9 | 170.12 | -1,344.2 | 780.1 | 3,097.9 | 3,048.6 | 62.869 | | |
| 4,400.0 | 4,083.4 | 5,057.6 | 4,818.0 | 26.9 | 25.6 | 170.73 | -1,326.4 | 746.9 | 3,112.5 | 3,062.0 | 61.688 | | |
| 4,500.0 | 4,174.0 | 5,142.8 | 4,897.0 | 27.6 | 26.2 | 171.24 | -1,311.7 | 718.9 | 3,127.4 | 3,075.9 | 60.688 | | |
| 4,600.0 | 4,264.5 | 5,224.0 | 4,972.6 | 28.3 | 26.7 | 171.71 | -1,297.7 | 692.7 | 3,143.0 | 3,090.4 | 59.771 | | |
| 4,700.0 | 4,355.1 | 5,311.7 | 5,054.6 | 29.0 | 27.3 | 172.20 | -1,282.5 | 665.5 | 3,159.2 | 3,105.5 | 58.869 | | |
| 4,800.0 | 4,445.6 | 5,409.6 | 5,146.3 | 29.7 | 27.9 | 172.72 | -1,265.2 | 636.1 | 3,175.7 | 3,120.9 | 57.946 | | |
| 4,900.0 | 4,536.2 | 5,513.2 | 5,243.5 | 30.4 | 28.6 | 173.26 | -1,246.5 | 605.4 | 3,192.3 | 3,136.3 | 57.027 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|--------------------|----------|
| Survey Program: 157-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning |
| 5,000.0 | 4,626.8 | 5,597.0 | 5,322.2 | 31.1 | 29.1 | 173.68 | -1,231.0 | 580.9 | 3,208.9 | 3,151.9 | 56.273 | |
| 5,100.0 | 4,717.9 | 5,690.0 | 5,409.4 | 31.8 | 29.7 | 174.18 | -1,214.5 | 553.4 | 3,224.9 | 3,166.8 | 55.466 | |
| 5,200.0 | 4,810.3 | 5,768.8 | 5,483.4 | 32.5 | 30.2 | 174.60 | -1,201.0 | 529.7 | 3,238.2 | 3,179.0 | 54.679 | |
| 5,300.0 | 4,904.1 | 5,826.2 | 5,537.3 | 33.1 | 30.5 | 174.90 | -1,191.3 | 512.6 | 3,248.8 | 3,188.6 | 54.016 | |
| 5,400.0 | 4,999.0 | 5,878.0 | 5,586.2 | 33.6 | 30.8 | 175.17 | -1,183.3 | 497.5 | 3,257.4 | 3,196.4 | 53.400 | |
| 5,500.0 | 5,094.9 | 5,938.7 | 5,643.9 | 34.1 | 31.2 | 175.45 | -1,174.4 | 480.7 | 3,264.0 | 3,202.2 | 52.742 | |
| 5,600.0 | 5,191.8 | 5,998.3 | 5,700.9 | 34.5 | 31.5 | 175.70 | -1,165.8 | 465.8 | 3,268.4 | 3,205.6 | 52.100 | |
| 5,700.0 | 5,289.5 | 6,054.6 | 5,755.0 | 34.9 | 31.8 | 175.91 | -1,158.2 | 452.2 | 3,270.6 | 3,207.1 | 51.491 | |
| 5,800.0 | 5,387.8 | 6,116.1 | 5,814.3 | 35.2 | 32.1 | 176.14 | -1,150.6 | 437.9 | 3,270.7 | 3,206.4 | 50.871 | |
| 5,900.0 | 5,486.8 | 6,184.0 | 5,880.0 | 35.5 | 32.4 | 176.38 | -1,142.6 | 422.5 | 3,268.3 | 3,203.2 | 50.237 | |
| 6,000.0 | 5,586.1 | 6,237.0 | 5,931.4 | 35.7 | 32.6 | 176.55 | -1,136.9 | 411.3 | 3,263.7 | 3,198.0 | 49.704 | |
| 6,100.0 | 5,685.8 | 6,292.7 | 5,985.8 | 35.8 | 32.8 | 176.71 | -1,131.4 | 400.5 | 3,257.1 | 3,190.9 | 49.177 | |
| 6,200.0 | 5,785.8 | 6,370.0 | 6,061.6 | 35.9 | 33.1 | 176.90 | -1,124.1 | 387.4 | 3,248.1 | 3,181.3 | 48.560 | |
| 6,300.0 | 5,885.8 | 6,422.6 | 6,113.5 | 35.9 | 33.2 | 167.53 | -1,119.4 | 379.5 | 3,236.9 | 3,169.8 | 48.252 | |
| 6,400.0 | 5,985.8 | 6,464.0 | 6,154.3 | 36.0 | 33.4 | 167.62 | -1,116.1 | 374.0 | 3,226.3 | 3,159.2 | 48.096 | |
| 6,500.0 | 6,085.8 | 6,524.8 | 6,214.6 | 36.0 | 33.5 | 167.73 | -1,111.9 | 366.7 | 3,217.1 | 3,149.9 | 47.885 | |
| 6,600.0 | 6,185.8 | 6,578.7 | 6,268.0 | 36.0 | 33.6 | 167.81 | -1,109.0 | 361.1 | 3,209.5 | 3,142.3 | 47.751 | |
| 6,700.0 | 6,285.8 | 6,647.0 | 6,336.0 | 36.0 | 33.7 | 167.91 | -1,105.9 | 355.0 | 3,203.1 | 3,135.8 | 47.582 | |
| 6,800.0 | 6,385.8 | 6,700.2 | 6,389.1 | 36.0 | 33.8 | 167.97 | -1,103.9 | 351.2 | 3,198.0 | 3,130.7 | 47.530 | |
| 6,900.0 | 6,485.8 | 6,740.0 | 6,428.8 | 36.1 | 33.9 | 168.00 | -1,102.7 | 349.0 | 3,194.2 | 3,127.1 | 47.578 | |
| 7,000.0 | 6,585.8 | 6,800.3 | 6,489.0 | 36.1 | 33.9 | 168.05 | -1,101.8 | 346.4 | 3,192.0 | 3,124.9 | 47.594 | |
| 7,100.0 | 6,685.8 | 6,859.1 | 6,547.8 | 36.1 | 34.0 | 168.08 | -1,101.9 | 344.6 | 3,191.4 | 3,124.4 | 47.662 | |
| 7,121.3 | 6,707.0 | 6,878.3 | 6,567.0 | 36.1 | 34.0 | 168.09 | -1,102.0 | 344.1 | 3,191.4 | 3,124.4 | 47.654 | |
| 7,200.0 | 6,785.8 | 6,949.6 | 6,638.3 | 36.2 | 34.1 | 168.11 | -1,102.4 | 342.5 | 3,191.5 | 3,124.5 | 47.624 | |
| 7,300.0 | 6,885.8 | 7,040.4 | 6,729.1 | 36.2 | 34.2 | 168.14 | -1,103.0 | 341.3 | 3,191.9 | 3,124.8 | 47.589 | |
| 7,400.0 | 6,985.8 | 7,132.5 | 6,821.2 | 36.2 | 34.4 | 168.17 | -1,104.0 | 339.7 | 3,192.5 | 3,125.4 | 47.550 | |
| 7,500.0 | 7,085.8 | 7,224.6 | 6,913.1 | 36.2 | 34.6 | 168.22 | -1,105.3 | 337.2 | 3,193.4 | 3,126.2 | 47.516 | |
| 7,600.0 | 7,185.8 | 7,318.6 | 7,007.1 | 36.3 | 34.9 | 168.28 | -1,107.1 | 334.0 | 3,194.5 | 3,127.3 | 47.486 | |
| 7,700.0 | 7,285.8 | 7,414.1 | 7,102.6 | 36.3 | 35.1 | 168.34 | -1,108.9 | 331.2 | 3,195.8 | 3,128.5 | 47.459 | |
| 7,800.0 | 7,385.8 | 7,526.8 | 7,215.2 | 36.3 | 35.4 | 168.39 | -1,110.9 | 328.5 | 3,197.1 | 3,129.5 | 47.305 | |
| 7,900.0 | 7,485.8 | 7,650.1 | 7,338.5 | 36.3 | 35.9 | 168.46 | -1,112.3 | 325.2 | 3,197.7 | 3,129.7 | 47.066 | |
| 8,000.0 | 7,585.8 | 7,773.4 | 7,461.7 | 36.4 | 36.3 | 168.52 | -1,112.9 | 321.6 | 3,197.5 | 3,129.2 | 46.823 | |
| 8,100.0 | 7,685.8 | 7,872.0 | 7,560.3 | 36.4 | 36.7 | 168.57 | -1,113.0 | 318.7 | 3,197.1 | 3,128.5 | 46.601 | |
| 8,200.0 | 7,785.8 | 7,972.2 | 7,660.4 | 36.4 | 37.1 | 168.62 | -1,113.1 | 316.0 | 3,196.6 | 3,127.7 | 46.381 | |
| 8,300.0 | 7,885.8 | 8,072.3 | 7,760.5 | 36.4 | 37.5 | 168.66 | -1,113.1 | 313.5 | 3,196.2 | 3,126.9 | 46.163 | |
| 8,400.0 | 7,985.8 | 8,178.7 | 7,866.9 | 36.5 | 38.3 | 168.71 | -1,113.0 | 311.0 | 3,195.6 | 3,125.6 | 45.648 | |
| 8,500.0 | 8,085.8 | 8,285.7 | 7,973.8 | 36.5 | 39.1 | 168.75 | -1,112.6 | 308.8 | 3,194.8 | 3,124.0 | 45.123 | |
| 8,600.0 | 8,185.8 | 8,392.7 | 8,080.8 | 36.5 | 39.9 | 168.78 | -1,111.9 | 306.7 | 3,193.9 | 3,122.3 | 44.618 | |
| 8,700.0 | 8,285.8 | 8,499.8 | 8,187.9 | 36.6 | 40.7 | 168.81 | -1,111.0 | 304.8 | 3,192.6 | 3,120.3 | 44.113 | |
| 8,800.0 | 8,385.8 | 8,606.8 | 8,294.9 | 36.6 | 41.5 | 168.84 | -1,109.8 | 303.1 | 3,191.2 | 3,118.0 | 43.604 | |
| 8,900.0 | 8,485.8 | 8,710.9 | 8,398.9 | 36.6 | 42.1 | 168.86 | -1,108.4 | 301.6 | 3,189.6 | 3,115.8 | 43.246 SF | |
| 8,985.3 | 8,571.0 | 8,743.0 | 8,431.1 | 36.6 | 42.1 | 168.86 | -1,107.9 | 301.1 | 3,188.6 | 3,115.0 | 43.327 | |
| 9,000.0 | 8,585.8 | 8,743.0 | 8,431.1 | 36.6 | 42.1 | 168.86 | -1,107.9 | 301.1 | 3,188.6 | 3,115.1 | 43.366 | |
| 9,067.2 | 8,653.0 | 8,743.0 | 8,431.1 | 36.7 | 42.1 | 168.86 | -1,107.9 | 301.1 | 3,189.7 | 3,116.5 | 43.572 | |

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft | |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|---------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|--|
| Survey Program: 920-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -108.25 | -812.6 | -2,463.7 | 2,603.0 | | | | | |
| 100.0 | 100.0 | 0.0 | 0.0 | 0.8 | 0.0 | -108.25 | -812.6 | -2,463.7 | 2,596.7 | 2,595.9 | 3,255.513 | | | |
| 200.0 | 200.0 | 0.0 | 0.0 | 1.4 | 0.0 | -108.25 | -812.6 | -2,463.7 | 2,594.3 | 2,592.9 | 1,833.870 | | | |
| 209.6 | 209.6 | 0.0 | 0.0 | 1.5 | 0.0 | -113.26 | -812.6 | -2,463.7 | 2,594.2 | 2,592.8 | 1,773.756 | CC | | |
| 300.0 | 300.0 | 0.0 | 0.0 | 2.3 | 0.0 | -113.22 | -812.6 | -2,463.7 | 2,596.4 | 2,594.4 | 1,339.778 | | | |
| 400.0 | 399.8 | 145.5 | 145.5 | 3.5 | 4.0 | -113.29 | -813.1 | -2,464.7 | 2,598.5 | 2,592.1 | 404.136 | ES | | |
| 500.0 | 499.5 | 223.0 | 223.0 | 4.4 | 6.1 | -113.33 | -813.8 | -2,466.1 | 2,604.0 | 2,595.0 | 289.470 | | | |
| 600.0 | 598.7 | 300.1 | 300.0 | 5.2 | 8.2 | -113.38 | -814.7 | -2,468.2 | 2,611.7 | 2,600.2 | 226.809 | | | |
| 700.0 | 697.5 | 376.6 | 376.5 | 5.8 | 10.3 | -109.38 | -816.0 | -2,470.7 | 2,621.1 | 2,607.1 | 187.460 | | | |
| 800.0 | 795.7 | 452.5 | 452.4 | 6.5 | 12.3 | -106.73 | -817.4 | -2,473.9 | 2,631.6 | 2,615.2 | 160.383 | | | |
| 900.0 | 893.2 | 527.7 | 527.4 | 7.1 | 14.4 | -104.89 | -819.2 | -2,477.5 | 2,643.2 | 2,624.4 | 140.450 | | | |
| 1,000.0 | 989.9 | 602.1 | 601.7 | 7.7 | 16.4 | -103.57 | -821.1 | -2,481.7 | 2,656.0 | 2,634.8 | 125.123 | | | |
| 1,100.0 | 1,085.7 | 675.5 | 674.9 | 8.2 | 18.4 | -102.60 | -823.4 | -2,486.4 | 2,670.0 | 2,646.4 | 112.954 | | | |
| 1,200.0 | 1,180.4 | 747.9 | 747.0 | 8.8 | 20.4 | -101.88 | -825.8 | -2,491.5 | 2,685.4 | 2,659.3 | 103.054 | | | |
| 1,300.0 | 1,273.9 | 920.0 | 918.4 | 9.4 | 25.1 | -102.14 | -832.5 | -2,505.7 | 2,704.5 | 2,673.2 | 86.513 | | | |
| 1,400.0 | 1,366.2 | 920.0 | 918.4 | 9.9 | 25.1 | -101.20 | -832.5 | -2,505.7 | 2,720.4 | 2,688.6 | 85.576 | | | |
| 1,500.0 | 1,457.2 | 961.8 | 960.0 | 10.3 | 25.3 | -100.92 | -834.7 | -2,509.4 | 2,739.7 | 2,707.2 | 84.360 | | | |
| 1,600.0 | 1,547.7 | 1,045.0 | 1,042.7 | 10.7 | 25.8 | -101.73 | -841.5 | -2,516.1 | 2,760.4 | 2,727.0 | 82.716 | | | |
| 1,700.0 | 1,638.3 | 1,128.5 | 1,125.5 | 11.1 | 25.9 | -102.56 | -850.0 | -2,522.0 | 2,781.9 | 2,747.9 | 81.705 | | | |
| 1,800.0 | 1,728.8 | 1,216.2 | 1,212.5 | 11.4 | 25.9 | -103.42 | -858.6 | -2,528.3 | 2,804.1 | 2,769.4 | 80.729 | | | |
| 1,900.0 | 1,819.4 | 1,309.5 | 1,305.2 | 11.8 | 25.9 | -104.32 | -867.7 | -2,534.9 | 2,827.0 | 2,791.5 | 79.759 | | | |
| 2,000.0 | 1,910.0 | 1,410.7 | 1,405.6 | 12.3 | 26.0 | -105.29 | -877.4 | -2,541.6 | 2,850.1 | 2,813.9 | 78.785 | | | |
| 2,100.0 | 2,000.5 | 1,504.9 | 1,499.2 | 12.7 | 26.0 | -106.18 | -886.4 | -2,547.5 | 2,873.7 | 2,836.8 | 77.868 | | | |
| 2,200.0 | 2,091.1 | 1,622.1 | 1,615.7 | 13.1 | 26.1 | -107.28 | -897.9 | -2,553.6 | 2,897.2 | 2,859.6 | 76.895 | | | |
| 2,300.0 | 2,181.6 | 1,722.3 | 1,715.3 | 13.6 | 26.1 | -108.23 | -908.4 | -2,557.6 | 2,920.9 | 2,882.4 | 76.017 | | | |
| 2,400.0 | 2,272.2 | 1,823.5 | 1,815.8 | 14.0 | 26.2 | -109.19 | -919.6 | -2,560.7 | 2,944.8 | 2,905.7 | 75.171 | | | |
| 2,500.0 | 2,362.8 | 1,965.1 | 1,956.5 | 14.5 | 26.3 | -110.55 | -936.0 | -2,562.5 | 2,968.5 | 2,928.5 | 74.224 | | | |
| 2,600.0 | 2,453.3 | 2,082.0 | 2,072.5 | 15.0 | 26.4 | -111.67 | -949.8 | -2,561.8 | 2,991.8 | 2,951.0 | 73.393 | | | |
| 2,700.0 | 2,543.9 | 2,215.4 | 2,205.0 | 15.5 | 26.5 | -112.96 | -965.4 | -2,558.7 | 3,014.4 | 2,972.9 | 72.564 | | | |
| 2,800.0 | 2,634.4 | 2,325.4 | 2,314.1 | 16.0 | 26.7 | -114.01 | -978.4 | -2,554.5 | 3,036.9 | 2,994.6 | 71.827 | | | |
| 2,900.0 | 2,725.0 | 2,464.0 | 2,451.8 | 16.5 | 26.8 | -115.32 | -993.3 | -2,547.7 | 3,058.7 | 3,015.7 | 71.076 | | | |
| 3,000.0 | 2,815.6 | 2,582.9 | 2,569.9 | 17.1 | 26.9 | -116.42 | -1,004.7 | -2,541.2 | 3,080.4 | 3,036.7 | 70.395 | | | |
| 3,100.0 | 2,906.1 | 2,709.2 | 2,695.5 | 17.8 | 27.1 | -117.56 | -1,015.8 | -2,535.0 | 3,101.7 | 3,057.3 | 69.741 | | | |
| 3,200.0 | 2,996.7 | 2,843.1 | 2,828.5 | 18.4 | 27.2 | -118.75 | -1,026.5 | -2,522.7 | 3,122.5 | 3,077.3 | 69.119 | | | |
| 3,300.0 | 3,087.2 | 2,948.8 | 2,933.6 | 19.1 | 27.3 | -119.68 | -1,034.2 | -2,513.6 | 3,143.0 | 3,097.1 | 68.534 | | | |
| 3,400.0 | 3,177.8 | 3,051.3 | 3,035.5 | 19.8 | 27.4 | -120.57 | -1,041.3 | -2,504.6 | 3,163.7 | 3,117.2 | 67.984 | | | |
| 3,500.0 | 3,268.4 | 3,139.3 | 3,122.8 | 20.5 | 27.5 | -121.33 | -1,047.3 | -2,496.5 | 3,184.8 | 3,137.6 | 67.467 | | | |
| 3,600.0 | 3,358.9 | 3,234.8 | 3,217.7 | 21.2 | 27.6 | -122.14 | -1,053.6 | -2,487.7 | 3,206.5 | 3,158.6 | 66.976 | | | |
| 3,700.0 | 3,449.5 | 3,346.6 | 3,328.9 | 21.9 | 27.7 | -123.07 | -1,060.0 | -2,477.6 | 3,228.3 | 3,179.8 | 66.505 | | | |
| 3,800.0 | 3,540.0 | 3,467.9 | 3,449.6 | 22.6 | 27.8 | -124.04 | -1,066.4 | -2,466.2 | 3,249.7 | 3,200.5 | 66.041 | | | |
| 3,900.0 | 3,630.6 | 3,545.5 | 3,526.8 | 23.3 | 27.9 | -124.65 | -1,068.6 | -2,459.0 | 3,271.6 | 3,221.7 | 65.596 | | | |
| 4,000.0 | 3,721.2 | 3,642.0 | 3,622.8 | 24.0 | 28.0 | -125.40 | -1,072.5 | -2,450.3 | 3,294.1 | 3,243.6 | 65.179 | | | |
| 4,100.0 | 3,811.7 | 3,750.7 | 3,731.0 | 24.7 | 28.1 | -126.23 | -1,076.2 | -2,440.1 | 3,316.6 | 3,265.4 | 64.775 | | | |
| 4,200.0 | 3,902.3 | 3,833.8 | 3,813.7 | 25.4 | 28.2 | -126.85 | -1,078.8 | -2,432.5 | 3,339.5 | 3,287.6 | 64.408 | | | |
| 4,300.0 | 3,992.8 | 3,922.9 | 3,902.3 | 26.2 | 28.3 | -127.51 | -1,081.5 | -2,424.5 | 3,362.9 | 3,310.4 | 64.059 | | | |
| 4,400.0 | 4,083.4 | 4,033.9 | 4,012.9 | 26.9 | 28.4 | -128.31 | -1,084.3 | -2,414.7 | 3,386.7 | 3,333.6 | 63.728 | | | |
| 4,500.0 | 4,174.0 | 4,136.0 | 4,114.5 | 27.6 | 28.5 | -129.03 | -1,086.4 | -2,405.3 | 3,410.2 | 3,356.5 | 63.420 | | | |
| 4,600.0 | 4,264.5 | 4,254.8 | 4,232.7 | 28.3 | 28.6 | -129.86 | -1,088.1 | -2,394.1 | 3,433.8 | 3,379.4 | 63.123 | | | |
| 4,700.0 | 4,355.1 | 4,322.3 | 4,300.0 | 29.0 | 28.7 | -130.33 | -1,089.1 | -2,387.6 | 3,457.7 | 3,402.7 | 62.851 | | | |
| 4,800.0 | 4,445.6 | 4,440.8 | 4,417.9 | 29.7 | 28.8 | -131.14 | -1,090.8 | -2,376.3 | 3,482.2 | 3,426.5 | 62.582 | | | |
| 4,900.0 | 4,536.2 | 4,545.2 | 4,521.8 | 30.4 | 28.9 | -131.84 | -1,091.6 | -2,365.7 | 3,506.1 | 3,449.9 | 62.326 | | | |
| 5,000.0 | 4,626.8 | 4,634.9 | 4,611.0 | 31.1 | 29.0 | -132.43 | -1,092.0 | -2,356.8 | 3,530.4 | 3,473.6 | 62.085 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft | |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|--|
| Survey Program: 920-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 5,100.0 | 4,717.9 | 4,729.6 | 4,705.2 | 31.8 | 29.1 | -133.33 | -1,092.1 | -2,347.5 | 3,554.1 | 3,496.7 | 61.848 | | | |
| 5,200.0 | 4,810.3 | 4,817.6 | 4,792.9 | 32.5 | 29.2 | -134.16 | -1,092.0 | -2,339.3 | 3,575.9 | 3,517.8 | 61.588 | | | |
| 5,300.0 | 4,904.1 | 4,905.8 | 4,880.7 | 33.1 | 29.3 | -134.91 | -1,092.1 | -2,331.0 | 3,595.7 | 3,537.1 | 61.324 | | | |
| 5,400.0 | 4,999.0 | 5,007.0 | 4,981.4 | 33.6 | 29.4 | -135.65 | -1,092.3 | -2,321.0 | 3,613.3 | 3,554.1 | 61.046 | | | |
| 5,500.0 | 5,094.9 | 5,090.0 | 5,064.0 | 34.1 | 29.5 | -136.24 | -1,092.5 | -2,313.0 | 3,628.7 | 3,569.0 | 60.781 | | | |
| 5,600.0 | 5,191.8 | 5,182.0 | 5,155.6 | 34.5 | 29.6 | -136.78 | -1,092.6 | -2,304.6 | 3,641.9 | 3,581.7 | 60.510 | | | |
| 5,700.0 | 5,289.5 | 5,268.0 | 5,241.3 | 34.9 | 29.7 | -137.23 | -1,092.7 | -2,297.1 | 3,653.1 | 3,592.5 | 60.247 | | | |
| 5,800.0 | 5,387.8 | 5,378.2 | 5,351.1 | 35.2 | 29.8 | -137.68 | -1,092.8 | -2,287.7 | 3,661.9 | 3,600.8 | 59.953 | | | |
| 5,900.0 | 5,486.8 | 5,467.0 | 5,439.5 | 35.5 | 29.9 | -138.01 | -1,093.1 | -2,279.9 | 3,668.2 | 3,606.7 | 59.676 | | | |
| 6,000.0 | 5,586.1 | 5,562.9 | 5,535.1 | 35.7 | 30.0 | -138.28 | -1,093.4 | -2,271.6 | 3,672.1 | 3,610.2 | 59.392 | | | |
| 6,100.0 | 5,685.8 | 5,628.1 | 5,600.1 | 35.8 | 30.1 | -138.42 | -1,093.4 | -2,266.7 | 3,673.8 | 3,611.7 | 59.152 | | | |
| 6,200.0 | 5,785.8 | 5,724.1 | 5,695.9 | 35.9 | 30.2 | -138.54 | -1,093.6 | -2,260.6 | 3,673.7 | 3,611.3 | 58.898 | | | |
| 6,300.0 | 5,885.8 | 5,805.5 | 5,777.1 | 35.9 | 30.3 | -148.07 | -1,093.7 | -2,255.5 | 3,671.1 | 3,608.6 | 58.782 | | | |
| 6,400.0 | 5,985.8 | 5,901.1 | 5,872.6 | 36.0 | 30.5 | -148.14 | -1,093.8 | -2,250.5 | 3,668.4 | 3,605.9 | 58.702 | | | |
| 6,500.0 | 6,085.8 | 5,991.5 | 5,962.9 | 36.0 | 30.6 | -148.19 | -1,093.5 | -2,246.4 | 3,665.7 | 3,603.2 | 58.615 | | | |
| 6,600.0 | 6,185.8 | 6,080.3 | 6,051.7 | 36.0 | 30.7 | -148.23 | -1,093.2 | -2,243.1 | 3,663.4 | 3,600.9 | 58.534 | | | |
| 6,700.0 | 6,285.8 | 6,173.6 | 6,144.9 | 36.0 | 30.8 | -148.27 | -1,092.8 | -2,240.1 | 3,661.4 | 3,598.7 | 58.448 | | | |
| 6,800.0 | 6,385.8 | 6,273.9 | 6,245.2 | 36.0 | 30.9 | -148.30 | -1,092.3 | -2,237.1 | 3,659.4 | 3,596.7 | 58.365 | | | |
| 6,900.0 | 6,485.8 | 6,368.0 | 6,339.3 | 36.1 | 31.0 | -148.34 | -1,092.0 | -2,234.2 | 3,657.5 | 3,594.8 | 58.288 | | | |
| 7,000.0 | 6,585.8 | 6,456.2 | 6,427.3 | 36.1 | 31.1 | -148.37 | -1,091.8 | -2,231.6 | 3,655.8 | 3,593.0 | 58.225 | | | |
| 7,100.0 | 6,685.8 | 6,542.3 | 6,513.4 | 36.1 | 31.2 | -148.40 | -1,091.8 | -2,229.6 | 3,654.6 | 3,591.7 | 58.177 | | | |
| 7,200.0 | 6,785.8 | 6,646.8 | 6,617.9 | 36.2 | 31.4 | -148.42 | -1,091.6 | -2,227.6 | 3,653.4 | 3,590.5 | 58.022 | | | |
| 7,300.0 | 6,885.8 | 6,757.5 | 6,728.7 | 36.2 | 31.7 | -148.45 | -1,091.1 | -2,225.6 | 3,652.1 | 3,588.9 | 57.793 | | | |
| 7,400.0 | 6,985.8 | 6,868.3 | 6,839.4 | 36.2 | 31.9 | -148.47 | -1,090.2 | -2,223.5 | 3,650.4 | 3,587.0 | 57.561 | | | |
| 7,500.0 | 7,085.8 | 6,973.4 | 6,944.5 | 36.2 | 32.4 | -148.48 | -1,088.9 | -2,221.7 | 3,648.4 | 3,584.5 | 57.033 | | | |
| 7,600.0 | 7,185.8 | 7,068.4 | 7,039.4 | 36.3 | 33.5 | -148.49 | -1,087.8 | -2,220.1 | 3,646.5 | 3,581.4 | 55.996 | | | |
| 7,700.0 | 7,285.8 | 7,163.3 | 7,134.3 | 36.3 | 34.5 | -148.51 | -1,086.8 | -2,218.5 | 3,644.8 | 3,578.5 | 55.000 | | | |
| 7,800.0 | 7,385.8 | 7,258.2 | 7,229.2 | 36.3 | 35.6 | -148.52 | -1,085.9 | -2,217.0 | 3,643.2 | 3,575.7 | 54.042 | | | |
| 7,900.0 | 7,485.8 | 7,353.2 | 7,324.2 | 36.3 | 36.6 | -148.53 | -1,085.1 | -2,215.6 | 3,641.7 | 3,573.1 | 53.121 | | | |
| 8,000.0 | 7,585.8 | 7,448.1 | 7,419.1 | 36.4 | 37.7 | -148.54 | -1,084.4 | -2,214.3 | 3,640.3 | 3,570.6 | 52.235 | | | |
| 8,100.0 | 7,685.8 | 7,543.1 | 7,514.0 | 36.4 | 38.8 | -148.56 | -1,083.9 | -2,213.0 | 3,639.1 | 3,568.3 | 51.380 | | | |
| 8,200.0 | 7,785.8 | 7,639.0 | 7,610.0 | 36.4 | 39.9 | -148.57 | -1,083.4 | -2,211.7 | 3,638.1 | 3,566.1 | 50.547 | | | |
| 8,300.0 | 7,885.8 | 7,738.8 | 7,709.8 | 36.4 | 40.7 | -148.58 | -1,082.9 | -2,210.6 | 3,637.1 | 3,564.1 | 49.882 | | | |
| 8,400.0 | 7,985.8 | 7,839.7 | 7,810.6 | 36.5 | 41.6 | -148.59 | -1,082.3 | -2,209.6 | 3,636.0 | 3,562.2 | 49.228 | | | |
| 8,500.0 | 8,085.8 | 7,940.5 | 7,911.5 | 36.5 | 42.4 | -148.59 | -1,081.5 | -2,208.9 | 3,635.0 | 3,560.2 | 48.591 | | | |
| 8,600.0 | 8,185.8 | 8,041.4 | 8,012.4 | 36.5 | 43.3 | -148.59 | -1,080.6 | -2,208.3 | 3,633.9 | 3,558.1 | 47.970 | | | |
| 8,700.0 | 8,285.8 | 8,142.3 | 8,113.2 | 36.6 | 44.1 | -148.59 | -1,079.5 | -2,208.0 | 3,632.8 | 3,556.1 | 47.365 | | | |
| 8,800.0 | 8,385.8 | 8,243.1 | 8,214.1 | 36.6 | 45.0 | -148.58 | -1,078.3 | -2,207.8 | 3,631.7 | 3,554.0 | 46.776 | | | |
| 8,900.0 | 8,485.8 | 8,325.0 | 8,295.9 | 36.6 | 45.1 | -148.57 | -1,077.2 | -2,207.7 | 3,630.6 | 3,552.8 | 46.687 | SF | | |
| 8,923.2 | 8,508.9 | 8,325.0 | 8,295.9 | 36.6 | 45.1 | -148.57 | -1,077.2 | -2,207.7 | 3,630.5 | 3,552.8 | 46.707 | | | |
| 9,000.0 | 8,585.8 | 8,325.0 | 8,295.9 | 36.6 | 45.1 | -148.57 | -1,077.2 | -2,207.7 | 3,631.3 | 3,553.7 | 46.799 | | | |
| 9,067.2 | 8,653.0 | 8,325.0 | 8,295.9 | 36.7 | 45.1 | -148.57 | -1,077.2 | -2,207.7 | 3,633.4 | 3,555.9 | 46.913 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|------------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 184-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N/-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 67.79 | 746.2 | 1,827.8 | 1,974.2 | | | | |
| 100.0 | 100.0 | 94.2 | 94.2 | 0.8 | 0.6 | 67.79 | 746.1 | 1,827.7 | 1,974.1 | 1,972.7 | 1,382.957 | | |
| 200.0 | 200.0 | 196.8 | 196.8 | 1.4 | 1.3 | 67.80 | 745.9 | 1,827.5 | 1,973.9 | 1,971.1 | 716.595 | | |
| 300.0 | 300.0 | 294.2 | 294.2 | 2.3 | 2.1 | 62.87 | 745.5 | 1,827.4 | 1,972.9 | 1,968.8 | 487.517 | | |
| 400.0 | 399.8 | 397.7 | 397.7 | 3.5 | 2.7 | 63.07 | 744.9 | 1,827.5 | 1,970.3 | 1,965.1 | 378.474 | | |
| 500.0 | 499.5 | 504.5 | 504.5 | 4.4 | 3.2 | 63.40 | 744.6 | 1,827.0 | 1,965.8 | 1,959.6 | 319.675 | | |
| 600.0 | 598.7 | 606.3 | 606.2 | 5.2 | 3.6 | 63.84 | 744.0 | 1,826.4 | 1,959.6 | 1,952.5 | 279.174 | | |
| 700.0 | 697.5 | 702.0 | 702.0 | 5.8 | 4.0 | 68.47 | 743.0 | 1,825.9 | 1,952.5 | 1,944.7 | 250.786 | | |
| 800.0 | 795.7 | 794.7 | 794.7 | 6.5 | 4.4 | 71.85 | 742.4 | 1,825.6 | 1,945.4 | 1,937.0 | 229.253 | | |
| 900.0 | 893.2 | 891.0 | 890.9 | 7.1 | 4.8 | 74.57 | 742.1 | 1,825.3 | 1,938.5 | 1,929.4 | 211.133 | | |
| 1,000.0 | 989.9 | 986.6 | 986.6 | 7.7 | 5.2 | 76.88 | 742.1 | 1,825.0 | 1,931.8 | 1,921.9 | 195.590 | | |
| 1,100.0 | 1,085.7 | 1,082.9 | 1,082.9 | 8.2 | 5.4 | 78.95 | 742.2 | 1,824.6 | 1,925.2 | 1,914.7 | 183.805 | | |
| 1,200.0 | 1,180.4 | 1,185.9 | 1,185.9 | 8.8 | 5.6 | 80.97 | 741.9 | 1,824.2 | 1,918.8 | 1,907.7 | 173.801 | | |
| 1,300.0 | 1,273.9 | 1,303.5 | 1,303.5 | 9.4 | 5.9 | 83.11 | 740.2 | 1,823.0 | 1,912.1 | 1,900.4 | 164.057 | | |
| 1,400.0 | 1,366.2 | 1,410.7 | 1,410.6 | 9.9 | 6.1 | 85.17 | 736.8 | 1,821.4 | 1,905.3 | 1,893.0 | 154.793 | | |
| 1,500.0 | 1,457.2 | 1,528.4 | 1,528.1 | 10.3 | 6.4 | 87.26 | 731.3 | 1,818.4 | 1,898.4 | 1,885.4 | 146.045 | | |
| 1,600.0 | 1,547.7 | 1,622.0 | 1,621.5 | 10.7 | 6.6 | 88.59 | 725.5 | 1,815.5 | 1,891.9 | 1,878.1 | 137.777 | | |
| 1,700.0 | 1,638.3 | 1,723.2 | 1,722.4 | 11.1 | 6.9 | 90.09 | 717.8 | 1,812.5 | 1,886.4 | 1,871.9 | 129.932 | | |
| 1,800.0 | 1,728.8 | 1,831.6 | 1,830.3 | 11.4 | 7.3 | 91.73 | 707.9 | 1,808.2 | 1,881.1 | 1,865.7 | 122.590 | | |
| 1,900.0 | 1,819.4 | 1,930.7 | 1,928.7 | 11.8 | 7.6 | 93.26 | 698.0 | 1,803.6 | 1,876.4 | 1,860.2 | 116.007 | | |
| 2,000.0 | 1,910.0 | 2,017.5 | 2,014.8 | 12.3 | 7.9 | 94.65 | 687.9 | 1,799.3 | 1,872.7 | 1,855.7 | 110.234 | | |
| 2,100.0 | 2,000.5 | 2,115.6 | 2,111.9 | 12.7 | 8.3 | 96.25 | 674.9 | 1,794.4 | 1,870.3 | 1,852.5 | 104.915 | | |
| 2,200.0 | 2,091.1 | 2,207.4 | 2,202.6 | 13.1 | 8.6 | 97.78 | 661.9 | 1,789.3 | 1,868.9 | 1,850.2 | 100.130 | | |
| 2,256.2 | 2,142.0 | 2,256.9 | 2,251.6 | 13.4 | 8.8 | 98.61 | 654.9 | 1,786.5 | 1,868.7 | 1,849.5 | 97.653 | CC | |
| 2,300.0 | 2,181.6 | 2,294.8 | 2,289.0 | 13.6 | 9.0 | 99.25 | 649.2 | 1,784.2 | 1,868.8 | 1,849.3 | 95.834 | ES | |
| 2,400.0 | 2,272.2 | 2,372.4 | 2,365.5 | 14.0 | 9.3 | 100.57 | 637.0 | 1,779.7 | 1,870.4 | 1,850.1 | 92.067 | | |
| 2,500.0 | 2,362.8 | 2,446.1 | 2,438.1 | 14.5 | 9.5 | 101.82 | 625.3 | 1,775.8 | 1,873.9 | 1,852.8 | 88.749 | | |
| 2,600.0 | 2,453.3 | 2,521.7 | 2,512.7 | 15.0 | 9.8 | 103.11 | 613.1 | 1,772.1 | 1,879.6 | 1,857.7 | 85.784 | | |
| 2,700.0 | 2,543.9 | 2,607.4 | 2,597.2 | 15.5 | 10.1 | 104.56 | 599.5 | 1,768.0 | 1,886.9 | 1,864.2 | 83.034 | | |
| 2,800.0 | 2,634.4 | 2,687.0 | 2,675.7 | 16.0 | 10.4 | 105.90 | 586.8 | 1,764.3 | 1,896.0 | 1,872.4 | 80.610 | | |
| 2,900.0 | 2,725.0 | 2,773.2 | 2,760.7 | 16.5 | 10.8 | 107.33 | 573.4 | 1,760.3 | 1,906.6 | 1,882.3 | 78.368 | | |
| 3,000.0 | 2,815.6 | 2,846.7 | 2,833.3 | 17.1 | 11.1 | 108.54 | 562.3 | 1,757.0 | 1,918.8 | 1,893.7 | 76.452 | | |
| 3,100.0 | 2,906.1 | 2,932.3 | 2,917.7 | 17.8 | 11.4 | 109.94 | 548.8 | 1,753.3 | 1,932.9 | 1,907.0 | 74.638 | | |
| 3,200.0 | 2,996.7 | 3,016.0 | 3,000.4 | 18.4 | 11.7 | 111.29 | 535.9 | 1,749.6 | 1,948.1 | 1,921.4 | 72.999 | | |
| 3,300.0 | 3,087.2 | 3,097.5 | 3,080.8 | 19.1 | 12.0 | 112.57 | 523.7 | 1,746.2 | 1,965.0 | 1,937.5 | 71.542 | | |
| 3,400.0 | 3,177.8 | 3,186.6 | 3,168.9 | 19.8 | 12.4 | 113.96 | 510.5 | 1,742.4 | 1,983.1 | 1,954.9 | 70.160 | | |
| 3,500.0 | 3,268.4 | 3,277.0 | 3,258.3 | 20.5 | 12.7 | 115.33 | 497.6 | 1,738.3 | 2,002.3 | 1,973.2 | 68.881 | | |
| 3,600.0 | 3,358.9 | 3,357.1 | 3,337.4 | 21.2 | 13.1 | 116.54 | 486.0 | 1,734.6 | 2,022.7 | 1,992.8 | 67.796 | | |
| 3,700.0 | 3,449.5 | 3,432.0 | 3,411.5 | 21.9 | 13.4 | 117.64 | 475.3 | 1,731.5 | 2,044.6 | 2,014.1 | 66.864 | | |
| 3,800.0 | 3,540.0 | 3,512.1 | 3,490.7 | 22.6 | 13.7 | 118.81 | 463.8 | 1,728.4 | 2,068.1 | 2,036.7 | 65.994 | | |
| 3,900.0 | 3,630.6 | 3,602.8 | 3,580.5 | 23.3 | 14.1 | 120.10 | 450.8 | 1,724.9 | 2,092.6 | 2,060.5 | 65.113 | | |
| 4,000.0 | 3,721.2 | 3,698.5 | 3,675.2 | 24.0 | 14.4 | 121.42 | 438.0 | 1,721.1 | 2,117.8 | 2,084.9 | 64.264 | | |
| 4,100.0 | 3,811.7 | 3,785.1 | 3,761.0 | 24.7 | 14.8 | 122.58 | 427.1 | 1,717.5 | 2,143.8 | 2,110.1 | 63.553 | | |
| 4,200.0 | 3,902.3 | 3,865.1 | 3,840.3 | 25.4 | 15.1 | 123.63 | 416.8 | 1,714.3 | 2,170.8 | 2,136.4 | 62.951 | | |
| 4,300.0 | 3,992.8 | 3,949.3 | 3,923.7 | 26.2 | 15.4 | 124.72 | 405.7 | 1,710.9 | 2,199.0 | 2,163.7 | 62.373 | | |
| 4,400.0 | 4,083.4 | 4,036.0 | 4,009.6 | 26.9 | 15.8 | 125.82 | 394.3 | 1,707.3 | 2,228.0 | 2,191.9 | 61.819 | | |
| 4,500.0 | 4,174.0 | 4,132.3 | 4,105.0 | 27.6 | 16.2 | 127.02 | 381.6 | 1,703.1 | 2,257.7 | 2,220.8 | 61.231 | | |
| 4,600.0 | 4,264.5 | 4,221.6 | 4,193.3 | 28.3 | 16.6 | 128.12 | 369.8 | 1,698.6 | 2,287.8 | 2,250.1 | 60.725 | | |
| 4,700.0 | 4,355.1 | 4,295.2 | 4,266.2 | 29.0 | 16.9 | 129.01 | 359.9 | 1,694.8 | 2,318.9 | 2,280.5 | 60.382 | | |
| 4,800.0 | 4,445.6 | 4,363.0 | 4,333.2 | 29.7 | 17.2 | 129.81 | 350.4 | 1,691.7 | 2,351.3 | 2,312.2 | 60.135 | | |
| 4,900.0 | 4,536.2 | 4,440.0 | 4,409.4 | 30.4 | 17.5 | 130.70 | 339.8 | 1,688.7 | 2,385.0 | 2,345.1 | 59.856 | | |
| 5,000.0 | 4,626.8 | 4,526.6 | 4,495.2 | 31.1 | 17.8 | 131.67 | 328.1 | 1,685.7 | 2,419.5 | 2,378.8 | 59.530 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - (Offset) Buzzard Creek 16-8 - Wellbore #1 - Wellbore #1 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|--------------------|---------------------------------|-------------------------|--|--------------------|----------|
| Survey Program: 184-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,100.0 | 4,717.9 | 4,608.5 | 4,576.3 | 31.8 | 18.2 | 133.01 | 316.9 | 1,682.7 | 2,453.8 | 2,412.4 | 59.260 | | |
| 5,200.0 | 4,810.3 | 4,687.8 | 4,654.8 | 32.5 | 18.5 | 134.28 | 306.6 | 1,680.4 | 2,486.7 | 2,444.6 | 58.989 | | |
| 5,300.0 | 4,904.1 | 4,770.7 | 4,737.0 | 33.1 | 18.8 | 135.48 | 295.1 | 1,677.8 | 2,518.1 | 2,475.2 | 58.692 | | |
| 5,400.0 | 4,999.0 | 4,867.4 | 4,832.7 | 33.6 | 19.2 | 136.69 | 281.8 | 1,674.8 | 2,547.6 | 2,503.9 | 58.284 | | |
| 5,500.0 | 5,094.9 | 4,996.1 | 4,960.2 | 34.1 | 19.8 | 137.99 | 264.9 | 1,670.2 | 2,574.4 | 2,529.7 | 57.619 | | |
| 5,600.0 | 5,191.8 | 5,177.3 | 5,140.1 | 34.5 | 20.5 | 139.44 | 245.1 | 1,660.7 | 2,596.2 | 2,550.4 | 56.593 | | |
| 5,700.0 | 5,289.5 | 5,290.7 | 5,253.1 | 34.9 | 21.0 | 140.22 | 237.6 | 1,655.8 | 2,613.9 | 2,567.3 | 56.107 | | |
| 5,800.0 | 5,387.8 | 5,364.1 | 5,326.3 | 35.2 | 21.3 | 140.70 | 233.7 | 1,653.9 | 2,629.3 | 2,582.3 | 55.847 | | |
| 5,900.0 | 5,486.8 | 5,462.7 | 5,424.7 | 35.5 | 22.0 | 141.19 | 227.9 | 1,651.4 | 2,642.8 | 2,594.7 | 54.921 | | |
| 6,000.0 | 5,586.1 | 5,569.5 | 5,531.3 | 35.7 | 22.8 | 141.62 | 222.0 | 1,648.8 | 2,653.3 | 2,604.0 | 53.819 | | |
| 6,100.0 | 5,685.8 | 5,677.0 | 5,638.7 | 35.8 | 23.6 | 141.95 | 216.6 | 1,646.1 | 2,660.9 | 2,610.5 | 52.751 | | |
| 6,200.0 | 5,785.8 | 5,785.0 | 5,746.5 | 35.9 | 24.4 | 142.18 | 211.6 | 1,643.4 | 2,665.4 | 2,613.9 | 51.722 | | |
| 6,300.0 | 5,885.8 | 5,894.9 | 5,856.2 | 35.9 | 25.2 | 132.85 | 207.0 | 1,640.6 | 2,667.1 | 2,614.7 | 50.894 | | |
| 6,400.0 | 5,985.8 | 6,009.6 | 5,970.9 | 36.0 | 25.8 | 132.94 | 203.5 | 1,638.1 | 2,667.6 | 2,614.5 | 50.250 | | |
| 6,500.0 | 6,085.8 | 6,124.4 | 6,085.6 | 36.0 | 26.5 | 133.00 | 201.5 | 1,636.2 | 2,667.5 | 2,613.7 | 49.611 | | |
| 6,600.0 | 6,185.8 | 6,229.5 | 6,190.7 | 36.0 | 27.0 | 133.03 | 200.8 | 1,634.8 | 2,667.0 | 2,612.8 | 49.171 | | |
| 6,700.0 | 6,285.8 | 6,327.1 | 6,288.3 | 36.0 | 27.4 | 133.07 | 199.9 | 1,633.3 | 2,666.5 | 2,612.0 | 48.883 | | |
| 6,800.0 | 6,385.8 | 6,424.7 | 6,385.9 | 36.0 | 27.8 | 133.11 | 198.6 | 1,631.6 | 2,666.1 | 2,611.3 | 48.599 | | |
| 6,900.0 | 6,485.8 | 6,534.0 | 6,495.2 | 36.1 | 28.0 | 133.16 | 197.1 | 1,629.5 | 2,665.7 | 2,610.6 | 48.380 | | |
| 7,000.0 | 6,585.8 | 6,649.0 | 6,610.1 | 36.1 | 28.2 | 133.19 | 197.0 | 1,627.9 | 2,664.7 | 2,609.4 | 48.184 | | |
| 7,100.0 | 6,685.8 | 6,765.0 | 6,726.1 | 36.1 | 28.3 | 133.19 | 198.4 | 1,626.7 | 2,663.2 | 2,607.7 | 47.980 | | |
| 7,200.0 | 6,785.8 | 6,884.0 | 6,845.1 | 36.2 | 28.5 | 133.19 | 200.0 | 1,624.6 | 2,661.0 | 2,605.2 | 47.762 | | |
| 7,300.0 | 6,885.8 | 7,000.6 | 6,961.6 | 36.2 | 28.6 | 133.22 | 201.2 | 1,621.1 | 2,658.0 | 2,602.1 | 47.533 | | |
| 7,400.0 | 6,985.8 | 7,108.4 | 7,069.4 | 36.2 | 28.9 | 133.27 | 202.0 | 1,616.9 | 2,654.7 | 2,598.6 | 47.301 | | |
| 7,500.0 | 7,085.8 | 7,216.2 | 7,177.1 | 36.2 | 29.1 | 133.35 | 202.3 | 1,611.8 | 2,651.1 | 2,594.7 | 47.066 | | |
| 7,600.0 | 7,185.8 | 7,305.9 | 7,266.6 | 36.3 | 29.4 | 133.42 | 202.1 | 1,607.2 | 2,647.4 | 2,590.9 | 46.836 | | |
| 7,700.0 | 7,285.8 | 7,394.0 | 7,354.6 | 36.3 | 29.7 | 133.49 | 201.6 | 1,602.8 | 2,644.3 | 2,587.6 | 46.616 | | |
| 7,800.0 | 7,385.8 | 7,482.2 | 7,442.7 | 36.3 | 30.0 | 133.57 | 200.6 | 1,598.6 | 2,641.6 | 2,584.6 | 46.406 | | |
| 7,900.0 | 7,485.8 | 7,600.5 | 7,560.9 | 36.3 | 30.3 | 133.66 | 199.6 | 1,593.2 | 2,638.9 | 2,581.7 | 46.128 | | |
| 8,000.0 | 7,585.8 | 7,732.1 | 7,692.4 | 36.4 | 30.6 | 133.73 | 200.9 | 1,587.6 | 2,635.1 | 2,577.6 | 45.806 | | |
| 8,100.0 | 7,685.8 | 7,820.0 | 7,780.1 | 36.4 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,630.5 | 2,573.0 | 45.697 | SF | |
| 8,200.0 | 7,785.8 | 7,820.0 | 7,780.1 | 36.4 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,628.5 | 2,571.2 | 45.850 | | |
| 8,204.4 | 7,790.2 | 7,820.0 | 7,780.1 | 36.4 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,628.5 | 2,571.2 | 45.860 | | |
| 8,300.0 | 7,885.8 | 7,820.0 | 7,780.1 | 36.4 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,630.3 | 2,573.3 | 46.119 | | |
| 8,400.0 | 7,985.8 | 7,820.0 | 7,780.1 | 36.5 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,635.9 | 2,579.2 | 46.505 | | |
| 8,500.0 | 8,085.8 | 7,820.0 | 7,780.1 | 36.5 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,645.2 | 2,588.9 | 47.006 | | |
| 8,600.0 | 8,185.8 | 7,820.0 | 7,780.1 | 36.5 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,658.3 | 2,602.4 | 47.623 | | |
| 8,700.0 | 8,285.8 | 7,820.0 | 7,780.1 | 36.6 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,675.0 | 2,619.7 | 48.355 | | |
| 8,800.0 | 8,385.8 | 7,820.0 | 7,780.1 | 36.6 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,695.4 | 2,640.6 | 49.200 | | |
| 8,900.0 | 8,485.8 | 7,820.0 | 7,780.1 | 36.6 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,719.2 | 2,665.0 | 50.157 | | |
| 9,000.0 | 8,585.8 | 7,820.0 | 7,780.1 | 36.6 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,746.6 | 2,692.9 | 51.222 | | |
| 9,067.2 | 8,653.0 | 7,820.0 | 7,780.1 | 36.7 | 30.7 | 133.75 | 202.9 | 1,583.9 | 2,766.8 | 2,713.6 | 52.004 | | |

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft | |
|---|-----------------------|-----------------------|-----------------------|----------------------------------|---------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|--|
| Survey Program: 130-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 135.65 | -1,930.8 | 1,887.4 | 2,703.7 | | | | | |
| 100.0 | 100.0 | 0.0 | 0.0 | 0.8 | 0.0 | 135.65 | -1,930.8 | 1,887.4 | 2,700.4 | 2,699.6 | 3,406.452 | | | |
| 140.0 | 140.0 | 0.0 | 0.0 | 1.0 | 0.0 | 135.65 | -1,930.8 | 1,887.4 | 2,700.1 | 2,699.0 | 2,593.458 | CC | | |
| 200.0 | 200.0 | 56.2 | 56.2 | 1.4 | 0.3 | 135.65 | -1,930.9 | 1,887.4 | 2,700.1 | 2,698.4 | 1,562.355 | ES | | |
| 300.0 | 300.0 | 130.0 | 130.0 | 2.3 | 0.7 | 130.65 | -1,931.3 | 1,887.3 | 2,701.6 | 2,698.8 | 966.970 | | | |
| 400.0 | 399.8 | 219.0 | 219.0 | 3.5 | 1.5 | 130.68 | -1,932.8 | 1,887.3 | 2,706.3 | 2,702.0 | 636.306 | | | |
| 500.0 | 499.5 | 292.4 | 292.4 | 4.4 | 2.0 | 130.70 | -1,935.3 | 1,887.2 | 2,714.2 | 2,708.9 | 516.837 | | | |
| 600.0 | 598.7 | 356.3 | 356.1 | 5.2 | 2.3 | 130.71 | -1,938.2 | 1,886.9 | 2,725.2 | 2,719.1 | 446.693 | | | |
| 700.0 | 697.5 | 418.0 | 417.8 | 5.8 | 2.6 | 134.83 | -1,941.9 | 1,887.1 | 2,740.3 | 2,733.4 | 397.185 | | | |
| 800.0 | 795.7 | 490.0 | 489.6 | 6.5 | 3.0 | 137.65 | -1,947.1 | 1,887.4 | 2,759.7 | 2,751.9 | 356.792 | | | |
| 900.0 | 893.2 | 558.5 | 557.8 | 7.1 | 3.3 | 139.68 | -1,953.0 | 1,887.7 | 2,783.0 | 2,774.5 | 325.313 | | | |
| 1,000.0 | 989.9 | 630.9 | 629.8 | 7.7 | 3.6 | 141.25 | -1,960.4 | 1,887.5 | 2,810.3 | 2,800.9 | 299.255 | | | |
| 1,100.0 | 1,085.7 | 702.4 | 700.9 | 8.2 | 4.0 | 142.47 | -1,968.6 | 1,887.2 | 2,841.3 | 2,831.1 | 278.153 | | | |
| 1,200.0 | 1,180.4 | 765.0 | 763.0 | 8.8 | 4.2 | 143.40 | -1,976.5 | 1,886.8 | 2,876.2 | 2,865.2 | 261.528 | | | |
| 1,300.0 | 1,273.9 | 835.2 | 832.5 | 9.4 | 4.6 | 144.20 | -1,986.2 | 1,886.1 | 2,914.8 | 2,903.0 | 246.086 | | | |
| 1,400.0 | 1,366.2 | 895.7 | 892.3 | 9.9 | 4.9 | 144.80 | -1,995.4 | 1,885.4 | 2,957.3 | 2,944.7 | 233.720 | | | |
| 1,500.0 | 1,457.2 | 953.9 | 949.7 | 10.3 | 5.2 | 145.27 | -2,004.9 | 1,884.7 | 3,003.5 | 2,990.1 | 225.116 | | | |
| 1,600.0 | 1,547.7 | 1,047.8 | 1,042.2 | 10.7 | 5.6 | 146.00 | -2,021.0 | 1,882.9 | 3,050.9 | 3,036.7 | 215.580 | | | |
| 1,700.0 | 1,638.3 | 1,112.4 | 1,105.7 | 11.1 | 5.9 | 146.50 | -2,032.6 | 1,881.1 | 3,098.7 | 3,083.9 | 209.180 | | | |
| 1,800.0 | 1,728.8 | 1,172.7 | 1,164.9 | 11.4 | 6.2 | 146.97 | -2,044.0 | 1,879.2 | 3,147.3 | 3,131.9 | 203.413 | | | |
| 1,900.0 | 1,819.4 | 1,231.0 | 1,222.0 | 11.8 | 6.4 | 147.42 | -2,055.7 | 1,877.3 | 3,196.9 | 3,180.8 | 198.143 | | | |
| 2,000.0 | 1,910.0 | 1,286.8 | 1,276.5 | 12.3 | 6.7 | 147.86 | -2,067.5 | 1,875.2 | 3,247.4 | 3,230.6 | 193.201 | | | |
| 2,100.0 | 2,000.5 | 1,344.8 | 1,333.0 | 12.7 | 7.0 | 148.31 | -2,080.4 | 1,873.0 | 3,298.7 | 3,281.2 | 188.561 | | | |
| 2,200.0 | 2,091.1 | 1,404.2 | 1,390.7 | 13.1 | 7.3 | 148.78 | -2,094.0 | 1,870.5 | 3,350.9 | 3,332.7 | 184.277 | | | |
| 2,300.0 | 2,181.6 | 1,468.3 | 1,472.5 | 13.6 | 7.6 | 149.42 | -2,113.6 | 1,867.2 | 3,403.6 | 3,384.6 | 179.191 | | | |
| 2,400.0 | 2,272.2 | 1,563.2 | 1,545.4 | 14.0 | 8.0 | 149.96 | -2,130.6 | 1,864.7 | 3,456.5 | 3,436.7 | 174.853 | | | |
| 2,500.0 | 2,362.8 | 1,632.8 | 1,613.0 | 14.5 | 8.3 | 150.46 | -2,146.6 | 1,862.4 | 3,509.8 | 3,489.3 | 171.028 | | | |
| 2,600.0 | 2,453.3 | 1,716.0 | 1,694.0 | 15.0 | 8.6 | 151.03 | -2,165.8 | 1,859.6 | 3,563.6 | 3,542.2 | 166.801 | | | |
| 2,700.0 | 2,543.9 | 1,789.0 | 1,765.0 | 15.5 | 9.0 | 151.53 | -2,182.6 | 1,857.1 | 3,617.4 | 3,595.2 | 163.331 | | | |
| 2,800.0 | 2,634.4 | 1,853.0 | 1,827.1 | 16.0 | 9.3 | 151.96 | -2,197.7 | 1,854.9 | 3,671.9 | 3,649.0 | 160.511 | | | |
| 2,900.0 | 2,725.0 | 1,891.3 | 1,864.2 | 16.5 | 9.4 | 152.21 | -2,207.1 | 1,853.6 | 3,727.2 | 3,703.8 | 158.940 | | | |
| 3,000.0 | 2,815.6 | 1,946.0 | 1,917.1 | 17.1 | 9.7 | 152.58 | -2,221.1 | 1,851.6 | 3,783.4 | 3,759.3 | 156.771 | | | |
| 3,100.0 | 2,906.1 | 2,001.0 | 1,970.1 | 17.8 | 10.0 | 152.94 | -2,235.5 | 1,849.6 | 3,840.3 | 3,815.5 | 154.733 | | | |
| 3,200.0 | 2,996.7 | 2,061.4 | 2,028.3 | 18.4 | 10.3 | 153.33 | -2,251.5 | 1,847.4 | 3,897.6 | 3,872.1 | 152.618 | | | |
| 3,300.0 | 3,087.2 | 2,115.8 | 2,080.6 | 19.1 | 10.5 | 153.68 | -2,266.2 | 1,845.5 | 3,955.6 | 3,929.4 | 150.922 | | | |
| 3,400.0 | 3,177.8 | 2,163.7 | 2,126.6 | 19.8 | 10.8 | 153.99 | -2,279.5 | 1,843.8 | 4,014.3 | 3,987.4 | 149.557 | | | |
| 3,500.0 | 3,268.4 | 2,224.0 | 2,184.3 | 20.5 | 11.1 | 154.37 | -2,296.8 | 1,841.5 | 4,073.7 | 4,046.2 | 147.778 | | | |
| 3,600.0 | 3,358.9 | 2,267.7 | 2,226.1 | 21.2 | 11.3 | 154.65 | -2,309.7 | 1,839.8 | 4,133.8 | 4,105.6 | 146.763 | | | |
| 3,700.0 | 3,449.5 | 2,330.2 | 2,285.6 | 21.9 | 11.6 | 155.04 | -2,328.3 | 1,837.2 | 4,194.3 | 4,165.4 | 145.094 | | | |
| 3,800.0 | 3,540.0 | 2,383.1 | 2,336.0 | 22.6 | 11.9 | 155.37 | -2,344.4 | 1,834.9 | 4,255.2 | 4,225.7 | 143.907 | | | |
| 3,900.0 | 3,630.6 | 2,435.3 | 2,385.6 | 23.3 | 12.1 | 155.69 | -2,360.5 | 1,832.6 | 4,316.8 | 4,286.6 | 142.824 | | | |
| 4,000.0 | 3,721.2 | 2,486.5 | 2,434.2 | 24.0 | 12.4 | 156.01 | -2,376.7 | 1,830.2 | 4,378.9 | 4,348.0 | 141.840 | | | |
| 4,100.0 | 3,811.7 | 2,530.2 | 2,475.4 | 24.7 | 12.6 | 156.28 | -2,390.8 | 1,828.0 | 4,441.6 | 4,410.1 | 141.171 | | | |
| 4,200.0 | 3,902.3 | 2,569.9 | 2,512.8 | 25.4 | 12.8 | 156.52 | -2,404.0 | 1,826.0 | 4,504.9 | 4,472.9 | 140.693 | | | |
| 4,300.0 | 3,992.8 | 2,612.6 | 2,552.9 | 26.2 | 13.0 | 156.78 | -2,418.4 | 1,823.9 | 4,569.0 | 4,536.4 | 140.155 | | | |
| 4,400.0 | 4,083.4 | 2,662.9 | 2,600.1 | 26.9 | 13.3 | 157.09 | -2,435.7 | 1,821.4 | 4,633.6 | 4,600.4 | 139.378 | | | |
| 4,500.0 | 4,174.0 | 2,716.3 | 2,650.1 | 27.6 | 13.5 | 157.41 | -2,454.3 | 1,818.8 | 4,698.7 | 4,664.8 | 138.556 | | | |
| 4,600.0 | 4,264.5 | 2,773.4 | 2,703.5 | 28.3 | 13.8 | 157.74 | -2,474.3 | 1,816.0 | 4,764.1 | 4,729.5 | 137.663 | | | |
| 4,700.0 | 4,355.1 | 2,827.3 | 2,753.9 | 29.0 | 14.1 | 158.05 | -2,493.4 | 1,813.4 | 4,830.0 | 4,794.7 | 136.920 | | | |
| 4,800.0 | 4,445.6 | 2,884.4 | 2,807.1 | 29.7 | 14.4 | 158.38 | -2,513.9 | 1,810.5 | 4,896.2 | 4,860.2 | 136.120 | | | |
| 4,900.0 | 4,536.2 | 2,979.8 | 2,896.1 | 30.4 | 14.9 | 158.91 | -2,547.9 | 1,805.4 | 4,962.4 | 4,925.4 | 134.108 | SF | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|-----------------------------|---------------------|---------------------------------|----------------------------------|-------------------|--------------------|----------|
| Survey Program: 162-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.10 | 1,186.8 | 64.3 | 1,188.6 | | | | |
| 100.0 | 100.0 | 99.3 | 99.3 | 0.8 | 0.6 | 3.10 | 1,186.9 | 64.2 | 1,188.6 | 1,187.2 | 852.194 | | |
| 200.0 | 200.0 | 198.2 | 198.2 | 1.4 | 1.3 | 3.08 | 1,187.1 | 64.0 | 1,188.8 | 1,186.1 | 432.492 | | |
| 300.0 | 300.0 | 298.4 | 298.4 | 2.3 | 2.3 | -1.94 | 1,187.4 | 63.5 | 1,187.3 | 1,182.7 | 257.851 | | |
| 400.0 | 399.8 | 396.9 | 396.9 | 3.5 | 3.1 | -1.99 | 1,187.6 | 62.8 | 1,182.3 | 1,175.8 | 180.671 | | |
| 500.0 | 499.5 | 494.2 | 494.2 | 4.4 | 3.8 | -2.07 | 1,188.1 | 61.5 | 1,174.1 | 1,166.0 | 145.457 | | |
| 600.0 | 598.7 | 589.5 | 589.5 | 5.2 | 4.3 | -2.19 | 1,188.9 | 59.8 | 1,162.6 | 1,153.2 | 124.168 | | |
| 700.0 | 697.5 | 683.7 | 683.7 | 5.8 | 4.8 | 1.89 | 1,190.0 | 58.2 | 1,148.1 | 1,137.6 | 109.188 | | |
| 800.0 | 795.7 | 787.0 | 786.9 | 6.5 | 5.1 | 4.72 | 1,191.2 | 56.7 | 1,130.4 | 1,119.0 | 99.058 | | |
| 900.0 | 893.2 | 897.7 | 897.6 | 7.1 | 5.3 | 6.96 | 1,191.6 | 56.6 | 1,108.7 | 1,096.5 | 91.072 | | |
| 1,000.0 | 989.9 | 1,002.4 | 1,002.3 | 7.7 | 5.4 | 8.94 | 1,190.7 | 58.9 | 1,082.7 | 1,069.8 | 83.740 | | |
| 1,100.0 | 1,085.7 | 1,098.4 | 1,098.2 | 8.2 | 5.5 | 10.75 | 1,189.4 | 62.4 | 1,053.3 | 1,039.7 | 77.413 | | |
| 1,200.0 | 1,180.4 | 1,194.5 | 1,194.2 | 8.8 | 5.5 | 12.51 | 1,188.0 | 66.5 | 1,020.7 | 1,006.5 | 71.548 | | |
| 1,300.0 | 1,273.9 | 1,287.0 | 1,286.6 | 9.4 | 5.6 | 14.27 | 1,186.5 | 70.9 | 985.1 | 970.1 | 66.043 | | |
| 1,400.0 | 1,366.2 | 1,373.5 | 1,373.0 | 9.9 | 5.7 | 15.96 | 1,185.4 | 74.0 | 946.8 | 931.3 | 60.866 | | |
| 1,500.0 | 1,457.2 | 1,456.4 | 1,455.9 | 10.3 | 5.9 | 17.41 | 1,185.0 | 76.2 | 906.5 | 890.4 | 56.408 | | |
| 1,600.0 | 1,547.7 | 1,533.0 | 1,532.5 | 10.7 | 6.0 | 18.26 | 1,185.6 | 78.4 | 866.8 | 850.3 | 52.309 | | |
| 1,700.0 | 1,638.3 | 1,606.9 | 1,606.3 | 11.1 | 6.0 | 19.15 | 1,187.3 | 80.8 | 828.9 | 811.9 | 48.676 | | |
| 1,800.0 | 1,728.8 | 1,676.3 | 1,675.6 | 11.4 | 6.0 | 20.04 | 1,190.8 | 83.2 | 793.6 | 776.1 | 45.273 | | |
| 1,900.0 | 1,819.4 | 1,745.7 | 1,744.7 | 11.8 | 6.1 | 20.99 | 1,196.2 | 86.2 | 761.4 | 743.3 | 42.155 | | |
| 2,000.0 | 1,910.0 | 1,816.0 | 1,814.5 | 12.3 | 6.2 | 21.98 | 1,204.2 | 89.1 | 732.7 | 714.1 | 39.330 | | |
| 2,100.0 | 2,000.5 | 1,891.2 | 1,888.9 | 12.7 | 6.3 | 23.01 | 1,215.2 | 91.7 | 707.3 | 688.1 | 36.809 | | |
| 2,200.0 | 2,091.1 | 1,970.7 | 1,967.2 | 13.1 | 6.5 | 24.08 | 1,228.5 | 93.9 | 684.3 | 664.4 | 34.501 | | |
| 2,300.0 | 2,181.6 | 2,038.8 | 2,033.8 | 13.6 | 6.8 | 24.95 | 1,242.3 | 95.3 | 664.8 | 644.1 | 32.170 | | |
| 2,400.0 | 2,272.2 | 2,104.0 | 2,096.9 | 14.0 | 7.4 | 25.66 | 1,258.9 | 95.8 | 650.2 | 628.4 | 29.870 | | |
| 2,500.0 | 2,362.8 | 2,179.0 | 2,168.4 | 14.5 | 8.4 | 26.36 | 1,281.4 | 95.9 | 640.1 | 616.9 | 27.573 | | |
| 2,600.0 | 2,453.3 | 2,255.2 | 2,240.2 | 15.0 | 9.0 | 27.02 | 1,307.2 | 96.0 | 633.9 | 609.5 | 26.012 | | |
| 2,700.0 | 2,543.9 | 2,334.4 | 2,313.7 | 15.5 | 9.4 | 27.67 | 1,336.4 | 96.7 | 631.2 | 606.0 | 25.013 | | |
| 2,727.6 | 2,568.9 | 2,355.6 | 2,333.2 | 15.6 | 9.5 | 27.84 | 1,344.7 | 96.9 | 631.1 | 605.7 | 24.837 | CC, ES | |
| 2,800.0 | 2,634.4 | 2,409.5 | 2,382.6 | 16.0 | 9.6 | 28.29 | 1,366.5 | 98.1 | 632.2 | 606.4 | 24.457 | | |
| 2,900.0 | 2,725.0 | 2,502.7 | 2,467.0 | 16.5 | 9.9 | 29.22 | 1,405.4 | 102.5 | 636.1 | 609.5 | 23.887 | | |
| 3,000.0 | 2,815.6 | 2,603.3 | 2,558.5 | 17.1 | 10.2 | 30.28 | 1,447.2 | 108.0 | 640.3 | 612.8 | 23.269 | | |
| 3,100.0 | 2,906.1 | 2,699.4 | 2,645.8 | 17.8 | 10.4 | 31.27 | 1,487.0 | 113.0 | 644.4 | 616.0 | 22.698 | | |
| 3,200.0 | 2,996.7 | 2,802.6 | 2,739.3 | 18.4 | 10.8 | 32.29 | 1,530.2 | 118.4 | 649.3 | 619.9 | 22.089 | | |
| 3,300.0 | 3,087.2 | 2,914.5 | 2,841.6 | 19.1 | 11.2 | 33.43 | 1,575.3 | 124.0 | 652.6 | 622.1 | 21.376 | | |
| 3,400.0 | 3,177.8 | 3,017.4 | 2,935.9 | 19.8 | 11.6 | 34.43 | 1,616.1 | 128.2 | 655.1 | 623.5 | 20.710 | | |
| 3,500.0 | 3,268.4 | 3,112.8 | 3,023.4 | 20.5 | 12.1 | 35.30 | 1,653.9 | 131.5 | 657.5 | 624.8 | 20.124 | | |
| 3,600.0 | 3,358.9 | 3,201.8 | 3,104.6 | 21.2 | 12.4 | 36.12 | 1,690.2 | 135.3 | 661.6 | 627.9 | 19.657 | | |
| 3,700.0 | 3,449.5 | 3,300.9 | 3,194.9 | 21.9 | 12.9 | 37.17 | 1,730.7 | 141.6 | 666.9 | 632.1 | 19.190 | | |
| 3,800.0 | 3,540.0 | 3,401.5 | 3,286.9 | 22.6 | 13.3 | 38.24 | 1,770.9 | 147.7 | 671.4 | 635.6 | 18.717 | | |
| 3,900.0 | 3,630.6 | 3,503.5 | 3,379.9 | 23.3 | 13.8 | 39.33 | 1,812.2 | 154.6 | 677.1 | 640.0 | 18.271 | | |
| 4,000.0 | 3,721.2 | 3,606.1 | 3,474.3 | 24.0 | 14.3 | 40.49 | 1,851.8 | 161.4 | 681.2 | 642.9 | 17.788 | | |
| 4,100.0 | 3,811.7 | 3,698.9 | 3,559.3 | 24.7 | 14.7 | 41.47 | 1,888.7 | 167.5 | 686.5 | 647.1 | 17.423 | | |
| 4,200.0 | 3,902.3 | 3,796.2 | 3,648.0 | 25.4 | 15.2 | 42.44 | 1,928.1 | 173.5 | 692.5 | 651.9 | 17.081 | | |
| 4,300.0 | 3,992.8 | 3,895.1 | 3,738.3 | 26.2 | 15.7 | 43.44 | 1,967.9 | 180.2 | 698.8 | 657.1 | 16.756 | | |
| 4,400.0 | 4,083.4 | 3,988.9 | 3,823.8 | 26.9 | 16.1 | 44.34 | 2,006.0 | 186.4 | 705.6 | 662.8 | 16.472 | | |
| 4,500.0 | 4,174.0 | 4,094.7 | 3,919.8 | 27.6 | 16.8 | 45.26 | 2,049.9 | 192.8 | 713.1 | 668.9 | 16.155 | | |
| 4,600.0 | 4,264.5 | 4,197.8 | 4,014.0 | 28.3 | 17.4 | 46.16 | 2,091.5 | 198.4 | 719.2 | 673.8 | 15.838 | | |
| 4,700.0 | 4,355.1 | 4,300.0 | 4,107.2 | 29.0 | 18.0 | 46.97 | 2,133.2 | 203.1 | 725.4 | 678.8 | 15.545 | | |
| 4,800.0 | 4,445.6 | 4,388.4 | 4,187.8 | 29.7 | 18.6 | 47.68 | 2,169.2 | 207.6 | 732.1 | 684.3 | 15.322 | | |
| 4,900.0 | 4,536.2 | 4,496.3 | 4,285.9 | 30.4 | 19.3 | 48.54 | 2,213.6 | 213.7 | 739.5 | 690.4 | 15.049 | | |
| 5,000.0 | 4,626.8 | 4,607.4 | 4,387.9 | 31.1 | 20.0 | 49.51 | 2,257.1 | 219.7 | 745.3 | 694.8 | 14.754 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|--------------------|----------|
| Survey Program: 162-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning |
| 5,100.0 | 4,717.9 | 4,715.4 | 4,487.8 | 31.8 | 20.7 | 50.49 | 2,298.0 | 225.2 | 750.8 | 699.0 | 14.486 | |
| 5,200.0 | 4,810.3 | 4,818.6 | 4,583.8 | 32.5 | 21.3 | 51.36 | 2,335.4 | 230.8 | 757.7 | 704.6 | 14.274 | |
| 5,300.0 | 4,904.1 | 4,909.8 | 4,668.5 | 33.1 | 21.8 | 51.94 | 2,368.9 | 235.6 | 767.0 | 712.8 | 14.156 | SF |
| 5,400.0 | 4,999.0 | 4,989.9 | 4,742.1 | 33.6 | 22.3 | 52.28 | 2,400.1 | 240.0 | 780.5 | 725.4 | 14.159 | |
| 5,500.0 | 5,094.9 | 5,088.5 | 4,832.1 | 34.1 | 23.0 | 52.42 | 2,440.0 | 245.7 | 797.4 | 741.1 | 14.179 | |
| 5,600.0 | 5,191.8 | 5,207.5 | 4,941.5 | 34.5 | 23.7 | 52.39 | 2,486.4 | 252.1 | 815.0 | 757.5 | 14.175 | |
| 5,700.0 | 5,289.5 | 5,318.1 | 5,043.9 | 34.9 | 24.4 | 52.17 | 2,528.1 | 256.2 | 832.5 | 773.9 | 14.211 | |
| 5,800.0 | 5,387.8 | 5,417.4 | 5,136.2 | 35.2 | 25.0 | 51.92 | 2,564.3 | 260.2 | 851.5 | 792.0 | 14.310 | |
| 5,900.0 | 5,486.8 | 5,531.1 | 5,242.5 | 35.5 | 25.7 | 51.52 | 2,604.5 | 265.4 | 872.2 | 811.8 | 14.419 | |
| 6,000.0 | 5,586.1 | 5,658.6 | 5,363.3 | 35.7 | 26.4 | 51.04 | 2,644.8 | 271.1 | 892.2 | 830.7 | 14.501 | |
| 6,100.0 | 5,685.8 | 5,749.0 | 5,449.6 | 35.8 | 26.8 | 50.83 | 2,671.1 | 276.3 | 913.3 | 851.0 | 14.674 | |
| 6,200.0 | 5,785.8 | 5,829.9 | 5,526.6 | 35.9 | 27.2 | 50.62 | 2,695.2 | 281.7 | 937.7 | 874.9 | 14.924 | |
| 6,300.0 | 5,885.8 | 6,003.1 | 5,693.0 | 35.9 | 28.0 | 39.96 | 2,742.5 | 290.1 | 961.4 | 897.7 | 15.077 | |
| 6,400.0 | 5,985.8 | 6,135.5 | 5,822.2 | 36.0 | 28.5 | 38.99 | 2,771.3 | 292.8 | 979.6 | 915.4 | 15.245 | |
| 6,500.0 | 6,085.8 | 6,252.3 | 5,936.7 | 36.0 | 28.9 | 38.22 | 2,794.0 | 294.3 | 995.7 | 931.1 | 15.402 | |
| 6,600.0 | 6,185.8 | 6,402.6 | 6,085.3 | 36.0 | 29.3 | 37.50 | 2,816.8 | 296.1 | 1,008.6 | 943.7 | 15.549 | |
| 6,700.0 | 6,285.8 | 6,520.9 | 6,202.8 | 36.0 | 29.5 | 37.04 | 2,830.0 | 296.1 | 1,017.5 | 952.4 | 15.627 | |
| 6,800.0 | 6,385.8 | 6,648.0 | 6,329.5 | 36.0 | 29.7 | 36.71 | 2,840.3 | 296.4 | 1,024.0 | 958.8 | 15.701 | |
| 6,900.0 | 6,485.8 | 6,755.8 | 6,437.1 | 36.1 | 29.9 | 36.48 | 2,847.4 | 296.5 | 1,029.3 | 963.9 | 15.725 | |
| 7,000.0 | 6,585.8 | 6,895.6 | 6,576.7 | 36.1 | 30.1 | 36.32 | 2,852.7 | 297.0 | 1,032.8 | 967.5 | 15.817 | |
| 7,100.0 | 6,685.8 | 7,011.7 | 6,692.8 | 36.1 | 30.2 | 36.25 | 2,853.6 | 296.1 | 1,032.9 | 967.8 | 15.853 | |
| 7,159.2 | 6,744.9 | 7,064.8 | 6,745.9 | 36.1 | 30.3 | 36.21 | 2,853.8 | 295.4 | 1,032.7 | 967.4 | 15.819 | |
| 7,200.0 | 6,785.8 | 7,092.0 | 6,773.1 | 36.2 | 30.3 | 36.20 | 2,854.1 | 295.2 | 1,032.8 | 967.3 | 15.768 | |
| 7,300.0 | 6,885.8 | 7,177.0 | 6,858.2 | 36.2 | 30.5 | 36.15 | 2,855.7 | 295.3 | 1,034.6 | 968.6 | 15.697 | |
| 7,400.0 | 6,985.8 | 7,263.8 | 6,944.8 | 36.2 | 30.8 | 36.10 | 2,858.7 | 296.3 | 1,038.0 | 971.7 | 15.648 | |
| 7,500.0 | 7,085.8 | 7,354.0 | 7,034.9 | 36.2 | 31.0 | 36.06 | 2,862.5 | 298.1 | 1,042.5 | 975.8 | 15.619 | |
| 7,600.0 | 7,185.8 | 7,562.3 | 7,243.1 | 36.3 | 31.2 | 36.03 | 2,863.8 | 298.6 | 1,044.1 | 978.8 | 15.981 | |
| 7,700.0 | 7,285.8 | 7,690.1 | 7,370.5 | 36.3 | 31.1 | 35.90 | 2,857.2 | 290.8 | 1,036.1 | 971.3 | 16.004 | |
| 7,800.0 | 7,385.8 | 7,764.0 | 7,444.3 | 36.3 | 31.0 | 35.83 | 2,854.5 | 287.3 | 1,030.0 | 964.9 | 15.802 | |
| 7,900.0 | 7,485.8 | 7,831.0 | 7,511.2 | 36.3 | 31.0 | 35.76 | 2,853.7 | 285.1 | 1,026.8 | 961.0 | 15.621 | |
| 8,000.0 | 7,585.8 | 7,923.3 | 7,603.5 | 36.4 | 31.1 | 35.59 | 2,853.9 | 281.7 | 1,024.9 | 959.0 | 15.570 | |
| 8,100.0 | 7,685.8 | 8,064.6 | 7,744.6 | 36.4 | 31.3 | 35.38 | 2,852.2 | 275.7 | 1,021.5 | 956.5 | 15.716 | |
| 8,200.0 | 7,785.8 | 8,151.4 | 7,831.3 | 36.4 | 31.3 | 35.33 | 2,849.2 | 272.6 | 1,016.5 | 951.4 | 15.619 | |
| 8,300.0 | 7,885.8 | 8,255.2 | 7,935.0 | 36.4 | 31.2 | 35.29 | 2,845.6 | 269.0 | 1,011.7 | 946.9 | 15.607 | |
| 8,400.0 | 7,985.8 | 8,337.0 | 8,016.7 | 36.5 | 31.2 | 35.30 | 2,843.0 | 267.5 | 1,008.0 | 943.0 | 15.505 | |
| 8,500.0 | 8,085.8 | 8,432.0 | 8,111.7 | 36.5 | 31.1 | 35.37 | 2,840.0 | 267.0 | 1,005.1 | 940.1 | 15.472 | |
| 8,600.0 | 8,185.8 | 8,527.0 | 8,206.7 | 36.5 | 31.1 | 35.41 | 2,838.0 | 266.2 | 1,002.9 | 938.0 | 15.447 | |
| 8,649.9 | 8,235.7 | 8,557.0 | 8,236.7 | 36.5 | 31.1 | 35.40 | 2,837.9 | 266.1 | 1,002.6 | 937.3 | 15.362 | |
| 8,700.0 | 8,285.8 | 8,594.1 | 8,273.8 | 36.6 | 31.2 | 35.39 | 2,838.2 | 266.1 | 1,002.9 | 937.4 | 15.315 | |
| 8,800.0 | 8,385.8 | 8,682.3 | 8,362.0 | 36.6 | 31.3 | 35.34 | 2,840.2 | 266.5 | 1,005.1 | 939.2 | 15.267 | |
| 8,900.0 | 8,485.8 | 8,778.7 | 8,458.3 | 36.6 | 31.4 | 35.28 | 2,842.9 | 267.1 | 1,007.7 | 941.6 | 15.235 | |
| 9,000.0 | 8,585.8 | 8,879.5 | 8,559.0 | 36.6 | 31.6 | 35.22 | 2,846.0 | 267.9 | 1,010.6 | 944.2 | 15.218 | |
| 9,067.2 | 8,653.0 | 8,948.7 | 8,628.3 | 36.7 | 31.7 | 35.17 | 2,848.0 | 268.1 | 1,012.3 | 945.8 | 15.211 | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft | |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|------------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|--|
| Survey Program: 130-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N/-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.58 | 1,175.9 | 52.9 | 1,177.1 | | | | | |
| 100.0 | 100.0 | 99.1 | 99.1 | 0.8 | 0.6 | 2.58 | 1,175.9 | 53.0 | 1,177.1 | 1,175.8 | 875.621 | | | |
| 200.0 | 200.0 | 198.9 | 198.9 | 1.4 | 1.2 | 2.59 | 1,176.0 | 53.1 | 1,177.2 | 1,174.6 | 454.150 | | | |
| 300.0 | 300.0 | 294.5 | 294.5 | 2.3 | 1.7 | -2.43 | 1,176.3 | 52.9 | 1,175.7 | 1,171.8 | 297.112 | | | |
| 400.0 | 399.8 | 385.4 | 385.4 | 3.5 | 2.2 | -2.53 | 1,177.1 | 51.2 | 1,171.3 | 1,165.7 | 208.318 | | | |
| 500.0 | 499.5 | 477.0 | 476.9 | 4.4 | 2.6 | -2.72 | 1,178.7 | 47.8 | 1,164.2 | 1,157.3 | 169.693 | | | |
| 600.0 | 598.7 | 571.2 | 570.9 | 5.2 | 3.0 | -3.01 | 1,180.9 | 42.8 | 1,154.2 | 1,146.3 | 145.777 | | | |
| 700.0 | 697.5 | 663.9 | 663.3 | 5.8 | 3.5 | 0.77 | 1,183.6 | 35.9 | 1,141.3 | 1,132.4 | 128.551 | | | |
| 800.0 | 795.7 | 752.1 | 751.1 | 6.5 | 4.0 | 3.20 | 1,186.9 | 27.5 | 1,125.9 | 1,116.1 | 115.185 | | | |
| 900.0 | 893.2 | 841.5 | 839.8 | 7.1 | 4.4 | 4.80 | 1,191.0 | 17.1 | 1,108.1 | 1,097.5 | 104.063 | | | |
| 1,000.0 | 989.9 | 939.2 | 936.4 | 7.7 | 5.0 | 5.77 | 1,195.9 | 3.2 | 1,087.5 | 1,076.0 | 93.965 | | | |
| 1,100.0 | 1,085.7 | 1,027.8 | 1,023.6 | 8.2 | 5.5 | 6.39 | 1,200.4 | -11.4 | 1,064.0 | 1,051.6 | 85.350 | | | |
| 1,200.0 | 1,180.4 | 1,114.5 | 1,108.7 | 8.8 | 5.9 | 6.73 | 1,205.7 | -27.3 | 1,038.3 | 1,024.9 | 77.775 | | | |
| 1,300.0 | 1,273.9 | 1,200.0 | 1,192.4 | 9.4 | 6.2 | 6.88 | 1,211.5 | -43.6 | 1,010.3 | 996.1 | 70.995 | | | |
| 1,400.0 | 1,366.2 | 1,291.0 | 1,281.4 | 9.9 | 6.6 | 6.86 | 1,218.5 | -61.1 | 980.0 | 964.9 | 64.769 | | | |
| 1,500.0 | 1,457.2 | 1,383.7 | 1,372.2 | 10.3 | 6.9 | 6.56 | 1,225.6 | -78.8 | 946.8 | 930.9 | 59.566 | | | |
| 1,600.0 | 1,547.7 | 1,471.5 | 1,458.1 | 10.7 | 7.3 | 5.76 | 1,232.6 | -95.4 | 913.3 | 896.7 | 55.024 | | | |
| 1,700.0 | 1,638.3 | 1,564.2 | 1,548.8 | 11.1 | 7.6 | 4.89 | 1,240.6 | -112.6 | 880.5 | 863.1 | 50.772 | | | |
| 1,800.0 | 1,728.8 | 1,668.7 | 1,651.3 | 11.4 | 8.0 | 3.89 | 1,248.9 | -131.1 | 847.2 | 829.0 | 46.719 | | | |
| 1,900.0 | 1,819.4 | 1,777.0 | 1,757.6 | 11.8 | 8.5 | 2.69 | 1,255.7 | -150.9 | 812.6 | 793.6 | 42.841 | | | |
| 2,000.0 | 1,910.0 | 1,865.9 | 1,844.9 | 12.3 | 8.9 | 1.62 | 1,260.5 | -167.0 | 777.4 | 757.6 | 39.332 | | | |
| 2,100.0 | 2,000.5 | 1,957.6 | 1,935.0 | 12.7 | 9.2 | 0.50 | 1,266.1 | -182.6 | 743.0 | 722.5 | 36.145 | | | |
| 2,200.0 | 2,091.1 | 2,065.6 | 2,041.3 | 13.1 | 9.7 | -0.96 | 1,271.8 | -200.9 | 708.2 | 686.8 | 33.092 | | | |
| 2,300.0 | 2,181.6 | 2,151.5 | 2,125.8 | 13.6 | 10.1 | -2.34 | 1,275.2 | -216.4 | 672.6 | 650.4 | 30.214 | | | |
| 2,400.0 | 2,272.2 | 2,236.6 | 2,209.3 | 14.0 | 10.4 | -3.83 | 1,279.7 | -231.8 | 638.7 | 615.6 | 27.626 | | | |
| 2,500.0 | 2,362.8 | 2,333.9 | 2,305.0 | 14.5 | 10.8 | -5.67 | 1,285.2 | -249.1 | 605.7 | 581.7 | 25.241 | | | |
| 2,600.0 | 2,453.3 | 2,428.5 | 2,397.8 | 15.0 | 11.2 | -7.74 | 1,289.5 | -266.4 | 572.3 | 547.4 | 22.985 | | | |
| 2,700.0 | 2,543.9 | 2,518.8 | 2,486.6 | 15.5 | 11.6 | -9.91 | 1,293.8 | -282.6 | 539.7 | 513.9 | 20.905 | | | |
| 2,800.0 | 2,634.4 | 2,612.1 | 2,578.3 | 16.0 | 12.0 | -12.35 | 1,298.6 | -298.9 | 508.1 | 481.4 | 18.994 | | | |
| 2,900.0 | 2,725.0 | 2,706.9 | 2,671.4 | 16.5 | 12.5 | -15.26 | 1,302.7 | -316.1 | 477.2 | 449.5 | 17.206 | | | |
| 3,000.0 | 2,815.6 | 2,800.2 | 2,763.0 | 17.1 | 12.9 | -18.67 | 1,305.7 | -334.1 | 447.1 | 418.4 | 15.542 | | | |
| 3,100.0 | 2,906.1 | 2,890.8 | 2,851.9 | 17.8 | 13.3 | -22.30 | 1,309.0 | -350.8 | 418.6 | 388.8 | 14.026 | | | |
| 3,200.0 | 2,996.7 | 2,983.4 | 2,943.0 | 18.4 | 13.7 | -26.35 | 1,313.0 | -367.3 | 392.3 | 361.3 | 12.667 | | | |
| 3,300.0 | 3,087.2 | 3,076.7 | 3,034.7 | 19.1 | 14.1 | -31.07 | 1,316.2 | -384.3 | 367.9 | 335.7 | 11.444 | | | |
| 3,400.0 | 3,177.8 | 3,165.0 | 3,121.4 | 19.8 | 14.5 | -36.01 | 1,319.5 | -400.3 | 346.4 | 313.0 | 10.373 | | | |
| 3,500.0 | 3,268.4 | 3,255.7 | 3,210.5 | 20.5 | 14.9 | -41.42 | 1,324.4 | -416.8 | 329.3 | 294.6 | 9.497 | | | |
| 3,600.0 | 3,358.9 | 3,347.4 | 3,300.5 | 21.2 | 15.3 | -47.33 | 1,329.5 | -433.5 | 316.0 | 280.1 | 8.788 | | | |
| 3,700.0 | 3,449.5 | 3,441.1 | 3,392.6 | 21.9 | 15.7 | -53.39 | 1,336.5 | -449.6 | 306.9 | 269.7 | 8.246 | | | |
| 3,800.0 | 3,540.0 | 3,534.4 | 3,484.2 | 22.6 | 16.1 | -59.40 | 1,344.8 | -464.7 | 301.4 | 262.9 | 7.846 | | | |
| 3,872.5 | 3,605.7 | 3,601.0 | 3,549.6 | 23.1 | 16.4 | -63.86 | 1,350.4 | -476.0 | 300.1 | 260.9 | 7.653 CC | | | |
| 3,900.0 | 3,630.6 | 3,626.3 | 3,574.5 | 23.3 | 16.5 | -65.57 | 1,352.5 | -480.4 | 300.3 | 260.8 | 7.601 ES | | | |
| 4,000.0 | 3,721.2 | 3,718.8 | 3,665.3 | 24.0 | 16.9 | -71.84 | 1,359.7 | -496.6 | 303.9 | 263.4 | 7.502 SF | | | |
| 4,100.0 | 3,811.7 | 3,810.7 | 3,755.3 | 24.7 | 17.4 | -77.90 | 1,366.6 | -513.0 | 311.8 | 270.4 | 7.537 | | | |
| 4,200.0 | 3,902.3 | 3,899.8 | 3,842.7 | 25.4 | 17.8 | -83.47 | 1,373.4 | -529.6 | 324.3 | 282.2 | 7.705 | | | |
| 4,300.0 | 3,992.8 | 3,990.9 | 3,931.8 | 26.2 | 18.2 | -88.95 | 1,378.7 | -547.6 | 341.6 | 298.8 | 7.990 | | | |
| 4,400.0 | 4,083.4 | 4,085.9 | 4,024.7 | 26.9 | 18.6 | -93.98 | 1,385.4 | -566.2 | 361.6 | 318.1 | 8.321 | | | |
| 4,500.0 | 4,174.0 | 4,177.4 | 4,114.2 | 27.6 | 19.0 | -98.26 | 1,392.4 | -584.0 | 383.9 | 339.8 | 8.710 | | | |
| 4,600.0 | 4,264.5 | 4,271.1 | 4,205.7 | 28.3 | 19.5 | -102.15 | 1,399.5 | -602.8 | 408.7 | 364.0 | 9.136 | | | |
| 4,700.0 | 4,355.1 | 4,365.3 | 4,297.8 | 29.0 | 19.9 | -105.65 | 1,406.9 | -621.2 | 434.7 | 389.3 | 9.571 | | | |
| 4,800.0 | 4,445.6 | 4,459.2 | 4,389.8 | 29.7 | 20.4 | -108.84 | 1,413.6 | -639.2 | 462.1 | 416.0 | 10.026 | | | |
| 4,900.0 | 4,536.2 | 4,552.2 | 4,480.9 | 30.4 | 20.8 | -111.72 | 1,419.9 | -656.5 | 490.4 | 443.7 | 10.492 | | | |
| 5,000.0 | 4,626.8 | 4,645.7 | 4,572.8 | 31.1 | 21.2 | -114.51 | 1,424.9 | -672.9 | 520.0 | 472.7 | 10.972 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - (Offset) Currier Family 16-3 - Wellbore #1 - Wellbore #1 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|---|--------------------|----------|
| Survey Program: 130-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,100.0 | 4,717.9 | 4,739.0 | 4,664.6 | 31.8 | 21.6 | -117.40 | 1,429.7 | -689.0 | 549.9 | 501.8 | 11.443 | | |
| 5,200.0 | 4,810.3 | 4,832.0 | 4,755.9 | 32.5 | 22.1 | -119.69 | 1,435.1 | -705.5 | 579.0 | 530.3 | 11.880 | | |
| 5,300.0 | 4,904.1 | 4,931.3 | 4,853.4 | 33.1 | 22.5 | -121.54 | 1,441.2 | -723.5 | 606.8 | 557.3 | 12.248 | | |
| 5,400.0 | 4,999.0 | 5,029.7 | 4,950.1 | 33.6 | 23.0 | -122.93 | 1,447.8 | -740.6 | 632.3 | 582.0 | 12.563 | | |
| 5,500.0 | 5,094.9 | 5,127.8 | 5,046.5 | 34.1 | 23.4 | -123.94 | 1,454.3 | -757.6 | 655.9 | 604.8 | 12.836 | | |
| 5,600.0 | 5,191.8 | 5,230.1 | 5,147.1 | 34.5 | 23.9 | -124.66 | 1,461.2 | -774.7 | 677.3 | 625.4 | 13.046 | | |
| 5,700.0 | 5,289.5 | 5,337.4 | 5,252.7 | 34.9 | 24.4 | -125.08 | 1,469.0 | -791.7 | 695.7 | 642.9 | 13.182 | | |
| 5,800.0 | 5,387.8 | 5,434.9 | 5,348.9 | 35.2 | 24.8 | -125.27 | 1,476.0 | -806.1 | 711.5 | 658.0 | 13.312 | | |
| 5,900.0 | 5,486.8 | 5,525.7 | 5,438.4 | 35.5 | 25.2 | -125.20 | 1,482.4 | -820.3 | 726.0 | 672.0 | 13.440 | | |
| 6,000.0 | 5,586.1 | 5,617.6 | 5,528.7 | 35.7 | 25.6 | -124.85 | 1,488.8 | -836.0 | 739.6 | 685.0 | 13.542 | | |
| 6,100.0 | 5,685.8 | 5,711.9 | 5,621.5 | 35.8 | 26.1 | -124.34 | 1,494.3 | -852.1 | 752.1 | 696.9 | 13.619 | | |
| 6,200.0 | 5,785.8 | 5,807.4 | 5,715.5 | 35.9 | 26.5 | -123.68 | 1,498.9 | -868.0 | 763.3 | 707.5 | 13.676 | | |
| 6,300.0 | 5,885.8 | 5,901.6 | 5,808.2 | 35.9 | 26.9 | -132.27 | 1,503.1 | -884.2 | 773.4 | 717.1 | 13.737 | | |
| 6,400.0 | 5,985.8 | 6,009.2 | 5,914.2 | 36.0 | 27.4 | -131.09 | 1,508.1 | -902.5 | 783.1 | 726.2 | 13.745 | | |
| 6,500.0 | 6,085.8 | 6,127.5 | 6,031.1 | 36.0 | 28.0 | -129.97 | 1,513.6 | -919.7 | 791.3 | 733.5 | 13.705 | | |
| 6,600.0 | 6,185.8 | 6,243.4 | 6,146.2 | 36.0 | 28.5 | -129.11 | 1,518.5 | -932.5 | 797.1 | 738.7 | 13.661 | | |
| 6,700.0 | 6,285.8 | 6,355.4 | 6,257.6 | 36.0 | 28.9 | -128.42 | 1,523.0 | -942.2 | 801.3 | 742.5 | 13.621 | | |
| 6,800.0 | 6,385.8 | 6,462.8 | 6,364.8 | 36.0 | 29.4 | -128.04 | 1,525.2 | -948.0 | 804.4 | 745.2 | 13.588 | | |
| 6,900.0 | 6,485.8 | 6,567.2 | 6,469.1 | 36.1 | 29.7 | -127.80 | 1,526.3 | -952.0 | 806.7 | 747.2 | 13.553 | | |
| 7,000.0 | 6,585.8 | 6,671.3 | 6,573.1 | 36.1 | 30.1 | -127.57 | 1,527.8 | -955.5 | 808.5 | 748.7 | 13.510 | | |
| 7,100.0 | 6,685.8 | 6,772.7 | 6,674.5 | 36.1 | 30.5 | -127.35 | 1,529.4 | -958.5 | 809.9 | 749.7 | 13.443 | | |
| 7,200.0 | 6,785.8 | 6,871.9 | 6,773.7 | 36.2 | 31.0 | -127.18 | 1,530.5 | -961.1 | 811.3 | 750.6 | 13.364 | | |
| 7,300.0 | 6,885.8 | 6,971.3 | 6,873.0 | 36.2 | 31.4 | -127.06 | 1,530.9 | -963.4 | 812.9 | 751.7 | 13.290 | | |
| 7,400.0 | 6,985.8 | 7,070.6 | 6,972.3 | 36.2 | 31.9 | -126.99 | 1,530.7 | -965.2 | 814.5 | 752.9 | 13.220 | | |
| 7,500.0 | 7,085.8 | 7,170.7 | 7,072.5 | 36.2 | 32.6 | -126.93 | 1,530.4 | -967.0 | 816.1 | 753.7 | 13.074 | | |
| 7,600.0 | 7,185.8 | 7,270.9 | 7,172.6 | 36.3 | 33.4 | -126.84 | 1,530.4 | -969.1 | 817.7 | 754.5 | 12.930 | | |
| 7,700.0 | 7,285.8 | 7,371.0 | 7,272.7 | 36.3 | 34.1 | -126.71 | 1,530.9 | -971.5 | 819.3 | 755.3 | 12.787 | | |
| 7,800.0 | 7,385.8 | 7,471.2 | 7,372.8 | 36.3 | 34.9 | -126.55 | 1,531.8 | -974.1 | 820.9 | 756.0 | 12.648 | | |
| 7,900.0 | 7,485.8 | 7,571.3 | 7,472.9 | 36.3 | 35.7 | -126.36 | 1,533.1 | -977.0 | 822.5 | 756.7 | 12.510 | | |
| 8,000.0 | 7,585.8 | 7,674.8 | 7,576.3 | 36.4 | 36.4 | -126.14 | 1,534.9 | -980.1 | 823.9 | 757.3 | 12.375 | | |
| 8,100.0 | 7,685.8 | 7,778.8 | 7,680.3 | 36.4 | 37.2 | -125.92 | 1,536.8 | -982.6 | 824.8 | 757.4 | 12.237 | | |
| 8,200.0 | 7,785.8 | 7,882.9 | 7,784.4 | 36.4 | 38.0 | -125.72 | 1,538.9 | -984.7 | 825.2 | 757.0 | 12.095 | | |
| 8,300.0 | 7,885.8 | 7,987.0 | 7,888.4 | 36.4 | 38.8 | -125.53 | 1,541.2 | -986.2 | 825.1 | 756.1 | 11.950 | | |
| 8,400.0 | 7,985.8 | 8,089.8 | 7,991.2 | 36.5 | 39.7 | -125.35 | 1,543.7 | -987.3 | 824.6 | 754.7 | 11.797 | | |
| 8,500.0 | 8,085.8 | 8,188.5 | 8,089.8 | 36.5 | 40.6 | -125.17 | 1,546.0 | -988.3 | 824.0 | 753.1 | 11.630 | | |
| 8,600.0 | 8,185.8 | 8,287.2 | 8,188.5 | 36.5 | 41.5 | -125.00 | 1,548.3 | -989.4 | 823.6 | 751.8 | 11.470 | | |
| 8,700.0 | 8,285.8 | 8,385.9 | 8,287.2 | 36.6 | 42.5 | -124.82 | 1,550.6 | -990.6 | 823.3 | 750.6 | 11.316 | | |
| 8,800.0 | 8,385.8 | 8,484.6 | 8,385.9 | 36.6 | 43.4 | -124.64 | 1,552.7 | -992.0 | 823.2 | 749.5 | 11.169 | | |
| 8,807.6 | 8,393.3 | 8,492.1 | 8,393.3 | 36.6 | 43.4 | -124.63 | 1,552.9 | -992.1 | 823.2 | 749.5 | 11.158 | | |
| 8,900.0 | 8,485.8 | 8,583.3 | 8,484.5 | 36.6 | 44.3 | -124.46 | 1,554.8 | -993.5 | 823.3 | 748.6 | 11.028 | | |
| 8,904.4 | 8,490.2 | 8,587.7 | 8,488.9 | 36.6 | 44.3 | -124.46 | 1,554.9 | -993.6 | 823.3 | 748.6 | 11.022 | | |
| 9,000.0 | 8,585.8 | 8,650.0 | 8,551.2 | 36.6 | 44.9 | -124.34 | 1,556.1 | -994.6 | 824.2 | 749.0 | 10.963 | | |
| 9,067.2 | 8,653.0 | 8,650.0 | 8,551.2 | 36.7 | 44.9 | -124.34 | 1,556.1 | -994.6 | 829.7 | 755.1 | 11.117 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -136.28 | -7.2 | -6.9 | 10.0 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -136.28 | -7.2 | -6.9 | 10.0 | 8.4 | 6.308 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -136.28 | -7.2 | -6.9 | 10.0 | 7.2 | 3.532 | CC, ES | |
| 300.0 | 300.0 | 300.0 | 300.0 | 2.3 | 1.7 | -146.48 | -7.2 | -6.9 | 11.4 | 7.5 | 2.914 | | |
| 400.0 | 399.8 | 400.3 | 400.2 | 3.5 | 2.5 | -150.44 | -4.8 | -7.5 | 14.2 | 8.7 | 2.568 | | |
| 500.0 | 499.5 | 500.6 | 500.4 | 4.4 | 3.7 | -150.24 | 1.1 | -8.8 | 17.8 | 10.7 | 2.512 | SF | |
| 600.0 | 598.7 | 601.0 | 600.3 | 5.2 | 4.5 | -147.89 | 10.3 | -10.8 | 22.0 | 13.7 | 2.666 | | |
| 700.0 | 697.5 | 701.4 | 699.9 | 5.8 | 5.3 | -141.46 | 23.0 | -13.6 | 26.5 | 17.3 | 2.881 | | |
| 800.0 | 795.7 | 801.9 | 799.0 | 6.5 | 6.0 | -137.22 | 39.1 | -17.2 | 30.8 | 20.8 | 3.066 | | |
| 900.0 | 893.2 | 902.5 | 897.6 | 7.1 | 6.7 | -134.28 | 58.5 | -21.5 | 35.0 | 24.1 | 3.209 | | |
| 1,000.0 | 989.9 | 1,003.2 | 995.5 | 7.7 | 7.3 | -132.18 | 81.4 | -26.6 | 39.0 | 27.2 | 3.315 | | |
| 1,100.0 | 1,085.7 | 1,103.3 | 1,092.3 | 8.2 | 7.6 | -131.63 | 106.6 | -32.2 | 43.3 | 30.7 | 3.443 | | |
| 1,200.0 | 1,180.4 | 1,203.1 | 1,188.6 | 8.8 | 7.9 | -134.42 | 131.9 | -37.8 | 49.5 | 35.7 | 3.574 | | |
| 1,300.0 | 1,273.9 | 1,302.6 | 1,284.7 | 9.4 | 8.2 | -139.16 | 157.1 | -43.5 | 58.2 | 42.8 | 3.782 | | |
| 1,400.0 | 1,366.2 | 1,401.6 | 1,380.4 | 9.9 | 8.6 | -144.53 | 182.2 | -49.0 | 69.8 | 52.8 | 4.116 | | |
| 1,500.0 | 1,457.2 | 1,500.2 | 1,475.6 | 10.3 | 8.9 | -149.79 | 207.1 | -54.6 | 84.5 | 66.2 | 4.619 | | |
| 1,600.0 | 1,547.7 | 1,598.7 | 1,570.7 | 10.7 | 9.3 | -154.11 | 232.1 | -60.1 | 100.7 | 81.3 | 5.181 | | |
| 1,700.0 | 1,638.3 | 1,697.1 | 1,665.8 | 11.1 | 9.7 | -157.23 | 257.0 | -65.7 | 117.2 | 96.8 | 5.729 | | |
| 1,800.0 | 1,728.8 | 1,795.6 | 1,760.8 | 11.4 | 10.1 | -159.58 | 281.9 | -71.2 | 134.1 | 112.6 | 6.251 | | |
| 1,900.0 | 1,819.4 | 1,894.0 | 1,855.9 | 11.8 | 10.5 | -161.40 | 306.9 | -76.8 | 151.0 | 128.6 | 6.742 | | |
| 2,000.0 | 1,910.0 | 1,992.5 | 1,951.0 | 12.3 | 10.9 | -162.85 | 331.8 | -82.3 | 168.1 | 144.8 | 7.201 | | |
| 2,100.0 | 2,000.5 | 2,090.9 | 2,046.1 | 12.7 | 11.3 | -164.04 | 356.7 | -87.9 | 185.3 | 161.0 | 7.629 | | |
| 2,200.0 | 2,091.1 | 2,189.4 | 2,141.1 | 13.1 | 11.7 | -165.02 | 381.7 | -93.4 | 202.6 | 177.3 | 8.026 | | |
| 2,300.0 | 2,181.6 | 2,287.8 | 2,236.2 | 13.6 | 12.1 | -165.85 | 406.6 | -98.9 | 219.8 | 193.7 | 8.395 | | |
| 2,400.0 | 2,272.2 | 2,386.3 | 2,331.3 | 14.0 | 12.6 | -166.56 | 431.5 | -104.5 | 237.2 | 210.0 | 8.737 | | |
| 2,500.0 | 2,362.8 | 2,484.7 | 2,426.4 | 14.5 | 13.0 | -167.17 | 456.5 | -110.0 | 254.5 | 226.4 | 9.056 | | |
| 2,600.0 | 2,453.3 | 2,583.2 | 2,521.4 | 15.0 | 13.4 | -167.71 | 481.4 | -115.6 | 271.9 | 242.9 | 9.352 | | |
| 2,700.0 | 2,543.9 | 2,681.6 | 2,616.5 | 15.5 | 13.9 | -168.18 | 506.3 | -121.1 | 289.3 | 259.3 | 9.627 | | |
| 2,800.0 | 2,634.4 | 2,780.1 | 2,711.6 | 16.0 | 14.3 | -168.59 | 531.3 | -126.7 | 306.8 | 275.7 | 9.884 | | |
| 2,900.0 | 2,725.0 | 2,878.5 | 2,806.7 | 16.5 | 14.8 | -168.96 | 556.2 | -132.2 | 324.2 | 292.2 | 10.123 | | |
| 3,000.0 | 2,815.6 | 2,976.9 | 2,901.7 | 17.1 | 15.2 | -169.30 | 581.1 | -137.8 | 341.7 | 308.6 | 10.347 | | |
| 3,100.0 | 2,906.1 | 3,075.4 | 2,996.8 | 17.8 | 15.7 | -169.60 | 606.0 | -143.3 | 359.1 | 325.1 | 10.557 | | |
| 3,200.0 | 2,996.7 | 3,173.8 | 3,091.9 | 18.4 | 16.1 | -169.87 | 631.0 | -148.9 | 376.6 | 341.6 | 10.753 | | |
| 3,300.0 | 3,087.2 | 3,272.3 | 3,187.0 | 19.1 | 16.6 | -170.12 | 655.9 | -154.4 | 394.1 | 358.0 | 10.937 | | |
| 3,400.0 | 3,177.8 | 3,370.7 | 3,282.1 | 19.8 | 17.0 | -170.35 | 680.8 | -159.9 | 411.5 | 374.5 | 11.110 | | |
| 3,500.0 | 3,268.4 | 3,469.2 | 3,377.1 | 20.5 | 17.5 | -170.56 | 705.8 | -165.5 | 429.0 | 391.0 | 11.273 | | |
| 3,600.0 | 3,358.9 | 3,567.6 | 3,472.2 | 21.2 | 18.0 | -170.75 | 730.7 | -171.0 | 446.5 | 407.5 | 11.427 | | |
| 3,700.0 | 3,449.5 | 3,666.1 | 3,567.3 | 21.9 | 18.4 | -170.93 | 755.6 | -176.6 | 464.0 | 423.9 | 11.572 | | |
| 3,800.0 | 3,540.0 | 3,764.5 | 3,662.4 | 22.6 | 18.9 | -171.10 | 780.6 | -182.1 | 481.5 | 440.4 | 11.708 | | |
| 3,900.0 | 3,630.6 | 3,863.0 | 3,757.4 | 23.3 | 19.4 | -171.25 | 805.5 | -187.7 | 499.0 | 456.9 | 11.838 | | |
| 4,000.0 | 3,721.2 | 3,961.4 | 3,852.5 | 24.0 | 19.8 | -171.39 | 830.4 | -193.2 | 516.6 | 473.4 | 11.960 | | |
| 4,100.0 | 3,811.7 | 4,059.9 | 3,947.6 | 24.7 | 20.3 | -171.53 | 855.4 | -198.8 | 534.1 | 489.8 | 12.077 | | |
| 4,200.0 | 3,902.3 | 4,158.3 | 4,042.7 | 25.4 | 20.8 | -171.65 | 880.3 | -204.3 | 551.6 | 506.3 | 12.187 | | |
| 4,300.0 | 3,992.8 | 4,256.8 | 4,137.7 | 26.2 | 21.2 | -171.77 | 905.2 | -209.9 | 569.1 | 522.8 | 12.292 | | |
| 4,400.0 | 4,083.4 | 4,355.2 | 4,232.8 | 26.9 | 21.7 | -171.88 | 930.2 | -215.4 | 586.6 | 539.3 | 12.391 | | |
| 4,500.0 | 4,174.0 | 4,453.7 | 4,327.9 | 27.6 | 22.2 | -171.98 | 955.1 | -220.9 | 604.1 | 555.8 | 12.486 | | |
| 4,600.0 | 4,264.5 | 4,552.1 | 4,423.0 | 28.3 | 22.6 | -172.08 | 980.0 | -226.5 | 621.7 | 572.2 | 12.577 | | |
| 4,700.0 | 4,355.1 | 4,650.5 | 4,518.0 | 29.0 | 23.1 | -172.18 | 1,004.9 | -232.0 | 639.2 | 588.7 | 12.663 | | |
| 4,800.0 | 4,445.6 | 4,749.0 | 4,613.1 | 29.7 | 23.6 | -172.26 | 1,029.9 | -237.6 | 656.7 | 605.2 | 12.745 | | |
| 4,900.0 | 4,536.2 | 4,847.4 | 4,708.2 | 30.4 | 24.1 | -172.35 | 1,054.8 | -243.1 | 674.2 | 621.7 | 12.824 | | |
| 5,000.0 | 4,626.8 | 4,945.9 | 4,803.3 | 31.1 | 24.5 | -172.43 | 1,079.7 | -248.7 | 691.8 | 638.2 | 12.899 | | |
| 5,100.0 | 4,717.9 | 5,044.5 | 4,898.6 | 31.8 | 25.0 | -172.52 | 1,104.7 | -254.2 | 708.0 | 653.3 | 12.946 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 5,143.7 | 4,994.3 | 32.5 | 25.5 | -172.58 | 1,129.8 | -259.8 | 720.9 | 665.1 | 12.918 | | |
| 5,300.0 | 4,904.1 | 5,243.3 | 5,090.5 | 33.1 | 26.0 | -172.59 | 1,155.0 | -265.4 | 730.3 | 673.4 | 12.831 | | |
| 5,400.0 | 4,999.0 | 5,327.2 | 5,171.7 | 33.6 | 26.4 | -172.58 | 1,175.6 | -270.0 | 737.1 | 679.3 | 12.741 | | |
| 5,500.0 | 5,094.9 | 5,400.0 | 5,242.6 | 34.1 | 26.8 | -172.57 | 1,191.7 | -273.6 | 743.2 | 684.6 | 12.676 | | |
| 5,600.0 | 5,191.8 | 5,486.3 | 5,327.2 | 34.5 | 27.2 | -172.56 | 1,208.4 | -277.3 | 748.5 | 688.9 | 12.569 | | |
| 5,700.0 | 5,289.5 | 5,565.7 | 5,405.4 | 34.9 | 27.7 | -172.55 | 1,221.6 | -280.2 | 753.1 | 692.8 | 12.488 | | |
| 5,800.0 | 5,387.8 | 5,645.0 | 5,484.0 | 35.2 | 28.1 | -172.55 | 1,232.7 | -282.7 | 756.9 | 695.9 | 12.414 | | |
| 5,900.0 | 5,486.8 | 5,724.3 | 5,562.7 | 35.5 | 28.5 | -172.54 | 1,241.6 | -284.7 | 760.0 | 698.4 | 12.347 | | |
| 6,000.0 | 5,586.1 | 5,800.0 | 5,638.1 | 35.7 | 28.8 | -172.54 | 1,248.2 | -286.1 | 762.4 | 700.4 | 12.303 | | |
| 6,100.0 | 5,685.8 | 5,882.8 | 5,720.8 | 35.8 | 29.2 | -172.54 | 1,253.1 | -287.2 | 764.0 | 701.6 | 12.239 | | |
| 6,200.0 | 5,785.8 | 5,962.1 | 5,799.9 | 35.9 | 29.5 | -172.53 | 1,255.6 | -287.8 | 764.9 | 702.2 | 12.206 | | |
| 6,300.0 | 5,885.8 | 6,047.9 | 5,885.8 | 35.9 | 29.6 | 177.99 | 1,256.1 | -287.9 | 765.0 | 702.4 | 12.214 | | |
| 6,400.0 | 5,985.8 | 6,147.9 | 5,985.8 | 36.0 | 29.7 | 177.99 | 1,256.1 | -287.9 | 765.0 | 702.3 | 12.201 | | |
| 6,500.0 | 6,085.8 | 6,247.9 | 6,085.8 | 36.0 | 29.7 | 177.99 | 1,256.1 | -287.9 | 765.0 | 702.3 | 12.187 | | |
| 6,600.0 | 6,185.8 | 6,347.9 | 6,185.8 | 36.0 | 29.7 | 177.99 | 1,256.1 | -287.9 | 765.0 | 702.2 | 12.173 | | |
| 6,700.0 | 6,285.8 | 6,447.9 | 6,285.8 | 36.0 | 29.8 | 177.99 | 1,256.1 | -287.9 | 765.0 | 702.1 | 12.159 | | |
| 6,800.0 | 6,385.8 | 6,547.9 | 6,385.8 | 36.0 | 29.8 | 177.99 | 1,256.1 | -287.9 | 765.0 | 702.0 | 12.145 | | |
| 6,900.0 | 6,485.8 | 6,647.9 | 6,485.8 | 36.1 | 29.8 | 177.99 | 1,256.1 | -287.9 | 765.0 | 702.0 | 12.131 | | |
| 7,000.0 | 6,585.8 | 6,747.9 | 6,585.8 | 36.1 | 29.9 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.9 | 12.117 | | |
| 7,100.0 | 6,685.8 | 6,847.9 | 6,685.8 | 36.1 | 29.9 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.8 | 12.103 | | |
| 7,200.0 | 6,785.8 | 6,947.9 | 6,785.8 | 36.2 | 30.0 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.7 | 12.089 | | |
| 7,300.0 | 6,885.8 | 7,047.9 | 6,885.8 | 36.2 | 30.0 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.7 | 12.075 | | |
| 7,400.0 | 6,985.8 | 7,147.9 | 6,985.8 | 36.2 | 30.0 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.6 | 12.061 | | |
| 7,500.0 | 7,085.8 | 7,247.9 | 7,085.8 | 36.2 | 30.1 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.5 | 12.047 | | |
| 7,600.0 | 7,185.8 | 7,347.9 | 7,185.8 | 36.3 | 30.1 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.4 | 12.032 | | |
| 7,700.0 | 7,285.8 | 7,447.9 | 7,285.8 | 36.3 | 30.2 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.4 | 12.018 | | |
| 7,800.0 | 7,385.8 | 7,547.9 | 7,385.8 | 36.3 | 30.2 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.3 | 12.004 | | |
| 7,900.0 | 7,485.8 | 7,647.9 | 7,485.8 | 36.3 | 30.2 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.2 | 11.989 | | |
| 8,000.0 | 7,585.8 | 7,747.9 | 7,585.8 | 36.4 | 30.3 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.1 | 11.975 | | |
| 8,100.0 | 7,685.8 | 7,847.9 | 7,685.8 | 36.4 | 30.3 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.1 | 11.961 | | |
| 8,200.0 | 7,785.8 | 7,947.9 | 7,785.8 | 36.4 | 30.4 | 177.99 | 1,256.1 | -287.9 | 765.0 | 701.0 | 11.947 | | |
| 8,300.0 | 7,885.8 | 7,952.1 | 7,790.0 | 36.4 | 30.4 | 177.99 | 1,256.1 | -287.9 | 771.0 | 709.4 | 12.513 | | |
| 8,400.0 | 7,985.8 | 7,952.1 | 7,790.0 | 36.5 | 30.4 | 177.99 | 1,256.1 | -287.9 | 789.7 | 731.2 | 13.513 | | |
| 8,500.0 | 8,085.8 | 7,952.1 | 7,790.0 | 36.5 | 30.4 | 177.99 | 1,256.1 | -287.9 | 820.2 | 765.3 | 14.950 | | |
| 8,600.0 | 8,185.8 | 7,952.1 | 7,790.0 | 36.5 | 30.4 | 177.99 | 1,256.1 | -287.9 | 861.3 | 810.1 | 16.824 | | |
| 8,700.0 | 8,285.8 | 7,952.1 | 7,790.0 | 36.6 | 30.4 | 177.99 | 1,256.1 | -287.9 | 911.6 | 863.9 | 19.120 | | |
| 8,800.0 | 8,385.8 | 7,952.1 | 7,790.0 | 36.6 | 30.4 | 177.99 | 1,256.1 | -287.9 | 969.6 | 925.2 | 21.800 | | |
| 8,900.0 | 8,485.8 | 7,952.1 | 7,790.0 | 36.6 | 30.4 | 177.99 | 1,256.1 | -287.9 | 1,034.1 | 992.4 | 24.807 | | |
| 9,000.0 | 8,585.8 | 7,952.1 | 7,790.0 | 36.6 | 30.4 | 177.99 | 1,256.1 | -287.9 | 1,103.9 | 1,064.5 | 28.066 | | |
| 9,067.2 | 8,653.0 | 7,952.1 | 7,790.0 | 36.7 | 30.4 | 177.99 | 1,256.1 | -287.9 | 1,153.3 | 1,115.3 | 30.362 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|---------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -136.22 | -14.4 | -13.8 | 20.0 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -136.22 | -14.4 | -13.8 | 20.0 | 18.4 | 12.629 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -136.22 | -14.4 | -13.8 | 20.0 | 17.2 | 7.072 | CC, ES | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 2.3 | 1.7 | -143.58 | -14.3 | -14.0 | 21.3 | 17.5 | 5.601 | | | |
| 400.0 | 399.8 | 400.2 | 400.1 | 3.5 | 2.5 | -144.05 | -11.8 | -15.7 | 24.9 | 19.7 | 4.828 | SF | | |
| 500.0 | 499.5 | 500.2 | 500.0 | 4.4 | 3.7 | -141.81 | -6.5 | -19.4 | 30.4 | 24.2 | 4.886 | | | |
| 600.0 | 598.7 | 600.7 | 600.0 | 5.2 | 4.0 | -138.85 | 1.9 | -24.4 | 37.3 | 30.3 | 5.303 | | | |
| 700.0 | 697.5 | 701.4 | 699.8 | 5.8 | 4.7 | -132.77 | 13.8 | -29.7 | 44.2 | 36.3 | 5.602 | | | |
| 800.0 | 795.7 | 802.3 | 799.3 | 6.5 | 5.4 | -129.01 | 29.3 | -35.0 | 50.3 | 41.6 | 5.797 | | | |
| 900.0 | 893.2 | 903.3 | 898.4 | 7.1 | 6.2 | -126.67 | 48.3 | -40.5 | 55.8 | 46.2 | 5.839 | | | |
| 1,000.0 | 989.9 | 1,003.2 | 995.9 | 7.7 | 6.6 | -126.43 | 69.0 | -46.0 | 61.5 | 51.0 | 5.876 | | | |
| 1,100.0 | 1,085.7 | 1,102.8 | 1,093.3 | 8.2 | 6.9 | -128.86 | 89.6 | -51.5 | 68.9 | 57.3 | 5.935 | | | |
| 1,200.0 | 1,180.4 | 1,202.1 | 1,190.3 | 8.8 | 7.3 | -132.91 | 110.1 | -56.9 | 78.4 | 65.5 | 6.056 | | | |
| 1,300.0 | 1,273.9 | 1,301.0 | 1,286.9 | 9.4 | 7.6 | -137.68 | 130.6 | -62.4 | 90.6 | 76.2 | 6.293 | | | |
| 1,400.0 | 1,366.2 | 1,399.3 | 1,382.9 | 9.9 | 8.0 | -142.51 | 151.0 | -67.8 | 106.0 | 90.1 | 6.675 | | | |
| 1,500.0 | 1,457.2 | 1,497.0 | 1,478.4 | 10.3 | 8.3 | -147.16 | 171.2 | -73.2 | 124.7 | 107.5 | 7.255 | | | |
| 1,600.0 | 1,547.7 | 1,594.5 | 1,573.6 | 10.7 | 8.7 | -151.22 | 191.4 | -78.5 | 144.8 | 126.5 | 7.908 | | | |
| 1,700.0 | 1,638.3 | 1,692.0 | 1,668.8 | 11.1 | 9.1 | -154.29 | 211.5 | -83.9 | 165.5 | 146.1 | 8.548 | | | |
| 1,800.0 | 1,728.8 | 1,789.5 | 1,764.1 | 11.4 | 9.5 | -156.68 | 231.7 | -89.3 | 186.5 | 166.1 | 9.162 | | | |
| 1,900.0 | 1,819.4 | 1,887.0 | 1,859.3 | 11.8 | 9.9 | -158.58 | 251.9 | -94.6 | 207.8 | 186.5 | 9.743 | | | |
| 2,000.0 | 1,910.0 | 1,984.5 | 1,954.6 | 12.3 | 10.3 | -160.12 | 272.1 | -100.0 | 229.2 | 206.9 | 10.288 | | | |
| 2,100.0 | 2,000.5 | 2,082.0 | 2,049.8 | 12.7 | 10.7 | -161.41 | 292.2 | -105.4 | 250.8 | 227.6 | 10.796 | | | |
| 2,200.0 | 2,091.1 | 2,179.5 | 2,145.0 | 13.1 | 11.1 | -162.49 | 312.4 | -110.7 | 272.5 | 248.3 | 11.270 | | | |
| 2,300.0 | 2,181.6 | 2,277.0 | 2,240.3 | 13.6 | 11.5 | -163.41 | 332.6 | -116.1 | 294.3 | 269.1 | 11.711 | | | |
| 2,400.0 | 2,272.2 | 2,374.5 | 2,335.5 | 14.0 | 11.9 | -164.20 | 352.8 | -121.5 | 316.1 | 290.0 | 12.121 | | | |
| 2,500.0 | 2,362.8 | 2,472.1 | 2,430.8 | 14.5 | 12.4 | -164.89 | 372.9 | -126.8 | 338.0 | 310.9 | 12.502 | | | |
| 2,600.0 | 2,453.3 | 2,569.6 | 2,526.0 | 15.0 | 12.8 | -165.50 | 393.1 | -132.2 | 359.9 | 331.9 | 12.857 | | | |
| 2,700.0 | 2,543.9 | 2,667.1 | 2,621.2 | 15.5 | 13.2 | -166.04 | 413.3 | -137.5 | 381.9 | 352.9 | 13.188 | | | |
| 2,800.0 | 2,634.4 | 2,764.6 | 2,716.5 | 16.0 | 13.7 | -166.52 | 433.5 | -142.9 | 403.8 | 373.9 | 13.497 | | | |
| 2,900.0 | 2,725.0 | 2,862.1 | 2,811.7 | 16.5 | 14.1 | -166.95 | 453.7 | -148.3 | 425.8 | 395.0 | 13.786 | | | |
| 3,000.0 | 2,815.6 | 2,959.6 | 2,907.0 | 17.1 | 14.5 | -167.33 | 473.8 | -153.6 | 447.9 | 416.0 | 14.056 | | | |
| 3,100.0 | 2,906.1 | 3,057.1 | 3,002.2 | 17.8 | 15.0 | -167.68 | 494.0 | -159.0 | 469.9 | 437.1 | 14.308 | | | |
| 3,200.0 | 2,996.7 | 3,154.6 | 3,097.4 | 18.4 | 15.4 | -168.00 | 514.2 | -164.4 | 492.0 | 458.2 | 14.545 | | | |
| 3,300.0 | 3,087.2 | 3,252.1 | 3,192.7 | 19.1 | 15.8 | -168.30 | 534.4 | -169.7 | 514.1 | 479.2 | 14.768 | | | |
| 3,400.0 | 3,177.8 | 3,349.6 | 3,287.9 | 19.8 | 16.3 | -168.56 | 554.5 | -175.1 | 536.1 | 500.3 | 14.977 | | | |
| 3,500.0 | 3,268.4 | 3,447.1 | 3,383.2 | 20.5 | 16.7 | -168.81 | 574.7 | -180.5 | 558.2 | 521.4 | 15.174 | | | |
| 3,600.0 | 3,358.9 | 3,544.6 | 3,478.4 | 21.2 | 17.2 | -169.04 | 594.9 | -185.8 | 580.3 | 542.6 | 15.360 | | | |
| 3,700.0 | 3,449.5 | 3,642.1 | 3,573.6 | 21.9 | 17.6 | -169.25 | 615.1 | -191.2 | 602.5 | 563.7 | 15.535 | | | |
| 3,800.0 | 3,540.0 | 3,739.6 | 3,668.9 | 22.6 | 18.1 | -169.45 | 635.3 | -196.6 | 624.6 | 584.8 | 15.701 | | | |
| 3,900.0 | 3,630.6 | 3,837.1 | 3,764.1 | 23.3 | 18.5 | -169.63 | 655.4 | -201.9 | 646.7 | 605.9 | 15.858 | | | |
| 4,000.0 | 3,721.2 | 3,934.6 | 3,859.3 | 24.0 | 19.0 | -169.80 | 675.6 | -207.3 | 668.8 | 627.0 | 16.007 | | | |
| 4,100.0 | 3,811.7 | 4,032.1 | 3,954.6 | 24.7 | 19.4 | -169.96 | 695.8 | -212.6 | 691.0 | 648.2 | 16.148 | | | |
| 4,200.0 | 3,902.3 | 4,129.6 | 4,049.8 | 25.4 | 19.9 | -170.11 | 716.0 | -218.0 | 713.1 | 669.3 | 16.282 | | | |
| 4,300.0 | 3,992.8 | 4,227.1 | 4,145.1 | 26.2 | 20.3 | -170.25 | 736.1 | -223.4 | 735.3 | 690.5 | 16.409 | | | |
| 4,400.0 | 4,083.4 | 4,324.6 | 4,240.3 | 26.9 | 20.8 | -170.39 | 756.3 | -228.7 | 757.4 | 711.6 | 16.530 | | | |
| 4,500.0 | 4,174.0 | 4,422.1 | 4,335.5 | 27.6 | 21.2 | -170.51 | 776.5 | -234.1 | 779.6 | 732.7 | 16.646 | | | |
| 4,600.0 | 4,264.5 | 4,519.6 | 4,430.8 | 28.3 | 21.7 | -170.63 | 796.7 | -239.5 | 801.7 | 753.9 | 16.756 | | | |
| 4,700.0 | 4,355.1 | 4,617.1 | 4,526.0 | 29.0 | 22.1 | -170.74 | 816.8 | -244.8 | 823.9 | 775.0 | 16.861 | | | |
| 4,800.0 | 4,445.6 | 4,714.6 | 4,621.3 | 29.7 | 22.6 | -170.85 | 837.0 | -250.2 | 846.1 | 796.2 | 16.961 | | | |
| 4,900.0 | 4,536.2 | 4,812.1 | 4,716.5 | 30.4 | 23.0 | -170.95 | 857.2 | -255.6 | 868.2 | 817.3 | 17.057 | | | |
| 5,000.0 | 4,626.8 | 4,909.6 | 4,811.7 | 31.1 | 23.5 | -171.04 | 877.4 | -260.9 | 890.4 | 838.5 | 17.149 | | | |
| 5,100.0 | 4,717.9 | 5,007.4 | 4,907.3 | 31.8 | 24.0 | -171.18 | 897.6 | -266.3 | 911.3 | 858.3 | 17.210 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - Currier 0993-16-04M - OH - Design #4 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|---|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 5,105.8 | 5,003.4 | 32.5 | 24.4 | -171.27 | 918.0 | -271.7 | 928.9 | 874.8 | 17.190 | | |
| 5,300.0 | 4,904.1 | 5,204.8 | 5,100.1 | 33.1 | 24.9 | -171.32 | 938.5 | -277.2 | 943.0 | 887.9 | 17.109 | | |
| 5,400.0 | 4,999.0 | 5,304.2 | 5,197.2 | 33.6 | 25.3 | -171.33 | 959.0 | -282.6 | 953.7 | 897.5 | 16.974 | | |
| 5,500.0 | 5,094.9 | 5,391.3 | 5,282.4 | 34.1 | 25.7 | -171.31 | 976.8 | -287.4 | 961.4 | 904.3 | 16.835 | | |
| 5,600.0 | 5,191.8 | 5,466.5 | 5,356.2 | 34.5 | 26.1 | -171.29 | 990.5 | -291.0 | 967.8 | 909.9 | 16.719 | | |
| 5,700.0 | 5,289.5 | 5,541.7 | 5,430.4 | 34.9 | 26.5 | -171.28 | 1,002.3 | -294.1 | 973.3 | 914.7 | 16.603 | | |
| 5,800.0 | 5,387.8 | 5,616.8 | 5,504.8 | 35.2 | 26.9 | -171.27 | 1,012.2 | -296.8 | 977.9 | 918.6 | 16.491 | | |
| 5,900.0 | 5,486.8 | 5,700.0 | 5,587.5 | 35.5 | 27.3 | -171.26 | 1,020.9 | -299.1 | 981.7 | 921.7 | 16.354 | | |
| 6,000.0 | 5,586.1 | 5,766.8 | 5,654.1 | 35.7 | 27.6 | -171.25 | 1,026.3 | -300.5 | 984.4 | 924.0 | 16.297 | | |
| 6,100.0 | 5,685.8 | 5,841.8 | 5,728.9 | 35.8 | 27.9 | -171.24 | 1,030.5 | -301.6 | 986.3 | 925.5 | 16.218 | | |
| 6,200.0 | 5,785.8 | 5,916.7 | 5,803.9 | 35.9 | 28.2 | -171.24 | 1,032.8 | -302.3 | 987.3 | 926.2 | 16.161 | | |
| 6,300.0 | 5,885.8 | 5,998.7 | 5,885.8 | 35.9 | 28.3 | 179.28 | 1,033.3 | -302.4 | 987.5 | 926.4 | 16.176 | | |
| 6,400.0 | 5,985.8 | 6,098.7 | 5,985.8 | 36.0 | 28.4 | 179.28 | 1,033.3 | -302.4 | 987.5 | 926.3 | 16.158 | | |
| 6,500.0 | 6,085.8 | 6,198.7 | 6,085.8 | 36.0 | 28.4 | 179.28 | 1,033.3 | -302.4 | 987.5 | 926.3 | 16.139 | | |
| 6,600.0 | 6,185.8 | 6,298.7 | 6,185.8 | 36.0 | 28.4 | 179.28 | 1,033.3 | -302.4 | 987.5 | 926.2 | 16.119 | | |
| 6,700.0 | 6,285.8 | 6,398.7 | 6,285.8 | 36.0 | 28.5 | 179.28 | 1,033.3 | -302.4 | 987.5 | 926.1 | 16.099 | | |
| 6,800.0 | 6,385.8 | 6,498.7 | 6,385.8 | 36.0 | 28.5 | 179.28 | 1,033.3 | -302.4 | 987.5 | 926.0 | 16.080 | | |
| 6,900.0 | 6,485.8 | 6,598.7 | 6,485.8 | 36.1 | 28.5 | 179.28 | 1,033.3 | -302.4 | 987.5 | 926.0 | 16.060 | | |
| 7,000.0 | 6,585.8 | 6,698.7 | 6,585.8 | 36.1 | 28.6 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.9 | 16.041 | | |
| 7,100.0 | 6,685.8 | 6,798.7 | 6,685.8 | 36.1 | 28.6 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.8 | 16.021 | | |
| 7,200.0 | 6,785.8 | 6,898.7 | 6,785.8 | 36.2 | 28.7 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.7 | 16.001 | | |
| 7,300.0 | 6,885.8 | 6,998.7 | 6,885.8 | 36.2 | 28.7 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.7 | 15.981 | | |
| 7,400.0 | 6,985.8 | 7,098.7 | 6,985.8 | 36.2 | 28.8 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.6 | 15.962 | | |
| 7,500.0 | 7,085.8 | 7,198.7 | 7,085.8 | 36.2 | 28.8 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.5 | 15.942 | | |
| 7,600.0 | 7,185.8 | 7,298.7 | 7,185.8 | 36.3 | 28.8 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.4 | 15.922 | | |
| 7,700.0 | 7,285.8 | 7,398.7 | 7,285.8 | 36.3 | 28.9 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.4 | 15.902 | | |
| 7,800.0 | 7,385.8 | 7,498.7 | 7,385.8 | 36.3 | 28.9 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.3 | 15.882 | | |
| 7,900.0 | 7,485.8 | 7,598.7 | 7,485.8 | 36.3 | 29.0 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.2 | 15.862 | | |
| 8,000.0 | 7,585.8 | 7,698.7 | 7,585.8 | 36.4 | 29.0 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.1 | 15.842 | | |
| 8,100.0 | 7,685.8 | 7,798.7 | 7,685.8 | 36.4 | 29.0 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.0 | 15.822 | | |
| 8,200.0 | 7,785.8 | 7,898.7 | 7,785.8 | 36.4 | 29.1 | 179.28 | 1,033.3 | -302.4 | 987.5 | 925.0 | 15.802 | | |
| 8,300.0 | 7,885.8 | 7,998.7 | 7,885.8 | 36.4 | 29.1 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.9 | 15.782 | | |
| 8,400.0 | 7,985.8 | 8,098.7 | 7,985.8 | 36.5 | 29.2 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.8 | 15.761 | | |
| 8,500.0 | 8,085.8 | 8,198.7 | 8,085.8 | 36.5 | 29.2 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.7 | 15.741 | | |
| 8,600.0 | 8,185.8 | 8,298.7 | 8,185.8 | 36.5 | 29.3 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.6 | 15.721 | | |
| 8,700.0 | 8,285.8 | 8,398.7 | 8,285.8 | 36.6 | 29.3 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.6 | 15.701 | | |
| 8,800.0 | 8,385.8 | 8,498.7 | 8,385.8 | 36.6 | 29.3 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.5 | 15.681 | | |
| 8,900.0 | 8,485.8 | 8,598.7 | 8,485.8 | 36.6 | 29.4 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.4 | 15.660 | | |
| 9,000.0 | 8,585.8 | 8,698.7 | 8,585.8 | 36.6 | 29.4 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.3 | 15.640 | | |
| 9,067.2 | 8,653.0 | 8,765.9 | 8,653.0 | 36.7 | 29.4 | 179.28 | 1,033.3 | -302.4 | 987.5 | 924.3 | 15.629 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|---------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -136.25 | -28.9 | -27.7 | 40.0 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -136.25 | -28.9 | -27.7 | 40.0 | 38.4 | 25.245 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -136.25 | -28.9 | -27.7 | 40.0 | 37.2 | 14.135 | CC, ES | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 2.3 | 1.9 | -142.74 | -28.9 | -27.7 | 41.4 | 37.4 | 10.302 | | | |
| 400.0 | 399.8 | 399.8 | 399.8 | 3.5 | 2.2 | -146.67 | -28.9 | -27.7 | 45.6 | 40.3 | 8.478 | | | |
| 500.0 | 499.5 | 499.5 | 499.5 | 4.4 | 2.5 | -151.77 | -28.9 | -27.7 | 53.1 | 46.6 | 8.065 | SF | | |
| 600.0 | 598.7 | 598.7 | 598.7 | 5.2 | 2.8 | -156.83 | -28.9 | -27.7 | 64.2 | 56.5 | 8.329 | | | |
| 700.0 | 697.5 | 697.8 | 697.8 | 5.8 | 3.0 | -157.45 | -28.8 | -27.7 | 78.5 | 69.8 | 9.089 | | | |
| 800.0 | 795.7 | 798.7 | 798.7 | 6.5 | 3.5 | -158.29 | -26.6 | -28.5 | 94.2 | 84.4 | 9.681 | | | |
| 900.0 | 893.2 | 900.2 | 900.0 | 7.1 | 4.4 | -158.73 | -20.9 | -30.5 | 110.3 | 99.2 | 9.981 | | | |
| 1,000.0 | 989.9 | 1,002.2 | 1,001.5 | 7.7 | 5.2 | -158.92 | -11.9 | -33.8 | 126.6 | 114.3 | 10.285 | | | |
| 1,100.0 | 1,085.7 | 1,104.4 | 1,102.8 | 8.2 | 5.8 | -158.94 | 0.6 | -38.4 | 143.1 | 129.6 | 10.620 | | | |
| 1,200.0 | 1,180.4 | 1,202.6 | 1,200.1 | 8.8 | 6.3 | -159.18 | 14.0 | -43.2 | 161.4 | 146.8 | 11.078 | | | |
| 1,300.0 | 1,273.9 | 1,300.2 | 1,296.6 | 9.4 | 6.5 | -159.83 | 27.2 | -48.0 | 182.7 | 167.3 | 11.819 | | | |
| 1,400.0 | 1,366.2 | 1,397.0 | 1,392.4 | 9.9 | 6.8 | -160.69 | 40.4 | -52.8 | 207.3 | 190.9 | 12.660 | | | |
| 1,500.0 | 1,457.2 | 1,492.9 | 1,487.2 | 10.3 | 7.1 | -161.83 | 53.5 | -57.5 | 234.9 | 217.7 | 13.695 | | | |
| 1,600.0 | 1,547.7 | 1,588.5 | 1,581.9 | 10.7 | 7.4 | -163.25 | 66.5 | -62.3 | 263.5 | 245.6 | 14.741 | | | |
| 1,700.0 | 1,638.3 | 1,684.2 | 1,676.5 | 11.1 | 7.7 | -164.40 | 79.5 | -67.0 | 292.2 | 273.6 | 15.697 | | | |
| 1,800.0 | 1,728.8 | 1,779.8 | 1,771.2 | 11.4 | 8.0 | -165.34 | 92.5 | -71.7 | 321.0 | 301.6 | 16.572 | | | |
| 1,900.0 | 1,819.4 | 1,875.5 | 1,865.8 | 11.8 | 8.3 | -166.13 | 105.5 | -76.4 | 349.8 | 329.7 | 17.372 | | | |
| 2,000.0 | 1,910.0 | 1,971.1 | 1,960.4 | 12.3 | 8.6 | -166.80 | 118.5 | -81.2 | 378.7 | 357.8 | 18.104 | | | |
| 2,100.0 | 2,000.5 | 2,066.7 | 2,055.1 | 12.7 | 9.0 | -167.37 | 131.6 | -85.9 | 407.7 | 386.0 | 18.773 | | | |
| 2,200.0 | 2,091.1 | 2,162.4 | 2,149.7 | 13.1 | 9.3 | -167.87 | 144.6 | -90.6 | 436.7 | 414.1 | 19.385 | | | |
| 2,300.0 | 2,181.6 | 2,258.0 | 2,244.3 | 13.6 | 9.7 | -168.30 | 157.6 | -95.3 | 465.7 | 442.3 | 19.946 | | | |
| 2,400.0 | 2,272.2 | 2,353.7 | 2,339.0 | 14.0 | 10.0 | -168.69 | 170.6 | -100.0 | 494.7 | 470.5 | 20.461 | | | |
| 2,500.0 | 2,362.8 | 2,449.3 | 2,433.6 | 14.5 | 10.4 | -169.03 | 183.6 | -104.8 | 523.7 | 498.7 | 20.934 | | | |
| 2,600.0 | 2,453.3 | 2,545.0 | 2,528.2 | 15.0 | 10.8 | -169.33 | 196.6 | -109.5 | 552.8 | 526.9 | 21.369 | | | |
| 2,700.0 | 2,543.9 | 2,640.6 | 2,622.9 | 15.5 | 11.1 | -169.61 | 209.6 | -114.2 | 581.9 | 555.2 | 21.769 | | | |
| 2,800.0 | 2,634.4 | 2,736.3 | 2,717.5 | 16.0 | 11.5 | -169.86 | 222.7 | -118.9 | 611.0 | 583.4 | 22.140 | | | |
| 2,900.0 | 2,725.0 | 2,831.9 | 2,812.2 | 16.5 | 11.9 | -170.09 | 235.7 | -123.7 | 640.1 | 611.6 | 22.482 | | | |
| 3,000.0 | 2,815.6 | 2,927.5 | 2,906.8 | 17.1 | 12.3 | -170.29 | 248.7 | -128.4 | 669.2 | 639.8 | 22.800 | | | |
| 3,100.0 | 2,906.1 | 3,023.2 | 3,001.4 | 17.8 | 12.6 | -170.48 | 261.7 | -133.1 | 698.3 | 668.1 | 23.094 | | | |
| 3,200.0 | 2,996.7 | 3,118.8 | 3,096.1 | 18.4 | 13.0 | -170.66 | 274.7 | -137.8 | 727.4 | 696.3 | 23.368 | | | |
| 3,300.0 | 3,087.2 | 3,214.5 | 3,190.7 | 19.1 | 13.4 | -170.82 | 287.7 | -142.5 | 756.5 | 724.5 | 23.623 | | | |
| 3,400.0 | 3,177.8 | 3,310.1 | 3,285.3 | 19.8 | 13.8 | -170.97 | 300.8 | -147.3 | 785.7 | 752.7 | 23.861 | | | |
| 3,500.0 | 3,268.4 | 3,405.8 | 3,380.0 | 20.5 | 14.2 | -171.10 | 313.8 | -152.0 | 814.8 | 781.0 | 24.083 | | | |
| 3,600.0 | 3,358.9 | 3,501.4 | 3,474.6 | 21.2 | 14.6 | -171.23 | 326.8 | -156.7 | 843.9 | 809.2 | 24.291 | | | |
| 3,700.0 | 3,449.5 | 3,597.0 | 3,569.2 | 21.9 | 15.0 | -171.35 | 339.8 | -161.4 | 873.1 | 837.4 | 24.486 | | | |
| 3,800.0 | 3,540.0 | 3,692.7 | 3,663.9 | 22.6 | 15.4 | -171.47 | 352.8 | -166.2 | 902.2 | 865.7 | 24.669 | | | |
| 3,900.0 | 3,630.6 | 3,788.3 | 3,758.5 | 23.3 | 15.8 | -171.57 | 365.8 | -170.9 | 931.4 | 893.9 | 24.841 | | | |
| 4,000.0 | 3,721.2 | 3,884.0 | 3,853.2 | 24.0 | 16.2 | -171.67 | 378.8 | -175.6 | 960.5 | 922.1 | 25.003 | | | |
| 4,100.0 | 3,811.7 | 3,979.6 | 3,947.8 | 24.7 | 16.6 | -171.76 | 391.9 | -180.3 | 989.7 | 950.3 | 25.156 | | | |
| 4,200.0 | 3,902.3 | 4,075.3 | 4,042.4 | 25.4 | 17.0 | -171.85 | 404.9 | -185.0 | 1,018.8 | 978.6 | 25.300 | | | |
| 4,300.0 | 3,992.8 | 4,170.9 | 4,137.1 | 26.2 | 17.4 | -171.93 | 417.9 | -189.8 | 1,048.0 | 1,006.8 | 25.436 | | | |
| 4,400.0 | 4,083.4 | 4,266.6 | 4,231.7 | 26.9 | 17.8 | -172.01 | 430.9 | -194.5 | 1,077.2 | 1,035.0 | 25.565 | | | |
| 4,500.0 | 4,174.0 | 4,362.2 | 4,326.3 | 27.6 | 18.2 | -172.09 | 443.9 | -199.2 | 1,106.3 | 1,063.3 | 25.687 | | | |
| 4,600.0 | 4,264.5 | 4,457.8 | 4,421.0 | 28.3 | 18.6 | -172.16 | 456.9 | -203.9 | 1,135.5 | 1,091.5 | 25.803 | | | |
| 4,700.0 | 4,355.1 | 4,553.5 | 4,515.6 | 29.0 | 19.0 | -172.23 | 469.9 | -208.7 | 1,164.7 | 1,119.7 | 25.912 | | | |
| 4,800.0 | 4,445.6 | 4,649.1 | 4,610.2 | 29.7 | 19.4 | -172.29 | 483.0 | -213.4 | 1,193.8 | 1,147.9 | 26.017 | | | |
| 4,900.0 | 4,536.2 | 4,744.8 | 4,704.9 | 30.4 | 19.8 | -172.35 | 496.0 | -218.1 | 1,223.0 | 1,176.2 | 26.116 | | | |
| 5,000.0 | 4,626.8 | 4,840.4 | 4,799.5 | 31.1 | 20.2 | -172.41 | 509.0 | -222.8 | 1,252.2 | 1,204.4 | 26.210 | | | |
| 5,100.0 | 4,717.9 | 4,936.4 | 4,894.5 | 31.8 | 20.6 | -172.52 | 522.1 | -227.6 | 1,280.1 | 1,231.4 | 26.270 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 5,033.3 | 4,990.4 | 32.5 | 21.0 | -172.61 | 535.2 | -232.4 | 1,304.7 | 1,255.0 | 26.232 | | |
| 5,300.0 | 4,904.1 | 5,131.1 | 5,087.1 | 33.1 | 21.4 | -172.67 | 548.5 | -237.2 | 1,326.0 | 1,275.2 | 26.127 | | |
| 5,400.0 | 4,999.0 | 5,229.4 | 5,184.4 | 33.6 | 21.8 | -172.70 | 561.9 | -242.0 | 1,343.8 | 1,292.1 | 25.965 | | |
| 5,500.0 | 5,094.9 | 5,328.4 | 5,282.3 | 34.1 | 22.3 | -172.70 | 575.4 | -246.9 | 1,358.2 | 1,305.5 | 25.751 | | |
| 5,600.0 | 5,191.8 | 5,427.8 | 5,380.7 | 34.5 | 22.7 | -172.68 | 588.9 | -251.8 | 1,369.2 | 1,315.5 | 25.487 | | |
| 5,700.0 | 5,289.5 | 5,518.2 | 5,470.2 | 34.9 | 23.1 | -172.64 | 601.2 | -256.3 | 1,376.9 | 1,322.3 | 25.210 | | |
| 5,800.0 | 5,387.8 | 5,600.0 | 5,551.3 | 35.2 | 23.5 | -172.60 | 610.7 | -259.7 | 1,382.9 | 1,327.4 | 24.925 | | |
| 5,900.0 | 5,486.8 | 5,655.1 | 5,606.1 | 35.5 | 23.8 | -172.59 | 615.8 | -261.6 | 1,387.5 | 1,331.6 | 24.800 | | |
| 6,000.0 | 5,586.1 | 5,723.4 | 5,674.3 | 35.7 | 24.1 | -172.57 | 620.9 | -263.4 | 1,391.1 | 1,334.6 | 24.624 | | |
| 6,100.0 | 5,685.8 | 5,800.0 | 5,750.7 | 35.8 | 24.5 | -172.55 | 624.7 | -264.8 | 1,393.5 | 1,336.4 | 24.421 | | |
| 6,200.0 | 5,785.8 | 5,860.1 | 5,810.8 | 35.9 | 24.7 | -172.55 | 626.4 | -265.4 | 1,394.6 | 1,337.3 | 24.343 | | |
| 6,300.0 | 5,885.8 | 5,935.0 | 5,885.8 | 35.9 | 24.9 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,337.4 | 24.325 | | |
| 6,400.0 | 5,985.8 | 6,035.0 | 5,985.8 | 36.0 | 24.9 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,337.3 | 24.292 | | |
| 6,500.0 | 6,085.8 | 6,135.0 | 6,085.8 | 36.0 | 24.9 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,337.2 | 24.259 | | |
| 6,600.0 | 6,185.8 | 6,235.0 | 6,185.8 | 36.0 | 25.0 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,337.1 | 24.225 | | |
| 6,700.0 | 6,285.8 | 6,335.0 | 6,285.8 | 36.0 | 25.0 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,337.0 | 24.191 | | |
| 6,800.0 | 6,385.8 | 6,435.0 | 6,385.8 | 36.0 | 25.1 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,337.0 | 24.157 | | |
| 6,900.0 | 6,485.8 | 6,535.0 | 6,485.8 | 36.1 | 25.1 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.9 | 24.124 | | |
| 7,000.0 | 6,585.8 | 6,635.0 | 6,585.8 | 36.1 | 25.2 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.8 | 24.090 | | |
| 7,100.0 | 6,685.8 | 6,735.0 | 6,685.8 | 36.1 | 25.2 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.7 | 24.056 | | |
| 7,200.0 | 6,785.8 | 6,835.0 | 6,785.8 | 36.2 | 25.3 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.6 | 24.022 | | |
| 7,300.0 | 6,885.8 | 6,935.0 | 6,885.8 | 36.2 | 25.3 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.5 | 23.988 | | |
| 7,400.0 | 6,985.8 | 7,035.0 | 6,985.8 | 36.2 | 25.4 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.5 | 23.954 | | |
| 7,500.0 | 7,085.8 | 7,135.0 | 7,085.8 | 36.2 | 25.4 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.4 | 23.919 | | |
| 7,600.0 | 7,185.8 | 7,235.0 | 7,185.8 | 36.3 | 25.4 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.3 | 23.885 | | |
| 7,700.0 | 7,285.8 | 7,335.0 | 7,285.8 | 36.3 | 25.5 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.2 | 23.851 | | |
| 7,800.0 | 7,385.8 | 7,435.0 | 7,385.8 | 36.3 | 25.5 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.1 | 23.817 | | |
| 7,900.0 | 7,485.8 | 7,535.0 | 7,485.8 | 36.3 | 25.6 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.0 | 23.782 | | |
| 8,000.0 | 7,585.8 | 7,635.0 | 7,585.8 | 36.4 | 25.6 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,336.0 | 23.748 | | |
| 8,100.0 | 7,685.8 | 7,735.0 | 7,685.8 | 36.4 | 25.7 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,335.9 | 23.714 | | |
| 8,200.0 | 7,785.8 | 7,835.0 | 7,785.8 | 36.4 | 25.7 | 177.98 | 626.9 | -265.6 | 1,394.7 | 1,335.8 | 23.682 | | |
| 8,300.0 | 7,885.8 | 7,851.3 | 7,802.0 | 36.4 | 25.7 | 177.98 | 626.9 | -265.6 | 1,397.2 | 1,339.1 | 24.066 | | |
| 8,400.0 | 7,985.8 | 7,851.3 | 7,802.0 | 36.5 | 25.7 | 177.98 | 626.9 | -265.6 | 1,406.7 | 1,349.9 | 24.744 | | |
| 8,500.0 | 8,085.8 | 7,851.3 | 7,802.0 | 36.5 | 25.7 | 177.98 | 626.9 | -265.6 | 1,423.3 | 1,367.8 | 25.657 | | |
| 8,600.0 | 8,185.8 | 7,851.3 | 7,802.0 | 36.5 | 25.7 | 177.98 | 626.9 | -265.6 | 1,446.5 | 1,392.6 | 26.808 | | |
| 8,700.0 | 8,285.8 | 7,851.3 | 7,802.0 | 36.6 | 25.7 | 177.98 | 626.9 | -265.6 | 1,476.2 | 1,423.8 | 28.195 | | |
| 8,800.0 | 8,385.8 | 7,851.3 | 7,802.0 | 36.6 | 25.7 | 177.98 | 626.9 | -265.6 | 1,511.9 | 1,461.2 | 29.814 | | |
| 8,900.0 | 8,485.8 | 7,851.3 | 7,802.0 | 36.6 | 25.7 | 177.98 | 626.9 | -265.6 | 1,553.3 | 1,504.2 | 31.656 | | |
| 9,000.0 | 8,585.8 | 7,851.3 | 7,802.0 | 36.6 | 25.7 | 177.98 | 626.9 | -265.6 | 1,599.8 | 1,552.4 | 33.710 | | |
| 9,067.2 | 8,653.0 | 7,851.3 | 7,802.0 | 36.7 | 25.7 | 177.98 | 626.9 | -265.6 | 1,633.8 | 1,587.4 | 35.207 | | |



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|-----------------------|------------------------------|-----------------------------|--------------------|-----------------------|------------------------------|---------------------|---------------------------------|-------------------------|-------------------|---------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Offset Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N/-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -136.23 | -36.1 | -34.6 | 50.0 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -136.23 | -36.1 | -34.6 | 50.0 | 48.4 | 31.565 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -136.23 | -36.1 | -34.6 | 50.0 | 47.2 | 17.674 | CC, ES | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 2.3 | 1.9 | -142.43 | -36.1 | -34.6 | 51.4 | 47.4 | 12.802 | | | |
| 400.0 | 399.8 | 399.8 | 399.8 | 3.5 | 2.2 | -145.67 | -36.1 | -34.6 | 55.6 | 50.3 | 10.366 | | | |
| 500.0 | 499.5 | 499.2 | 499.2 | 4.4 | 2.4 | -149.82 | -36.0 | -34.9 | 63.1 | 56.7 | 9.888 | SF | | |
| 600.0 | 598.7 | 597.7 | 597.6 | 5.2 | 3.1 | -152.17 | -35.2 | -37.8 | 74.7 | 67.3 | 10.056 | | | |
| 700.0 | 697.5 | 695.7 | 695.4 | 5.8 | 4.0 | -148.88 | -33.5 | -43.9 | 90.1 | 81.7 | 10.740 | | | |
| 800.0 | 795.7 | 793.0 | 792.3 | 6.5 | 4.8 | -146.20 | -30.9 | -53.2 | 108.8 | 99.5 | 11.765 | | | |
| 900.0 | 893.2 | 889.5 | 887.9 | 7.1 | 5.5 | -143.88 | -27.5 | -65.6 | 130.6 | 120.6 | 12.988 | | | |
| 1,000.0 | 989.9 | 985.0 | 982.1 | 7.7 | 6.2 | -141.80 | -23.3 | -80.8 | 155.6 | 144.8 | 14.346 | | | |
| 1,100.0 | 1,085.7 | 1,080.5 | 1,075.7 | 8.2 | 6.5 | -140.09 | -18.4 | -98.5 | 183.6 | 172.0 | 15.894 | | | |
| 1,200.0 | 1,180.4 | 1,175.8 | 1,169.2 | 8.8 | 6.7 | -139.28 | -13.4 | -116.5 | 213.8 | 201.4 | 17.354 | | | |
| 1,300.0 | 1,273.9 | 1,270.3 | 1,261.9 | 9.4 | 7.0 | -139.10 | -8.5 | -134.2 | 246.2 | 233.1 | 18.753 | | | |
| 1,400.0 | 1,366.2 | 1,363.9 | 1,353.7 | 9.9 | 7.3 | -139.32 | -3.6 | -151.9 | 280.9 | 266.9 | 20.114 | | | |
| 1,500.0 | 1,457.2 | 1,456.5 | 1,444.5 | 10.3 | 7.6 | -140.06 | 1.2 | -169.3 | 317.9 | 303.1 | 21.596 | | | |
| 1,600.0 | 1,547.7 | 1,548.8 | 1,535.0 | 10.7 | 8.0 | -141.40 | 6.0 | -186.6 | 355.6 | 340.2 | 23.021 | | | |
| 1,700.0 | 1,638.3 | 1,641.1 | 1,625.6 | 11.1 | 8.3 | -142.49 | 10.9 | -204.0 | 393.5 | 377.3 | 24.300 | | | |
| 1,800.0 | 1,728.8 | 1,733.4 | 1,716.1 | 11.4 | 8.6 | -143.38 | 15.7 | -221.4 | 431.5 | 414.5 | 25.457 | | | |
| 1,900.0 | 1,819.4 | 1,825.7 | 1,806.6 | 11.8 | 9.0 | -144.13 | 20.5 | -238.7 | 469.5 | 451.8 | 26.504 | | | |
| 2,000.0 | 1,910.0 | 1,918.0 | 1,897.2 | 12.3 | 9.3 | -144.77 | 25.3 | -256.1 | 507.7 | 489.2 | 27.454 | | | |
| 2,100.0 | 2,000.5 | 2,010.3 | 1,987.7 | 12.7 | 9.7 | -145.32 | 30.1 | -273.5 | 545.8 | 526.5 | 28.317 | | | |
| 2,200.0 | 2,091.1 | 2,102.6 | 2,078.3 | 13.1 | 10.1 | -145.79 | 34.9 | -290.8 | 584.0 | 564.0 | 29.103 | | | |
| 2,300.0 | 2,181.6 | 2,195.0 | 2,168.8 | 13.6 | 10.4 | -146.21 | 39.8 | -308.2 | 622.2 | 601.4 | 29.820 | | | |
| 2,400.0 | 2,272.2 | 2,287.3 | 2,259.3 | 14.0 | 10.8 | -146.58 | 44.6 | -325.6 | 660.5 | 638.8 | 30.476 | | | |
| 2,500.0 | 2,362.8 | 2,379.6 | 2,349.9 | 14.5 | 11.2 | -146.91 | 49.4 | -342.9 | 698.8 | 676.3 | 31.077 | | | |
| 2,600.0 | 2,453.3 | 2,471.9 | 2,440.4 | 15.0 | 11.6 | -147.21 | 54.2 | -360.3 | 737.1 | 713.8 | 31.629 | | | |
| 2,700.0 | 2,543.9 | 2,564.2 | 2,530.9 | 15.5 | 12.0 | -147.48 | 59.0 | -377.7 | 775.4 | 751.3 | 32.138 | | | |
| 2,800.0 | 2,634.4 | 2,656.5 | 2,621.5 | 16.0 | 12.4 | -147.72 | 63.8 | -395.0 | 813.7 | 788.8 | 32.607 | | | |
| 2,900.0 | 2,725.0 | 2,748.8 | 2,712.0 | 16.5 | 12.8 | -147.94 | 68.6 | -412.4 | 852.0 | 826.3 | 33.041 | | | |
| 3,000.0 | 2,815.6 | 2,841.2 | 2,802.6 | 17.1 | 13.1 | -148.14 | 73.5 | -429.8 | 890.4 | 863.8 | 33.443 | | | |
| 3,100.0 | 2,906.1 | 2,933.5 | 2,893.1 | 17.8 | 13.5 | -148.32 | 78.3 | -447.1 | 928.7 | 901.3 | 33.817 | | | |
| 3,200.0 | 2,996.7 | 3,025.8 | 2,983.6 | 18.4 | 13.9 | -148.49 | 83.1 | -464.5 | 967.1 | 938.8 | 34.164 | | | |
| 3,300.0 | 3,087.2 | 3,118.1 | 3,074.2 | 19.1 | 14.3 | -148.65 | 87.9 | -481.9 | 1,005.5 | 976.3 | 34.488 | | | |
| 3,400.0 | 3,177.8 | 3,210.4 | 3,164.7 | 19.8 | 14.8 | -148.79 | 92.7 | -499.2 | 1,043.8 | 1,013.8 | 34.790 | | | |
| 3,500.0 | 3,268.4 | 3,302.7 | 3,255.2 | 20.5 | 15.2 | -148.93 | 97.5 | -516.6 | 1,082.2 | 1,051.4 | 35.073 | | | |
| 3,600.0 | 3,358.9 | 3,395.0 | 3,345.8 | 21.2 | 15.6 | -149.05 | 102.3 | -534.0 | 1,120.6 | 1,088.9 | 35.338 | | | |
| 3,700.0 | 3,449.5 | 3,487.3 | 3,436.3 | 21.9 | 16.0 | -149.17 | 107.2 | -551.3 | 1,159.0 | 1,126.4 | 35.587 | | | |
| 3,800.0 | 3,540.0 | 3,579.7 | 3,526.9 | 22.6 | 16.4 | -149.28 | 112.0 | -568.7 | 1,197.4 | 1,164.0 | 35.820 | | | |
| 3,900.0 | 3,630.6 | 3,672.0 | 3,617.4 | 23.3 | 16.8 | -149.38 | 116.8 | -586.1 | 1,235.8 | 1,201.5 | 36.040 | | | |
| 4,000.0 | 3,721.2 | 3,764.3 | 3,707.9 | 24.0 | 17.2 | -149.48 | 121.6 | -603.4 | 1,274.2 | 1,239.0 | 36.248 | | | |
| 4,100.0 | 3,811.7 | 3,856.6 | 3,798.5 | 24.7 | 17.6 | -149.57 | 126.4 | -620.8 | 1,312.6 | 1,276.6 | 36.443 | | | |
| 4,200.0 | 3,902.3 | 3,948.9 | 3,889.0 | 25.4 | 18.0 | -149.66 | 131.2 | -638.2 | 1,351.0 | 1,314.1 | 36.628 | | | |
| 4,300.0 | 3,992.8 | 4,041.2 | 3,979.5 | 26.2 | 18.4 | -149.74 | 136.1 | -655.5 | 1,389.4 | 1,351.6 | 36.803 | | | |
| 4,400.0 | 4,083.4 | 4,133.5 | 4,070.1 | 26.9 | 18.9 | -149.82 | 140.9 | -672.9 | 1,427.8 | 1,389.2 | 36.969 | | | |
| 4,500.0 | 4,174.0 | 4,225.9 | 4,160.6 | 27.6 | 19.3 | -149.89 | 145.7 | -690.3 | 1,466.2 | 1,426.7 | 37.126 | | | |
| 4,600.0 | 4,264.5 | 4,318.2 | 4,251.2 | 28.3 | 19.7 | -149.96 | 150.5 | -707.6 | 1,504.6 | 1,464.2 | 37.276 | | | |
| 4,700.0 | 4,355.1 | 4,410.5 | 4,341.7 | 29.0 | 20.1 | -150.02 | 155.3 | -725.0 | 1,543.0 | 1,501.8 | 37.418 | | | |
| 4,800.0 | 4,445.6 | 4,502.8 | 4,432.2 | 29.7 | 20.5 | -150.09 | 160.1 | -742.4 | 1,581.4 | 1,539.3 | 37.553 | | | |
| 4,900.0 | 4,536.2 | 4,595.1 | 4,522.8 | 30.4 | 20.9 | -150.15 | 164.9 | -759.7 | 1,619.9 | 1,576.9 | 37.682 | | | |
| 5,000.0 | 4,626.8 | 4,687.4 | 4,613.3 | 31.1 | 21.4 | -150.20 | 169.8 | -777.1 | 1,658.3 | 1,614.4 | 37.804 | | | |
| 5,100.0 | 4,717.9 | 4,780.2 | 4,704.3 | 31.8 | 21.8 | -150.25 | 174.6 | -794.6 | 1,696.6 | 1,650.9 | 37.895 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 4,874.0 | 4,796.3 | 32.5 | 22.2 | -150.90 | 179.5 | -812.2 | 1,730.2 | 1,684.5 | 37.892 | | |
| 5,300.0 | 4,904.1 | 4,968.8 | 4,889.3 | 33.1 | 22.7 | -151.14 | 184.4 | -830.0 | 1,761.9 | 1,715.3 | 37.828 | | |
| 5,400.0 | 4,999.0 | 5,064.5 | 4,983.1 | 33.6 | 23.1 | -151.29 | 189.4 | -848.0 | 1,790.7 | 1,743.2 | 37.716 | | |
| 5,500.0 | 5,094.9 | 5,160.9 | 5,077.7 | 34.1 | 23.5 | -151.35 | 194.5 | -866.2 | 1,816.5 | 1,768.1 | 37.560 | | |
| 5,600.0 | 5,191.8 | 5,258.0 | 5,172.9 | 34.5 | 24.0 | -151.34 | 199.5 | -884.4 | 1,839.4 | 1,790.2 | 37.363 | | |
| 5,700.0 | 5,289.5 | 5,355.5 | 5,268.5 | 34.9 | 24.4 | -151.25 | 204.6 | -902.8 | 1,859.3 | 1,809.3 | 37.130 | | |
| 5,800.0 | 5,387.8 | 5,456.0 | 5,367.2 | 35.2 | 24.9 | -151.09 | 209.7 | -921.1 | 1,876.3 | 1,825.4 | 36.838 | | |
| 5,900.0 | 5,486.8 | 5,559.1 | 5,469.0 | 35.5 | 25.4 | -150.95 | 214.0 | -936.7 | 1,890.1 | 1,838.3 | 36.538 | | |
| 6,000.0 | 5,586.1 | 5,663.1 | 5,572.2 | 35.7 | 26.0 | -150.84 | 217.4 | -948.8 | 1,900.6 | 1,848.2 | 36.263 | | |
| 6,100.0 | 5,685.8 | 5,767.7 | 5,676.5 | 35.8 | 26.5 | -150.76 | 219.7 | -957.3 | 1,907.9 | 1,854.9 | 36.000 | | |
| 6,200.0 | 5,785.8 | 5,872.8 | 5,781.5 | 35.9 | 26.9 | -150.71 | 221.1 | -962.2 | 1,911.8 | 1,858.4 | 35.756 | | |
| 6,300.0 | 5,885.8 | 5,977.1 | 5,885.8 | 35.9 | 27.1 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,859.0 | 35.640 | | |
| 6,400.0 | 5,985.8 | 6,077.1 | 5,985.8 | 36.0 | 27.1 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.9 | 35.593 | | |
| 6,500.0 | 6,085.8 | 6,177.1 | 6,085.8 | 36.0 | 27.2 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.8 | 35.539 | | |
| 6,600.0 | 6,185.8 | 6,277.1 | 6,185.8 | 36.0 | 27.2 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.7 | 35.484 | | |
| 6,700.0 | 6,285.8 | 6,377.1 | 6,285.8 | 36.0 | 27.2 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.6 | 35.430 | | |
| 6,800.0 | 6,385.8 | 6,477.1 | 6,385.8 | 36.0 | 27.3 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.6 | 35.375 | | |
| 6,900.0 | 6,485.8 | 6,577.1 | 6,485.8 | 36.1 | 27.3 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.5 | 35.320 | | |
| 7,000.0 | 6,585.8 | 6,677.1 | 6,585.8 | 36.1 | 27.3 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.4 | 35.266 | | |
| 7,100.0 | 6,685.8 | 6,777.1 | 6,685.8 | 36.1 | 27.4 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.3 | 35.211 | | |
| 7,200.0 | 6,785.8 | 6,877.1 | 6,785.8 | 36.2 | 27.4 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.2 | 35.156 | | |
| 7,300.0 | 6,885.8 | 6,977.1 | 6,885.8 | 36.2 | 27.4 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.1 | 35.101 | | |
| 7,400.0 | 6,985.8 | 7,077.1 | 6,985.8 | 36.2 | 27.5 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.1 | 35.046 | | |
| 7,500.0 | 7,085.8 | 7,177.1 | 7,085.8 | 36.2 | 27.5 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,858.0 | 34.991 | | |
| 7,600.0 | 7,185.8 | 7,277.1 | 7,185.8 | 36.3 | 27.5 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.9 | 34.936 | | |
| 7,700.0 | 7,285.8 | 7,377.1 | 7,285.8 | 36.3 | 27.6 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.8 | 34.880 | | |
| 7,800.0 | 7,385.8 | 7,477.1 | 7,385.8 | 36.3 | 27.6 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.7 | 34.825 | | |
| 7,900.0 | 7,485.8 | 7,577.1 | 7,485.8 | 36.3 | 27.6 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.6 | 34.770 | | |
| 8,000.0 | 7,585.8 | 7,677.1 | 7,585.8 | 36.4 | 27.7 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.5 | 34.714 | | |
| 8,100.0 | 7,685.8 | 7,777.1 | 7,685.8 | 36.4 | 27.7 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.4 | 34.659 | | |
| 8,200.0 | 7,785.8 | 7,877.1 | 7,785.8 | 36.4 | 27.7 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.4 | 34.604 | | |
| 8,300.0 | 7,885.8 | 7,977.1 | 7,885.8 | 36.4 | 27.8 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.3 | 34.548 | | |
| 8,400.0 | 7,985.8 | 8,077.1 | 7,985.8 | 36.5 | 27.8 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.2 | 34.493 | | |
| 8,500.0 | 8,085.8 | 8,177.1 | 8,085.8 | 36.5 | 27.8 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.1 | 34.437 | | |
| 8,600.0 | 8,185.8 | 8,277.1 | 8,185.8 | 36.5 | 27.9 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,857.0 | 34.382 | | |
| 8,700.0 | 8,285.8 | 8,377.1 | 8,285.8 | 36.6 | 27.9 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,856.9 | 34.326 | | |
| 8,800.0 | 8,385.8 | 8,477.1 | 8,385.8 | 36.6 | 28.0 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,856.8 | 34.271 | | |
| 8,900.0 | 8,485.8 | 8,577.1 | 8,485.8 | 36.6 | 28.0 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,856.7 | 34.215 | | |
| 9,000.0 | 8,585.8 | 8,677.1 | 8,585.8 | 36.6 | 28.0 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,856.6 | 34.159 | | |
| 9,067.2 | 8,653.0 | 8,744.4 | 8,653.0 | 36.7 | 28.1 | -160.17 | 221.4 | -963.4 | 1,912.6 | 1,856.6 | 34.130 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -136.24 | -43.3 | -41.5 | 60.0 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -136.24 | -43.3 | -41.5 | 60.0 | 58.4 | 37.873 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -136.24 | -43.3 | -41.5 | 60.0 | 57.2 | 21.206 | CC, ES | |
| 300.0 | 300.0 | 300.0 | 300.0 | 2.3 | 1.9 | -142.24 | -43.3 | -41.5 | 61.4 | 57.4 | 15.297 | | |
| 400.0 | 399.8 | 399.8 | 399.8 | 3.5 | 2.2 | -144.99 | -43.3 | -41.5 | 65.6 | 60.2 | 12.253 | | |
| 500.0 | 499.5 | 497.9 | 497.9 | 4.4 | 2.8 | -147.73 | -43.3 | -43.2 | 73.9 | 67.4 | 11.389 | | |
| 600.0 | 598.7 | 595.4 | 595.2 | 5.2 | 3.7 | -149.16 | -43.3 | -48.2 | 87.3 | 79.6 | 11.264 | SF | |
| 700.0 | 697.5 | 691.3 | 690.8 | 5.8 | 4.0 | -145.81 | -43.6 | -56.1 | 105.4 | 96.9 | 12.339 | | |
| 800.0 | 795.7 | 784.6 | 783.6 | 6.5 | 4.4 | -144.45 | -46.1 | -65.7 | 128.7 | 119.2 | 13.588 | | |
| 900.0 | 893.2 | 876.5 | 874.7 | 7.1 | 4.7 | -144.23 | -51.0 | -76.6 | 157.4 | 147.1 | 15.282 | | |
| 1,000.0 | 989.9 | 971.0 | 968.2 | 7.7 | 4.9 | -144.63 | -57.0 | -88.3 | 189.7 | 178.6 | 17.106 | | |
| 1,100.0 | 1,085.7 | 1,064.4 | 1,060.7 | 8.2 | 5.2 | -145.30 | -62.9 | -99.9 | 224.5 | 212.6 | 18.829 | | |
| 1,200.0 | 1,180.4 | 1,156.6 | 1,152.1 | 8.8 | 5.5 | -146.09 | -68.7 | -111.3 | 262.0 | 249.2 | 20.526 | | |
| 1,300.0 | 1,273.9 | 1,247.7 | 1,242.3 | 9.4 | 5.8 | -146.93 | -74.5 | -122.6 | 302.2 | 288.6 | 22.220 | | |
| 1,400.0 | 1,366.2 | 1,337.4 | 1,331.1 | 9.9 | 6.1 | -147.75 | -80.2 | -133.7 | 345.1 | 330.7 | 23.920 | | |
| 1,500.0 | 1,457.2 | 1,425.7 | 1,418.5 | 10.3 | 6.4 | -148.83 | -85.7 | -144.7 | 390.7 | 375.6 | 25.809 | | |
| 1,600.0 | 1,547.7 | 1,513.6 | 1,505.6 | 10.7 | 6.8 | -150.44 | -91.3 | -155.6 | 437.2 | 421.4 | 27.675 | | |
| 1,700.0 | 1,638.3 | 1,601.5 | 1,592.6 | 11.1 | 7.1 | -151.74 | -96.9 | -166.5 | 484.0 | 467.5 | 29.385 | | |
| 1,800.0 | 1,728.8 | 1,689.4 | 1,679.7 | 11.4 | 7.4 | -152.82 | -102.4 | -177.4 | 530.9 | 513.8 | 30.960 | | |
| 1,900.0 | 1,819.4 | 1,777.3 | 1,766.7 | 11.8 | 7.8 | -153.72 | -108.0 | -188.3 | 578.0 | 560.2 | 32.409 | | |
| 2,000.0 | 1,910.0 | 1,865.2 | 1,853.7 | 12.3 | 8.1 | -154.48 | -113.5 | -199.2 | 625.2 | 606.6 | 33.743 | | |
| 2,100.0 | 2,000.5 | 1,953.1 | 1,940.8 | 12.7 | 8.4 | -155.14 | -119.1 | -210.1 | 672.4 | 653.2 | 34.972 | | |
| 2,200.0 | 2,091.1 | 2,046.4 | 2,033.2 | 13.1 | 8.8 | -155.76 | -124.9 | -221.4 | 719.6 | 699.6 | 36.012 | | |
| 2,300.0 | 2,181.6 | 2,152.2 | 2,138.4 | 13.6 | 9.4 | -156.57 | -130.2 | -231.7 | 765.2 | 744.3 | 36.617 | | |
| 2,400.0 | 2,272.2 | 2,259.9 | 2,245.8 | 14.0 | 10.0 | -157.52 | -133.7 | -238.6 | 808.9 | 787.1 | 37.068 | | |
| 2,500.0 | 2,362.8 | 2,369.2 | 2,355.1 | 14.5 | 10.6 | -158.61 | -135.4 | -241.9 | 850.7 | 828.0 | 37.499 | | |
| 2,600.0 | 2,453.3 | 2,467.5 | 2,453.3 | 15.0 | 10.8 | -159.66 | -135.5 | -242.2 | 890.9 | 867.7 | 38.246 | | |
| 2,700.0 | 2,543.9 | 2,558.0 | 2,543.9 | 15.5 | 10.8 | -160.56 | -135.5 | -242.2 | 931.3 | 907.4 | 39.117 | | |
| 2,800.0 | 2,634.4 | 2,648.6 | 2,634.4 | 16.0 | 10.9 | -161.39 | -135.5 | -242.2 | 971.7 | 947.4 | 39.955 | | |
| 2,900.0 | 2,725.0 | 2,739.1 | 2,725.0 | 16.5 | 11.0 | -162.15 | -135.5 | -242.2 | 1,012.4 | 987.5 | 40.752 | | |
| 3,000.0 | 2,815.6 | 2,829.7 | 2,815.6 | 17.1 | 11.0 | -162.85 | -135.5 | -242.2 | 1,053.2 | 1,027.8 | 41.512 | | |
| 3,100.0 | 2,906.1 | 2,920.3 | 2,906.1 | 17.8 | 11.1 | -163.50 | -135.5 | -242.2 | 1,094.1 | 1,068.2 | 42.237 | | |
| 3,200.0 | 2,996.7 | 3,010.8 | 2,996.7 | 18.4 | 11.1 | -164.10 | -135.5 | -242.2 | 1,135.1 | 1,108.6 | 42.928 | | |
| 3,300.0 | 3,087.2 | 3,101.4 | 3,087.2 | 19.1 | 11.2 | -164.66 | -135.5 | -242.2 | 1,176.2 | 1,149.2 | 43.588 | | |
| 3,400.0 | 3,177.8 | 3,191.9 | 3,177.8 | 19.8 | 11.3 | -165.19 | -135.5 | -242.2 | 1,217.4 | 1,189.9 | 44.218 | | |
| 3,500.0 | 3,268.4 | 3,282.5 | 3,268.4 | 20.5 | 11.3 | -165.68 | -135.5 | -242.2 | 1,258.7 | 1,230.6 | 44.820 | | |
| 3,600.0 | 3,358.9 | 3,373.1 | 3,358.9 | 21.2 | 11.4 | -166.14 | -135.5 | -242.2 | 1,300.1 | 1,271.4 | 45.396 | | |
| 3,700.0 | 3,449.5 | 3,463.6 | 3,449.5 | 21.9 | 11.4 | -166.57 | -135.5 | -242.2 | 1,341.5 | 1,312.3 | 45.946 | | |
| 3,800.0 | 3,540.0 | 3,554.2 | 3,540.0 | 22.6 | 11.5 | -166.98 | -135.5 | -242.2 | 1,383.0 | 1,353.2 | 46.473 | | |
| 3,900.0 | 3,630.6 | 3,644.8 | 3,630.6 | 23.3 | 11.6 | -167.36 | -135.5 | -242.2 | 1,424.5 | 1,394.2 | 46.977 | | |
| 4,000.0 | 3,721.2 | 3,735.3 | 3,721.2 | 24.0 | 11.6 | -167.72 | -135.5 | -242.2 | 1,466.1 | 1,435.2 | 47.460 | | |
| 4,100.0 | 3,811.7 | 3,825.9 | 3,811.7 | 24.7 | 11.7 | -168.06 | -135.5 | -242.2 | 1,507.7 | 1,476.3 | 47.923 | | |
| 4,200.0 | 3,902.3 | 3,916.4 | 3,902.3 | 25.4 | 11.8 | -168.39 | -135.5 | -242.2 | 1,549.4 | 1,517.4 | 48.368 | | |
| 4,300.0 | 3,992.8 | 4,007.0 | 3,992.8 | 26.2 | 11.8 | -168.69 | -135.5 | -242.2 | 1,591.1 | 1,558.5 | 48.794 | | |
| 4,400.0 | 4,083.4 | 4,097.6 | 4,083.4 | 26.9 | 11.9 | -168.98 | -135.5 | -242.2 | 1,632.9 | 1,599.7 | 49.204 | | |
| 4,500.0 | 4,174.0 | 4,188.1 | 4,174.0 | 27.6 | 11.9 | -169.26 | -135.5 | -242.2 | 1,674.7 | 1,640.9 | 49.598 | | |
| 4,600.0 | 4,264.5 | 4,278.7 | 4,264.5 | 28.3 | 12.0 | -169.52 | -135.5 | -242.2 | 1,716.5 | 1,682.1 | 49.977 | | |
| 4,700.0 | 4,355.1 | 4,369.2 | 4,355.1 | 29.0 | 12.1 | -169.77 | -135.5 | -242.2 | 1,758.3 | 1,723.4 | 50.341 | | |
| 4,800.0 | 4,445.6 | 4,459.8 | 4,445.6 | 29.7 | 12.1 | -170.01 | -135.5 | -242.2 | 1,800.2 | 1,764.7 | 50.692 | | |
| 4,900.0 | 4,536.2 | 4,550.4 | 4,536.2 | 30.4 | 12.2 | -170.24 | -135.5 | -242.2 | 1,842.1 | 1,806.0 | 51.030 | | |
| 5,000.0 | 4,626.8 | 4,640.9 | 4,626.8 | 31.1 | 12.3 | -170.46 | -135.5 | -242.2 | 1,884.0 | 1,847.3 | 51.356 | | |
| 5,100.0 | 4,717.9 | 4,732.0 | 4,717.9 | 31.8 | 12.3 | -170.79 | -135.5 | -242.2 | 1,924.8 | 1,887.5 | 51.628 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 4,824.5 | 4,810.3 | 32.5 | 12.4 | -171.09 | -135.5 | -242.2 | 1,962.4 | 1,924.5 | 51.736 | | |
| 5,300.0 | 4,904.1 | 4,918.2 | 4,904.1 | 33.1 | 12.5 | -171.36 | -135.5 | -242.2 | 1,996.8 | 1,958.3 | 51.748 | | |
| 5,400.0 | 4,999.0 | 5,013.1 | 4,999.0 | 33.6 | 12.5 | -171.59 | -135.5 | -242.2 | 2,028.0 | 1,988.8 | 51.685 | | |
| 5,500.0 | 5,094.9 | 5,109.1 | 5,094.9 | 34.1 | 12.6 | -171.78 | -135.5 | -242.2 | 2,055.9 | 2,016.1 | 51.552 | | |
| 5,600.0 | 5,191.8 | 5,205.9 | 5,191.8 | 34.5 | 12.7 | -171.95 | -135.5 | -242.2 | 2,080.5 | 2,040.0 | 51.356 | | |
| 5,700.0 | 5,289.5 | 5,303.6 | 5,289.5 | 34.9 | 12.7 | -172.09 | -135.5 | -242.2 | 2,101.7 | 2,060.6 | 51.100 | | |
| 5,800.0 | 5,387.8 | 5,402.0 | 5,387.8 | 35.2 | 12.8 | -172.21 | -135.5 | -242.2 | 2,119.6 | 2,077.8 | 50.792 | | |
| 5,900.0 | 5,486.8 | 5,500.9 | 5,486.8 | 35.5 | 12.9 | -172.30 | -135.5 | -242.2 | 2,134.0 | 2,091.7 | 50.438 | | |
| 6,000.0 | 5,586.1 | 5,600.3 | 5,586.1 | 35.7 | 12.9 | -172.37 | -135.5 | -242.2 | 2,145.0 | 2,102.1 | 50.044 | | |
| 6,100.0 | 5,685.8 | 5,700.0 | 5,685.8 | 35.8 | 13.0 | -172.42 | -135.5 | -242.2 | 2,152.5 | 2,109.1 | 49.620 | | |
| 6,200.0 | 5,785.8 | 5,799.9 | 5,785.8 | 35.9 | 13.1 | -172.44 | -135.5 | -242.2 | 2,156.6 | 2,112.8 | 49.185 | | |
| 6,300.0 | 5,885.8 | 5,899.9 | 5,885.8 | 35.9 | 13.1 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,113.3 | 48.960 | | |
| 6,400.0 | 5,985.8 | 5,999.9 | 5,985.8 | 36.0 | 13.2 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,113.2 | 48.828 | | |
| 6,500.0 | 6,085.8 | 6,099.9 | 6,085.8 | 36.0 | 13.3 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,113.1 | 48.694 | | |
| 6,600.0 | 6,185.8 | 6,199.9 | 6,185.8 | 36.0 | 13.4 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,113.0 | 48.561 | | |
| 6,700.0 | 6,285.8 | 6,299.9 | 6,285.8 | 36.0 | 13.4 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,112.9 | 48.428 | | |
| 6,800.0 | 6,385.8 | 6,399.9 | 6,385.8 | 36.0 | 13.5 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,112.7 | 48.296 | | |
| 6,900.0 | 6,485.8 | 6,499.9 | 6,485.8 | 36.1 | 13.6 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,112.6 | 48.164 | | |
| 7,000.0 | 6,585.8 | 6,599.9 | 6,585.8 | 36.1 | 13.7 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,112.5 | 48.034 | | |
| 7,100.0 | 6,685.8 | 6,699.9 | 6,685.8 | 36.1 | 13.7 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,112.4 | 47.903 | | |
| 7,200.0 | 6,785.8 | 6,799.9 | 6,785.8 | 36.2 | 13.8 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,112.2 | 47.774 | | |
| 7,300.0 | 6,885.8 | 6,899.9 | 6,885.8 | 36.2 | 13.9 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,112.1 | 47.645 | | |
| 7,400.0 | 6,985.8 | 6,999.9 | 6,985.8 | 36.2 | 13.9 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,112.0 | 47.517 | | |
| 7,500.0 | 7,085.8 | 7,099.9 | 7,085.8 | 36.2 | 14.0 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.9 | 47.389 | | |
| 7,600.0 | 7,185.8 | 7,199.9 | 7,185.8 | 36.3 | 14.1 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.8 | 47.262 | | |
| 7,700.0 | 7,285.8 | 7,299.9 | 7,285.8 | 36.3 | 14.2 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.6 | 47.135 | | |
| 7,800.0 | 7,385.8 | 7,399.9 | 7,385.8 | 36.3 | 14.2 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.5 | 47.009 | | |
| 7,900.0 | 7,485.8 | 7,499.9 | 7,485.8 | 36.3 | 14.3 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.4 | 46.884 | | |
| 8,000.0 | 7,585.8 | 7,599.9 | 7,585.8 | 36.4 | 14.4 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.3 | 46.759 | | |
| 8,100.0 | 7,685.8 | 7,699.9 | 7,685.8 | 36.4 | 14.5 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.1 | 46.635 | | |
| 8,200.0 | 7,785.8 | 7,799.9 | 7,785.8 | 36.4 | 14.5 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.0 | 46.511 | | |
| 8,210.0 | 7,795.8 | 7,809.9 | 7,795.8 | 36.4 | 14.5 | 178.07 | -135.5 | -242.2 | 2,157.4 | 2,111.0 | 46.503 | | |
| 8,300.0 | 7,885.8 | 7,838.2 | 7,824.0 | 36.4 | 14.5 | 178.07 | -135.5 | -242.2 | 2,158.3 | 2,112.2 | 46.789 | | |
| 8,400.0 | 7,985.8 | 7,838.2 | 7,824.0 | 36.5 | 14.5 | 178.07 | -135.5 | -242.2 | 2,163.5 | 2,117.8 | 47.424 | | |
| 8,500.0 | 8,085.8 | 7,838.2 | 7,824.0 | 36.5 | 14.5 | 178.07 | -135.5 | -242.2 | 2,173.2 | 2,128.2 | 48.224 | | |
| 8,600.0 | 8,185.8 | 7,838.2 | 7,824.0 | 36.5 | 14.5 | 178.07 | -135.5 | -242.2 | 2,187.5 | 2,143.0 | 49.186 | | |
| 8,700.0 | 8,285.8 | 7,838.2 | 7,824.0 | 36.6 | 14.5 | 178.07 | -135.5 | -242.2 | 2,206.3 | 2,162.4 | 50.311 | | |
| 8,800.0 | 8,385.8 | 7,838.2 | 7,824.0 | 36.6 | 14.5 | 178.07 | -135.5 | -242.2 | 2,229.3 | 2,186.1 | 51.594 | | |
| 8,900.0 | 8,485.8 | 7,838.2 | 7,824.0 | 36.6 | 14.5 | 178.07 | -135.5 | -242.2 | 2,256.6 | 2,214.1 | 53.030 | | |
| 9,000.0 | 8,585.8 | 7,838.2 | 7,824.0 | 36.6 | 14.5 | 178.07 | -135.5 | -242.2 | 2,287.9 | 2,246.0 | 54.614 | | |
| 9,067.2 | 8,653.0 | 7,838.2 | 7,824.0 | 36.7 | 14.5 | 178.07 | -135.5 | -242.2 | 2,311.2 | 2,269.8 | 55.765 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -136.31 | -57.8 | -55.2 | 79.9 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -136.31 | -57.8 | -55.2 | 79.9 | 78.3 | 50.448 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -136.31 | -57.8 | -55.2 | 79.9 | 77.1 | 28.247 | CC, ES | |
| 300.0 | 300.0 | 300.0 | 300.0 | 2.3 | 1.9 | -142.06 | -57.8 | -55.2 | 81.3 | 77.3 | 20.269 | | |
| 400.0 | 399.8 | 399.8 | 399.8 | 3.5 | 2.2 | -144.17 | -57.8 | -55.2 | 85.5 | 80.1 | 16.015 | | |
| 500.0 | 499.5 | 499.5 | 499.5 | 4.4 | 2.5 | -147.24 | -57.8 | -55.2 | 92.7 | 86.2 | 14.302 | | |
| 600.0 | 598.7 | 598.7 | 598.7 | 5.2 | 2.8 | -150.80 | -57.8 | -55.2 | 103.2 | 95.6 | 13.674 | SF | |
| 700.0 | 697.5 | 697.5 | 697.5 | 5.8 | 3.1 | -150.51 | -57.8 | -55.2 | 116.7 | 108.2 | 13.690 | | |
| 800.0 | 795.7 | 795.7 | 795.7 | 6.5 | 3.3 | -151.71 | -57.8 | -55.2 | 133.3 | 123.8 | 14.107 | | |
| 900.0 | 893.2 | 893.2 | 893.2 | 7.1 | 3.5 | -153.55 | -57.8 | -55.2 | 153.1 | 142.7 | 14.802 | | |
| 1,000.0 | 989.9 | 989.9 | 989.9 | 7.7 | 3.8 | -155.58 | -57.8 | -55.2 | 176.2 | 165.0 | 15.730 | | |
| 1,100.0 | 1,085.7 | 1,081.6 | 1,081.6 | 8.2 | 4.0 | -157.20 | -58.4 | -56.2 | 203.6 | 191.7 | 16.994 | | |
| 1,200.0 | 1,180.4 | 1,170.9 | 1,170.8 | 8.8 | 4.6 | -158.15 | -60.3 | -59.6 | 236.4 | 223.5 | 18.337 | | |
| 1,300.0 | 1,273.9 | 1,257.8 | 1,257.5 | 9.4 | 5.0 | -158.60 | -63.6 | -65.2 | 274.3 | 260.6 | 20.116 | | |
| 1,400.0 | 1,366.2 | 1,340.1 | 1,339.4 | 9.9 | 5.1 | -158.96 | -68.5 | -71.1 | 317.2 | 303.0 | 22.237 | | |
| 1,500.0 | 1,457.2 | 1,418.8 | 1,417.6 | 10.3 | 5.4 | -159.69 | -75.4 | -76.1 | 365.3 | 350.5 | 24.602 | | |
| 1,600.0 | 1,547.7 | 1,494.7 | 1,492.9 | 10.7 | 5.7 | -161.01 | -84.0 | -80.5 | 416.5 | 401.0 | 26.959 | | |
| 1,700.0 | 1,638.3 | 1,578.3 | 1,575.7 | 11.1 | 5.9 | -162.23 | -94.8 | -85.0 | 469.0 | 452.9 | 29.164 | | |
| 1,800.0 | 1,728.8 | 1,663.0 | 1,659.6 | 11.4 | 6.2 | -163.22 | -105.6 | -89.5 | 521.7 | 505.0 | 31.273 | | |
| 1,900.0 | 1,819.4 | 1,747.7 | 1,743.4 | 11.8 | 6.4 | -164.03 | -116.5 | -94.1 | 574.5 | 557.2 | 33.239 | | |
| 2,000.0 | 1,910.0 | 1,832.4 | 1,827.3 | 12.3 | 6.6 | -164.70 | -127.4 | -98.6 | 627.4 | 609.5 | 35.038 | | |
| 2,100.0 | 2,000.5 | 1,917.0 | 1,911.1 | 12.7 | 6.8 | -165.27 | -138.3 | -103.1 | 680.3 | 661.7 | 36.683 | | |
| 2,200.0 | 2,091.1 | 2,001.7 | 1,995.0 | 13.1 | 7.1 | -165.76 | -149.2 | -107.7 | 733.2 | 714.0 | 38.187 | | |
| 2,300.0 | 2,181.6 | 2,086.4 | 2,078.8 | 13.6 | 7.3 | -166.18 | -160.1 | -112.2 | 786.2 | 766.4 | 39.561 | | |
| 2,400.0 | 2,272.2 | 2,171.1 | 2,162.7 | 14.0 | 7.6 | -166.55 | -170.9 | -116.7 | 839.2 | 818.7 | 40.820 | | |
| 2,500.0 | 2,362.8 | 2,255.7 | 2,246.5 | 14.5 | 7.9 | -166.87 | -181.8 | -121.2 | 892.3 | 871.0 | 41.974 | | |
| 2,600.0 | 2,453.3 | 2,340.4 | 2,330.4 | 15.0 | 8.2 | -167.16 | -192.7 | -125.8 | 945.3 | 923.4 | 43.034 | | |
| 2,700.0 | 2,543.9 | 2,425.1 | 2,414.2 | 15.5 | 8.5 | -167.42 | -203.6 | -130.3 | 998.4 | 975.7 | 44.009 | | |
| 2,800.0 | 2,634.4 | 2,509.8 | 2,498.1 | 16.0 | 8.8 | -167.65 | -214.5 | -134.8 | 1,051.5 | 1,028.1 | 44.907 | | |
| 2,900.0 | 2,725.0 | 2,594.4 | 2,581.9 | 16.5 | 9.1 | -167.86 | -225.4 | -139.4 | 1,104.6 | 1,080.4 | 45.735 | | |
| 3,000.0 | 2,815.6 | 2,679.1 | 2,665.8 | 17.1 | 9.4 | -168.05 | -236.3 | -143.9 | 1,157.7 | 1,132.8 | 46.499 | | |
| 3,100.0 | 2,906.1 | 2,763.8 | 2,749.6 | 17.8 | 9.7 | -168.22 | -247.1 | -148.4 | 1,210.8 | 1,185.2 | 47.206 | | |
| 3,200.0 | 2,996.7 | 2,848.5 | 2,833.5 | 18.4 | 10.0 | -168.38 | -258.0 | -153.0 | 1,263.9 | 1,237.5 | 47.862 | | |
| 3,300.0 | 3,087.2 | 2,933.1 | 2,917.3 | 19.1 | 10.3 | -168.53 | -268.9 | -157.5 | 1,317.1 | 1,289.9 | 48.471 | | |
| 3,400.0 | 3,177.8 | 3,017.8 | 3,001.2 | 19.8 | 10.7 | -168.66 | -279.8 | -162.0 | 1,370.2 | 1,342.2 | 49.038 | | |
| 3,500.0 | 3,268.4 | 3,102.5 | 3,085.0 | 20.5 | 11.0 | -168.79 | -290.7 | -166.6 | 1,423.3 | 1,394.6 | 49.566 | | |
| 3,600.0 | 3,358.9 | 3,187.2 | 3,168.9 | 21.2 | 11.3 | -168.90 | -301.6 | -171.1 | 1,476.5 | 1,447.0 | 50.058 | | |
| 3,700.0 | 3,449.5 | 3,271.8 | 3,252.7 | 21.9 | 11.7 | -169.01 | -312.4 | -175.6 | 1,529.6 | 1,499.3 | 50.517 | | |
| 3,800.0 | 3,540.0 | 3,356.5 | 3,336.6 | 22.6 | 12.0 | -169.11 | -323.3 | -180.2 | 1,582.8 | 1,551.7 | 50.948 | | |
| 3,900.0 | 3,630.6 | 3,441.2 | 3,420.4 | 23.3 | 12.3 | -169.21 | -334.2 | -184.7 | 1,635.9 | 1,604.1 | 51.351 | | |
| 4,000.0 | 3,721.2 | 3,525.8 | 3,504.3 | 24.0 | 12.7 | -169.30 | -345.1 | -189.2 | 1,689.1 | 1,656.4 | 51.729 | | |
| 4,100.0 | 3,811.7 | 3,610.5 | 3,588.1 | 24.7 | 13.0 | -169.38 | -356.0 | -193.8 | 1,742.2 | 1,708.8 | 52.085 | | |
| 4,200.0 | 3,902.3 | 3,695.2 | 3,672.0 | 25.4 | 13.4 | -169.46 | -366.9 | -198.3 | 1,795.4 | 1,761.1 | 52.419 | | |
| 4,300.0 | 3,992.8 | 3,779.9 | 3,755.8 | 26.2 | 13.7 | -169.53 | -377.8 | -202.8 | 1,848.6 | 1,813.5 | 52.734 | | |
| 4,400.0 | 4,083.4 | 3,864.5 | 3,839.7 | 26.9 | 14.0 | -169.60 | -388.6 | -207.4 | 1,901.7 | 1,865.9 | 53.031 | | |
| 4,500.0 | 4,174.0 | 3,949.2 | 3,923.5 | 27.6 | 14.4 | -169.66 | -399.5 | -211.9 | 1,954.9 | 1,918.2 | 53.312 | | |
| 4,600.0 | 4,264.5 | 4,033.9 | 4,007.4 | 28.3 | 14.7 | -169.73 | -410.4 | -216.4 | 2,008.1 | 1,970.6 | 53.577 | | |
| 4,700.0 | 4,355.1 | 4,118.6 | 4,091.2 | 29.0 | 15.1 | -169.79 | -421.3 | -221.0 | 2,061.2 | 2,022.9 | 53.837 | | |
| 4,800.0 | 4,445.6 | 4,345.5 | 4,316.8 | 29.7 | 16.1 | -170.02 | -443.4 | -230.2 | 2,112.1 | 2,071.6 | 52.156 | | |
| 4,900.0 | 4,536.2 | 4,565.0 | 4,536.2 | 30.4 | 16.9 | -170.42 | -449.2 | -232.6 | 2,155.9 | 2,113.7 | 51.041 | | |
| 5,000.0 | 4,626.8 | 4,655.6 | 4,626.8 | 31.1 | 16.9 | -170.61 | -449.2 | -232.6 | 2,197.9 | 2,155.1 | 51.389 | | |
| 5,100.0 | 4,717.9 | 4,746.7 | 4,717.9 | 31.8 | 16.9 | -170.90 | -449.2 | -232.6 | 2,238.6 | 2,195.3 | 51.683 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 4,839.2 | 4,810.3 | 32.5 | 17.0 | -171.18 | -449.2 | -232.6 | 2,276.3 | 2,232.4 | 51.834 | | |
| 5,300.0 | 4,904.1 | 4,932.9 | 4,904.1 | 33.1 | 17.0 | -171.42 | -449.2 | -232.6 | 2,310.7 | 2,266.2 | 51.901 | | |
| 5,400.0 | 4,999.0 | 5,027.8 | 4,999.0 | 33.6 | 17.0 | -171.63 | -449.2 | -232.6 | 2,341.9 | 2,296.8 | 51.901 | | |
| 5,500.0 | 5,094.9 | 5,123.7 | 5,094.9 | 34.1 | 17.1 | -171.81 | -449.2 | -232.6 | 2,369.8 | 2,324.1 | 51.839 | | |
| 5,600.0 | 5,191.8 | 5,220.6 | 5,191.8 | 34.5 | 17.1 | -171.97 | -449.2 | -232.6 | 2,394.4 | 2,348.1 | 51.718 | | |
| 5,700.0 | 5,289.5 | 5,318.3 | 5,289.5 | 34.9 | 17.1 | -172.10 | -449.2 | -232.6 | 2,415.6 | 2,368.7 | 51.543 | | |
| 5,800.0 | 5,387.8 | 5,416.7 | 5,387.8 | 35.2 | 17.2 | -172.21 | -449.2 | -232.6 | 2,433.4 | 2,386.0 | 51.320 | | |
| 5,900.0 | 5,486.8 | 5,515.6 | 5,486.8 | 35.5 | 17.2 | -172.29 | -449.2 | -232.6 | 2,447.9 | 2,399.9 | 51.052 | | |
| 6,000.0 | 5,586.1 | 5,615.0 | 5,586.1 | 35.7 | 17.3 | -172.36 | -449.2 | -232.6 | 2,458.8 | 2,410.4 | 50.747 | | |
| 6,100.0 | 5,685.8 | 5,714.7 | 5,685.8 | 35.8 | 17.3 | -172.40 | -449.2 | -232.6 | 2,466.4 | 2,417.5 | 50.413 | | |
| 6,200.0 | 5,785.8 | 5,814.6 | 5,785.8 | 35.9 | 17.3 | -172.42 | -449.2 | -232.6 | 2,470.5 | 2,421.1 | 50.067 | | |
| 6,300.0 | 5,885.8 | 5,914.6 | 5,885.8 | 35.9 | 17.4 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.8 | 49.909 | | |
| 6,400.0 | 5,985.8 | 6,014.6 | 5,985.8 | 36.0 | 17.4 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.7 | 49.836 | | |
| 6,500.0 | 6,085.8 | 6,114.6 | 6,085.8 | 36.0 | 17.4 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.6 | 49.759 | | |
| 6,600.0 | 6,185.8 | 6,214.6 | 6,185.8 | 36.0 | 17.5 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.5 | 49.682 | | |
| 6,700.0 | 6,285.8 | 6,314.6 | 6,285.8 | 36.0 | 17.5 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.5 | 49.605 | | |
| 6,800.0 | 6,385.8 | 6,414.6 | 6,385.8 | 36.0 | 17.6 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.4 | 49.528 | | |
| 6,900.0 | 6,485.8 | 6,514.6 | 6,485.8 | 36.1 | 17.6 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.3 | 49.450 | | |
| 7,000.0 | 6,585.8 | 6,614.6 | 6,585.8 | 36.1 | 17.7 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.2 | 49.373 | | |
| 7,100.0 | 6,685.8 | 6,714.6 | 6,685.8 | 36.1 | 17.7 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.2 | 49.295 | | |
| 7,200.0 | 6,785.8 | 6,814.6 | 6,785.8 | 36.2 | 17.7 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.1 | 49.216 | | |
| 7,300.0 | 6,885.8 | 6,914.6 | 6,885.8 | 36.2 | 17.8 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,421.0 | 49.138 | | |
| 7,400.0 | 6,985.8 | 7,014.6 | 6,985.8 | 36.2 | 17.8 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.9 | 49.060 | | |
| 7,500.0 | 7,085.8 | 7,114.6 | 7,085.8 | 36.2 | 17.9 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.8 | 48.981 | | |
| 7,600.0 | 7,185.8 | 7,214.6 | 7,185.8 | 36.3 | 17.9 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.8 | 48.902 | | |
| 7,700.0 | 7,285.8 | 7,314.6 | 7,285.8 | 36.3 | 18.0 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.7 | 48.823 | | |
| 7,800.0 | 7,385.8 | 7,414.6 | 7,385.8 | 36.3 | 18.0 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.6 | 48.744 | | |
| 7,900.0 | 7,485.8 | 7,514.6 | 7,485.8 | 36.3 | 18.0 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.5 | 48.665 | | |
| 8,000.0 | 7,585.8 | 7,614.6 | 7,585.8 | 36.4 | 18.1 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.4 | 48.585 | | |
| 8,100.0 | 7,685.8 | 7,714.6 | 7,685.8 | 36.4 | 18.1 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.3 | 48.506 | | |
| 8,200.0 | 7,785.8 | 7,814.6 | 7,785.8 | 36.4 | 18.2 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.3 | 48.426 | | |
| 8,300.0 | 7,885.8 | 7,914.6 | 7,885.8 | 36.4 | 18.2 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.2 | 48.346 | | |
| 8,400.0 | 7,985.8 | 8,014.6 | 7,985.8 | 36.5 | 18.3 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.1 | 48.266 | | |
| 8,500.0 | 8,085.8 | 8,114.6 | 8,085.8 | 36.5 | 18.3 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,420.0 | 48.186 | | |
| 8,600.0 | 8,185.8 | 8,214.6 | 8,185.8 | 36.5 | 18.4 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,419.9 | 48.106 | | |
| 8,700.0 | 8,285.8 | 8,314.6 | 8,285.8 | 36.6 | 18.4 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,419.8 | 48.026 | | |
| 8,800.0 | 8,385.8 | 8,414.6 | 8,385.8 | 36.6 | 18.4 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,419.7 | 47.946 | | |
| 8,900.0 | 8,485.8 | 8,514.6 | 8,485.8 | 36.6 | 18.5 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,419.7 | 47.865 | | |
| 9,000.0 | 8,585.8 | 8,614.6 | 8,585.8 | 36.6 | 18.5 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,419.6 | 47.784 | | |
| 9,067.2 | 8,653.0 | 8,681.8 | 8,653.0 | 36.7 | 18.6 | 178.10 | -449.2 | -232.6 | 2,471.3 | 2,419.5 | 47.735 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|------------------------------|---------------------|---------------------------------|-------------------------|-------------------|---------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N/-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -145.70 | -50.2 | -34.3 | 60.8 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -145.70 | -50.2 | -34.3 | 60.8 | 59.2 | 38.397 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -145.70 | -50.2 | -34.3 | 60.8 | 58.0 | 21.500 | CC, ES | | |
| 300.0 | 300.0 | 299.4 | 299.4 | 2.3 | 1.7 | -151.50 | -50.4 | -34.3 | 62.5 | 58.6 | 16.128 | | | |
| 400.0 | 399.8 | 396.9 | 396.9 | 3.5 | 2.5 | -154.14 | -53.0 | -35.0 | 69.8 | 64.1 | 12.215 | | | |
| 500.0 | 499.5 | 493.3 | 493.1 | 4.4 | 3.5 | -157.69 | -58.7 | -36.5 | 83.6 | 76.0 | 10.939 | SF | | |
| 600.0 | 598.7 | 587.9 | 587.3 | 5.2 | 4.4 | -161.09 | -67.3 | -38.8 | 104.2 | 95.0 | 11.233 | | | |
| 700.0 | 697.5 | 680.8 | 679.4 | 5.8 | 4.8 | -159.87 | -78.6 | -41.8 | 131.2 | 120.8 | 12.608 | | | |
| 800.0 | 795.7 | 775.5 | 773.2 | 6.5 | 5.1 | -159.69 | -91.3 | -45.2 | 162.4 | 151.1 | 14.400 | | | |
| 900.0 | 893.2 | 869.1 | 865.9 | 7.1 | 5.4 | -159.89 | -103.9 | -48.6 | 196.7 | 184.5 | 16.176 | | | |
| 1,000.0 | 989.9 | 961.6 | 957.5 | 7.7 | 5.7 | -160.27 | -116.3 | -51.9 | 234.0 | 220.9 | 17.960 | | | |
| 1,100.0 | 1,085.7 | 1,052.7 | 1,047.7 | 8.2 | 6.0 | -160.72 | -128.5 | -55.1 | 274.3 | 260.5 | 19.758 | | | |
| 1,200.0 | 1,180.4 | 1,142.4 | 1,136.5 | 8.8 | 6.3 | -161.17 | -140.5 | -58.3 | 317.7 | 303.0 | 21.570 | | | |
| 1,300.0 | 1,273.9 | 1,230.5 | 1,223.8 | 9.4 | 6.6 | -161.61 | -152.3 | -61.5 | 364.2 | 348.6 | 23.395 | | | |
| 1,400.0 | 1,366.2 | 1,317.0 | 1,309.5 | 9.9 | 6.9 | -162.02 | -163.9 | -64.6 | 413.5 | 397.1 | 25.234 | | | |
| 1,500.0 | 1,457.2 | 1,401.8 | 1,393.5 | 10.3 | 7.2 | -162.65 | -175.3 | -67.6 | 465.7 | 448.6 | 27.263 | | | |
| 1,600.0 | 1,547.7 | 1,486.2 | 1,477.0 | 10.7 | 7.5 | -163.80 | -186.6 | -70.6 | 518.8 | 501.1 | 29.269 | | | |
| 1,700.0 | 1,638.3 | 1,570.5 | 1,560.5 | 11.1 | 7.8 | -164.74 | -197.9 | -73.6 | 572.0 | 553.6 | 31.106 | | | |
| 1,800.0 | 1,728.8 | 1,654.8 | 1,644.0 | 11.4 | 8.1 | -165.52 | -209.2 | -76.6 | 625.3 | 606.3 | 32.797 | | | |
| 1,900.0 | 1,819.4 | 1,739.1 | 1,727.5 | 11.8 | 8.5 | -166.18 | -220.5 | -79.6 | 678.7 | 658.9 | 34.352 | | | |
| 2,000.0 | 1,910.0 | 1,823.5 | 1,811.0 | 12.3 | 8.8 | -166.74 | -231.8 | -82.6 | 732.1 | 711.7 | 35.785 | | | |
| 2,100.0 | 2,000.5 | 1,907.8 | 1,894.5 | 12.7 | 9.1 | -167.23 | -243.1 | -85.6 | 785.6 | 764.4 | 37.105 | | | |
| 2,200.0 | 2,091.1 | 1,992.1 | 1,978.1 | 13.1 | 9.5 | -167.65 | -254.4 | -88.7 | 839.1 | 817.2 | 38.322 | | | |
| 2,300.0 | 2,181.6 | 2,076.5 | 2,061.6 | 13.6 | 9.8 | -168.02 | -265.7 | -91.7 | 892.6 | 870.0 | 39.446 | | | |
| 2,400.0 | 2,272.2 | 2,160.8 | 2,145.1 | 14.0 | 10.1 | -168.36 | -277.0 | -94.7 | 946.2 | 922.8 | 40.486 | | | |
| 2,500.0 | 2,362.8 | 2,245.1 | 2,228.6 | 14.5 | 10.5 | -168.65 | -288.3 | -97.7 | 999.8 | 975.6 | 41.449 | | | |
| 2,600.0 | 2,453.3 | 2,329.4 | 2,312.1 | 15.0 | 10.8 | -168.92 | -299.6 | -100.7 | 1,053.4 | 1,028.5 | 42.343 | | | |
| 2,700.0 | 2,543.9 | 2,413.8 | 2,395.6 | 15.5 | 11.2 | -169.16 | -310.9 | -103.7 | 1,107.0 | 1,081.3 | 43.174 | | | |
| 2,800.0 | 2,634.4 | 2,498.1 | 2,479.1 | 16.0 | 11.5 | -169.38 | -322.2 | -106.7 | 1,160.6 | 1,134.2 | 43.947 | | | |
| 2,900.0 | 2,725.0 | 2,582.4 | 2,562.6 | 16.5 | 11.8 | -169.58 | -333.5 | -109.7 | 1,214.2 | 1,187.0 | 44.668 | | | |
| 3,000.0 | 2,815.6 | 2,666.8 | 2,646.2 | 17.1 | 12.2 | -169.76 | -344.8 | -112.7 | 1,267.9 | 1,239.9 | 45.340 | | | |
| 3,100.0 | 2,906.1 | 2,751.1 | 2,729.7 | 17.8 | 12.5 | -169.93 | -356.1 | -115.8 | 1,321.5 | 1,292.8 | 45.969 | | | |
| 3,200.0 | 2,996.7 | 2,835.4 | 2,813.2 | 18.4 | 12.9 | -170.08 | -367.4 | -118.8 | 1,375.2 | 1,345.6 | 46.558 | | | |
| 3,300.0 | 3,087.2 | 2,919.7 | 2,896.7 | 19.1 | 13.2 | -170.22 | -378.7 | -121.8 | 1,428.8 | 1,398.5 | 47.111 | | | |
| 3,400.0 | 3,177.8 | 3,004.1 | 2,980.2 | 19.8 | 13.6 | -170.36 | -390.0 | -124.8 | 1,482.5 | 1,451.4 | 47.630 | | | |
| 3,500.0 | 3,268.4 | 3,088.4 | 3,063.7 | 20.5 | 13.9 | -170.48 | -401.3 | -127.8 | 1,536.2 | 1,504.3 | 48.117 | | | |
| 3,600.0 | 3,358.9 | 3,172.7 | 3,147.2 | 21.2 | 14.3 | -170.59 | -412.6 | -130.8 | 1,589.9 | 1,557.1 | 48.577 | | | |
| 3,700.0 | 3,449.5 | 3,257.1 | 3,230.8 | 21.9 | 14.6 | -170.70 | -423.9 | -133.8 | 1,643.6 | 1,610.0 | 49.010 | | | |
| 3,800.0 | 3,540.0 | 3,341.4 | 3,314.3 | 22.6 | 15.0 | -170.80 | -435.2 | -136.8 | 1,697.2 | 1,662.9 | 49.418 | | | |
| 3,900.0 | 3,630.6 | 3,425.7 | 3,397.8 | 23.3 | 15.4 | -170.90 | -446.5 | -139.8 | 1,750.9 | 1,715.8 | 49.805 | | | |
| 4,000.0 | 3,721.2 | 3,510.0 | 3,481.3 | 24.0 | 15.7 | -170.99 | -457.8 | -142.8 | 1,804.6 | 1,768.7 | 50.170 | | | |
| 4,100.0 | 3,811.7 | 3,594.4 | 3,564.8 | 24.7 | 16.1 | -171.07 | -469.1 | -145.9 | 1,858.3 | 1,821.5 | 50.517 | | | |
| 4,200.0 | 3,902.3 | 3,678.7 | 3,648.3 | 25.4 | 16.4 | -171.15 | -480.4 | -148.9 | 1,912.0 | 1,874.4 | 50.845 | | | |
| 4,300.0 | 3,992.8 | 3,763.0 | 3,731.8 | 26.2 | 16.8 | -171.22 | -491.7 | -151.9 | 1,965.7 | 1,927.3 | 51.157 | | | |
| 4,400.0 | 4,083.4 | 3,847.4 | 3,815.4 | 26.9 | 17.1 | -171.29 | -503.0 | -154.9 | 2,019.4 | 1,980.2 | 51.453 | | | |
| 4,500.0 | 4,174.0 | 3,931.7 | 3,898.9 | 27.6 | 17.5 | -171.36 | -514.3 | -157.9 | 2,073.2 | 2,033.1 | 51.735 | | | |
| 4,600.0 | 4,264.5 | 4,016.0 | 3,982.4 | 28.3 | 17.8 | -171.42 | -525.6 | -160.9 | 2,126.9 | 2,086.0 | 52.004 | | | |
| 4,700.0 | 4,355.1 | 4,100.3 | 4,065.9 | 29.0 | 18.2 | -171.48 | -536.9 | -163.9 | 2,180.6 | 2,138.9 | 52.260 | | | |
| 4,800.0 | 4,445.6 | 4,184.7 | 4,149.4 | 29.7 | 18.6 | -171.54 | -548.2 | -166.9 | 2,234.3 | 2,191.7 | 52.503 | | | |
| 4,900.0 | 4,536.2 | 4,269.0 | 4,232.9 | 30.4 | 18.9 | -171.60 | -559.5 | -169.9 | 2,288.0 | 2,244.6 | 52.736 | | | |
| 5,000.0 | 4,626.8 | 4,353.3 | 4,316.4 | 31.1 | 19.3 | -171.65 | -570.8 | -173.0 | 2,341.7 | 2,297.5 | 52.959 | | | |
| 5,100.0 | 4,717.9 | 4,438.3 | 4,400.6 | 31.8 | 19.6 | -171.85 | -582.2 | -176.0 | 2,394.3 | 2,349.3 | 53.135 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - Currier BCU 0993-16-09M - OH - Design #2 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|---|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 4,525.1 | 4,486.6 | 32.5 | 20.0 | -172.04 | -593.8 | -179.1 | 2,444.0 | 2,398.1 | 53.172 | | |
| 5,300.0 | 4,904.1 | 4,613.6 | 4,574.2 | 33.1 | 20.4 | -172.20 | -605.6 | -182.2 | 2,490.7 | 2,443.8 | 53.125 | | |
| 5,400.0 | 4,999.0 | 4,703.6 | 4,663.3 | 33.6 | 20.8 | -172.33 | -617.7 | -185.5 | 2,534.2 | 2,486.4 | 53.012 | | |
| 5,500.0 | 5,094.9 | 4,795.0 | 4,753.9 | 34.1 | 21.2 | -172.44 | -630.0 | -188.7 | 2,574.7 | 2,525.9 | 52.838 | | |
| 5,600.0 | 5,191.8 | 4,887.8 | 4,845.8 | 34.5 | 21.6 | -172.53 | -642.4 | -192.0 | 2,611.9 | 2,562.3 | 52.609 | | |
| 5,700.0 | 5,289.5 | 4,981.8 | 4,938.9 | 34.9 | 22.0 | -172.59 | -655.0 | -195.4 | 2,645.9 | 2,595.3 | 52.330 | | |
| 5,800.0 | 5,387.8 | 5,077.0 | 5,033.1 | 35.2 | 22.4 | -172.63 | -667.7 | -198.8 | 2,676.6 | 2,625.2 | 52.006 | | |
| 5,900.0 | 5,486.8 | 5,173.1 | 5,128.3 | 35.5 | 22.8 | -172.66 | -680.6 | -202.2 | 2,704.1 | 2,651.7 | 51.644 | | |
| 6,000.0 | 5,586.1 | 5,270.1 | 5,224.4 | 35.7 | 23.2 | -172.67 | -693.6 | -205.7 | 2,728.1 | 2,674.9 | 51.251 | | |
| 6,100.0 | 5,685.8 | 5,367.9 | 5,321.2 | 35.8 | 23.6 | -172.66 | -706.7 | -209.2 | 2,748.8 | 2,694.8 | 50.834 | | |
| 6,200.0 | 5,785.8 | 5,466.3 | 5,418.7 | 35.9 | 24.0 | -172.63 | -719.9 | -212.7 | 2,766.2 | 2,711.3 | 50.410 | | |
| 6,300.0 | 5,885.8 | 5,565.2 | 5,517.9 | 35.9 | 24.8 | 178.02 | -743.9 | -219.1 | 2,780.1 | 2,723.8 | 49.397 | | |
| 6,400.0 | 5,985.8 | 5,664.6 | 5,616.8 | 36.0 | 26.0 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.7 | 47.532 | | |
| 6,500.0 | 6,085.8 | 5,763.6 | 5,715.8 | 36.0 | 26.0 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.6 | 47.494 | | |
| 6,600.0 | 6,185.8 | 5,862.6 | 5,814.8 | 36.0 | 26.0 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.6 | 47.454 | | |
| 6,700.0 | 6,285.8 | 5,961.6 | 5,913.8 | 36.0 | 26.0 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.5 | 47.413 | | |
| 6,800.0 | 6,385.8 | 6,060.6 | 6,012.8 | 36.0 | 26.0 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.5 | 47.372 | | |
| 6,900.0 | 6,485.8 | 6,159.6 | 6,111.8 | 36.1 | 26.1 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.4 | 47.331 | | |
| 7,000.0 | 6,585.8 | 6,258.6 | 6,210.8 | 36.1 | 26.1 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.4 | 47.290 | | |
| 7,100.0 | 6,685.8 | 6,357.6 | 6,309.8 | 36.1 | 26.1 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.3 | 47.248 | | |
| 7,200.0 | 6,785.8 | 6,456.6 | 6,408.8 | 36.2 | 26.1 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.3 | 47.206 | | |
| 7,300.0 | 6,885.8 | 6,555.6 | 6,507.8 | 36.2 | 26.1 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.2 | 47.164 | | |
| 7,400.0 | 6,985.8 | 6,654.6 | 6,606.8 | 36.2 | 26.2 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.2 | 47.122 | | |
| 7,500.0 | 7,085.8 | 6,753.6 | 6,705.8 | 36.2 | 26.2 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.1 | 47.079 | | |
| 7,600.0 | 7,185.8 | 6,852.6 | 6,804.8 | 36.3 | 26.2 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.0 | 47.036 | | |
| 7,700.0 | 7,285.8 | 6,951.6 | 6,903.8 | 36.3 | 26.2 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,722.0 | 46.993 | | |
| 7,800.0 | 7,385.8 | 7,050.6 | 7,002.8 | 36.3 | 26.2 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,721.9 | 46.950 | | |
| 7,900.0 | 7,485.8 | 7,149.6 | 7,101.8 | 36.3 | 26.2 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,721.9 | 46.906 | | |
| 8,000.0 | 7,585.8 | 7,248.6 | 7,199.8 | 36.4 | 26.3 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,721.8 | 46.862 | | |
| 8,100.0 | 7,685.8 | 7,347.6 | 7,298.8 | 36.4 | 26.3 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,721.8 | 46.818 | | |
| 8,200.0 | 7,785.8 | 7,446.6 | 7,397.8 | 36.4 | 26.3 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,721.7 | 46.774 | | |
| 8,210.0 | 7,795.8 | 7,456.6 | 7,407.8 | 36.4 | 26.3 | 178.11 | -759.0 | -223.1 | 2,781.2 | 2,721.7 | 46.770 | | |
| 8,300.0 | 7,885.8 | 7,545.6 | 7,496.8 | 36.4 | 26.3 | 178.11 | -759.0 | -223.1 | 2,781.5 | 2,722.1 | 46.844 | | |
| 8,400.0 | 7,985.8 | 7,644.6 | 7,595.8 | 36.5 | 26.3 | 178.11 | -759.0 | -223.1 | 2,784.8 | 2,725.8 | 47.140 | | |
| 8,500.0 | 8,085.8 | 7,743.6 | 7,694.8 | 36.5 | 26.3 | 178.11 | -759.0 | -223.1 | 2,791.7 | 2,733.0 | 47.544 | | |
| 8,600.0 | 8,185.8 | 7,842.6 | 7,793.8 | 36.5 | 26.3 | 178.11 | -759.0 | -223.1 | 2,802.2 | 2,743.9 | 48.056 | | |
| 8,700.0 | 8,285.8 | 7,941.6 | 7,891.8 | 36.6 | 26.3 | 178.11 | -759.0 | -223.1 | 2,816.2 | 2,758.3 | 48.674 | | |
| 8,800.0 | 8,385.8 | 8,040.6 | 7,989.8 | 36.6 | 26.3 | 178.11 | -759.0 | -223.1 | 2,833.6 | 2,776.3 | 49.399 | | |
| 8,900.0 | 8,485.8 | 8,139.6 | 8,088.8 | 36.6 | 26.3 | 178.11 | -759.0 | -223.1 | 2,854.5 | 2,797.6 | 50.228 | | |
| 9,000.0 | 8,585.8 | 8,238.6 | 8,187.8 | 36.6 | 26.3 | 178.11 | -759.0 | -223.1 | 2,878.6 | 2,822.4 | 51.160 | | |
| 9,067.2 | 8,653.0 | 8,292.8 | 8,241.0 | 36.7 | 26.3 | 178.11 | -759.0 | -223.1 | 2,896.7 | 2,840.9 | 51.849 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft | |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|------------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|--|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N/-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 133.29 | -6.9 | 7.4 | 10.1 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | 133.29 | -6.9 | 7.4 | 10.1 | 8.5 | 6.379 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | 133.29 | -6.9 | 7.4 | 10.1 | 7.3 | 3.572 | CC, ES | | |
| 300.0 | 300.0 | 299.4 | 299.4 | 2.3 | 2.2 | 132.59 | -8.1 | 9.1 | 13.4 | 9.1 | 3.159 | SF | | |
| 400.0 | 399.8 | 398.2 | 397.9 | 3.5 | 3.8 | 138.15 | -11.7 | 14.5 | 23.3 | 16.7 | 3.524 | | | |
| 500.0 | 499.5 | 495.5 | 494.7 | 4.4 | 4.9 | 141.15 | -17.6 | 23.1 | 40.0 | 31.6 | 4.772 | | | |
| 600.0 | 598.7 | 592.6 | 590.8 | 5.2 | 5.2 | 143.08 | -25.0 | 34.2 | 62.2 | 52.9 | 6.720 | | | |
| 700.0 | 697.5 | 686.8 | 684.0 | 5.8 | 5.4 | 148.83 | -33.1 | 45.7 | 88.5 | 78.4 | 8.782 | | | |
| 800.0 | 795.7 | 777.0 | 772.7 | 6.5 | 6.1 | 152.38 | -43.4 | 59.0 | 121.7 | 110.5 | 10.844 | | | |
| 900.0 | 893.2 | 863.5 | 857.0 | 7.1 | 6.8 | 154.68 | -55.7 | 73.9 | 161.6 | 149.2 | 13.023 | | | |
| 1,000.0 | 989.9 | 945.8 | 936.4 | 7.7 | 7.5 | 156.24 | -69.6 | 90.0 | 207.7 | 194.2 | 15.373 | | | |
| 1,100.0 | 1,085.7 | 1,023.5 | 1,010.7 | 8.2 | 8.1 | 157.33 | -84.8 | 106.9 | 259.8 | 245.3 | 17.890 | | | |
| 1,200.0 | 1,180.4 | 1,100.0 | 1,083.1 | 8.8 | 8.6 | 158.09 | -101.5 | 125.2 | 317.4 | 301.9 | 20.451 | | | |
| 1,300.0 | 1,273.9 | 1,164.2 | 1,143.2 | 9.4 | 9.1 | 158.59 | -117.0 | 141.7 | 380.1 | 363.8 | 23.354 | | | |
| 1,400.0 | 1,366.2 | 1,227.2 | 1,201.5 | 9.9 | 9.5 | 158.92 | -133.3 | 159.0 | 447.4 | 430.4 | 26.269 | | | |
| 1,500.0 | 1,457.2 | 1,285.2 | 1,254.6 | 10.3 | 9.9 | 159.10 | -149.5 | 175.8 | 519.0 | 501.3 | 29.428 | | | |
| 1,600.0 | 1,547.7 | 1,339.8 | 1,304.1 | 10.7 | 10.1 | 159.19 | -165.7 | 192.5 | 592.8 | 574.7 | 32.889 | | | |
| 1,700.0 | 1,638.3 | 1,405.2 | 1,362.8 | 11.1 | 10.3 | 159.25 | -185.6 | 213.0 | 667.5 | 648.9 | 36.013 | | | |
| 1,800.0 | 1,728.8 | 1,471.6 | 1,422.6 | 11.4 | 10.6 | 159.30 | -205.9 | 233.8 | 742.2 | 723.1 | 38.876 | | | |
| 1,900.0 | 1,819.4 | 1,538.1 | 1,482.4 | 11.8 | 10.8 | 159.34 | -226.2 | 254.6 | 816.9 | 797.2 | 41.533 | | | |
| 2,000.0 | 1,910.0 | 1,604.6 | 1,542.2 | 12.3 | 11.0 | 159.37 | -246.5 | 275.4 | 891.5 | 871.3 | 43.998 | | | |
| 2,100.0 | 2,000.5 | 1,671.1 | 1,602.0 | 12.7 | 11.3 | 159.40 | -266.8 | 296.3 | 966.2 | 945.4 | 46.285 | | | |
| 2,200.0 | 2,091.1 | 1,737.6 | 1,661.8 | 13.1 | 11.5 | 159.42 | -287.0 | 317.1 | 1,040.9 | 1,019.4 | 48.410 | | | |
| 2,300.0 | 2,181.6 | 1,804.1 | 1,721.5 | 13.6 | 11.8 | 159.45 | -307.3 | 337.9 | 1,115.6 | 1,093.5 | 50.384 | | | |
| 2,400.0 | 2,272.2 | 1,870.6 | 1,781.3 | 14.0 | 12.0 | 159.46 | -327.6 | 358.7 | 1,190.3 | 1,167.5 | 52.220 | | | |
| 2,500.0 | 2,362.8 | 1,937.1 | 1,841.1 | 14.5 | 12.3 | 159.48 | -347.9 | 379.6 | 1,265.0 | 1,241.6 | 53.928 | | | |
| 2,600.0 | 2,453.3 | 2,003.5 | 1,900.9 | 15.0 | 12.6 | 159.49 | -368.2 | 400.4 | 1,339.7 | 1,315.6 | 55.517 | | | |
| 2,700.0 | 2,543.9 | 2,070.0 | 1,960.7 | 15.5 | 12.9 | 159.51 | -388.5 | 421.2 | 1,414.4 | 1,389.6 | 57.000 | | | |
| 2,800.0 | 2,634.4 | 2,136.5 | 2,020.5 | 16.0 | 13.2 | 159.52 | -408.8 | 442.1 | 1,489.1 | 1,463.6 | 58.385 | | | |
| 2,900.0 | 2,725.0 | 2,203.0 | 2,080.3 | 16.5 | 13.5 | 159.53 | -429.1 | 462.9 | 1,563.8 | 1,537.6 | 59.672 | | | |
| 3,000.0 | 2,815.6 | 2,269.5 | 2,140.1 | 17.1 | 13.8 | 159.54 | -449.4 | 483.7 | 1,638.5 | 1,611.6 | 60.887 | | | |
| 3,100.0 | 2,906.1 | 2,336.0 | 2,199.9 | 17.8 | 14.1 | 159.55 | -469.7 | 504.5 | 1,713.2 | 1,685.6 | 62.069 | | | |
| 3,200.0 | 2,996.7 | 2,402.5 | 2,259.7 | 18.4 | 14.5 | 159.55 | -489.9 | 525.4 | 1,787.9 | 1,759.5 | 63.061 | | | |
| 3,300.0 | 3,087.2 | 2,468.9 | 2,319.5 | 19.1 | 15.0 | 159.56 | -510.2 | 546.2 | 1,862.6 | 1,833.5 | 64.035 | | | |
| 3,400.0 | 3,177.8 | 2,535.4 | 2,379.3 | 19.8 | 15.5 | 159.57 | -530.5 | 567.0 | 1,937.3 | 1,907.5 | 64.979 | | | |
| 3,500.0 | 3,268.4 | 2,601.9 | 2,439.0 | 20.5 | 16.0 | 159.57 | -550.8 | 587.8 | 2,012.0 | 1,981.4 | 65.863 | | | |
| 3,600.0 | 3,358.9 | 2,668.4 | 2,498.8 | 21.2 | 16.5 | 159.58 | -571.1 | 608.7 | 2,086.7 | 2,055.4 | 66.682 | | | |
| 3,700.0 | 3,449.5 | 2,734.9 | 2,558.6 | 21.9 | 17.0 | 159.58 | -591.4 | 629.5 | 2,161.4 | 2,129.3 | 67.460 | | | |
| 3,800.0 | 3,540.0 | 2,801.4 | 2,618.4 | 22.6 | 17.6 | 159.59 | -611.7 | 650.3 | 2,236.1 | 2,203.3 | 68.195 | | | |
| 3,900.0 | 3,630.6 | 2,867.9 | 2,678.2 | 23.3 | 18.1 | 159.59 | -632.0 | 671.2 | 2,310.8 | 2,277.2 | 68.884 | | | |
| 4,000.0 | 3,721.2 | 2,934.4 | 2,738.0 | 24.0 | 18.6 | 159.60 | -652.3 | 692.0 | 2,385.5 | 2,351.2 | 69.537 | | | |
| 4,100.0 | 3,811.7 | 3,000.8 | 2,797.8 | 24.7 | 19.2 | 159.60 | -672.5 | 712.8 | 2,460.2 | 2,425.1 | 70.156 | | | |
| 4,200.0 | 3,902.3 | 3,067.3 | 2,857.6 | 25.4 | 19.7 | 159.61 | -692.8 | 733.6 | 2,534.9 | 2,499.0 | 70.739 | | | |
| 4,300.0 | 3,992.8 | 3,133.8 | 2,917.4 | 26.2 | 20.2 | 159.61 | -713.1 | 754.5 | 2,609.5 | 2,572.9 | 71.293 | | | |
| 4,400.0 | 4,083.4 | 3,200.3 | 2,977.2 | 26.9 | 20.8 | 159.61 | -733.4 | 775.3 | 2,684.2 | 2,646.9 | 71.820 | | | |
| 4,500.0 | 4,174.0 | 3,266.8 | 3,037.0 | 27.6 | 21.3 | 159.62 | -753.7 | 796.1 | 2,758.9 | 2,720.8 | 72.317 | | | |
| 4,600.0 | 4,264.5 | 3,333.3 | 3,096.8 | 28.3 | 21.9 | 159.62 | -774.0 | 816.9 | 2,833.6 | 2,794.7 | 72.790 | | | |
| 4,700.0 | 4,355.1 | 3,399.8 | 3,156.6 | 29.0 | 22.4 | 159.62 | -794.3 | 837.8 | 2,908.3 | 2,868.6 | 73.242 | | | |
| 4,800.0 | 4,445.6 | 3,466.3 | 3,216.3 | 29.7 | 22.9 | 159.63 | -814.6 | 858.6 | 2,983.0 | 2,942.5 | 73.669 | | | |
| 4,900.0 | 4,536.2 | 3,532.7 | 3,276.1 | 30.4 | 23.5 | 159.63 | -834.9 | 879.4 | 3,057.7 | 3,016.4 | 74.077 | | | |
| 5,000.0 | 4,626.8 | 3,599.2 | 3,335.9 | 31.1 | 24.0 | 159.63 | -855.2 | 900.3 | 3,132.4 | 3,090.4 | 74.466 | | | |
| 5,100.0 | 4,717.9 | 3,666.6 | 3,396.5 | 31.8 | 24.6 | 160.27 | -875.7 | 921.4 | 3,206.3 | 3,163.4 | 74.799 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|---------------|-----------------------|-----------------------------|---------------------|---------------------------------|----------------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 3,736.4 | 3,459.3 | 32.5 | 25.2 | 160.91 | -897.0 | 943.2 | 3,277.9 | 3,234.2 | 74.980 | | |
| 5,300.0 | 4,904.1 | 3,808.4 | 3,524.0 | 33.1 | 25.7 | 161.47 | -919.0 | 965.8 | 3,347.2 | 3,302.6 | 75.063 | | |
| 5,400.0 | 4,999.0 | 3,882.6 | 3,590.8 | 33.6 | 26.3 | 161.95 | -941.6 | 989.0 | 3,414.1 | 3,368.6 | 75.066 | | |
| 5,500.0 | 5,094.9 | 3,959.0 | 3,659.5 | 34.1 | 27.0 | 162.35 | -964.9 | 1,013.0 | 3,478.5 | 3,432.1 | 74.997 | | |
| 5,600.0 | 5,191.8 | 4,037.4 | 3,729.9 | 34.5 | 27.6 | 162.70 | -988.9 | 1,037.5 | 3,540.3 | 3,493.0 | 74.864 | | |
| 5,700.0 | 5,289.5 | 4,117.6 | 3,802.1 | 34.9 | 28.3 | 162.99 | -1,013.4 | 1,062.7 | 3,599.5 | 3,551.3 | 74.675 | | |
| 5,800.0 | 5,387.8 | 4,199.8 | 3,876.0 | 35.2 | 28.9 | 163.23 | -1,038.4 | 1,088.4 | 3,655.9 | 3,606.8 | 74.435 | | |
| 5,900.0 | 5,486.8 | 4,283.6 | 3,951.4 | 35.5 | 29.6 | 163.43 | -1,064.0 | 1,114.6 | 3,709.6 | 3,659.6 | 74.154 | | |
| 6,000.0 | 5,586.1 | 4,369.1 | 4,028.2 | 35.7 | 30.3 | 163.58 | -1,090.1 | 1,141.4 | 3,760.5 | 3,709.6 | 73.840 | | |
| 6,100.0 | 5,685.8 | 4,456.0 | 4,106.5 | 35.8 | 31.0 | 163.69 | -1,116.6 | 1,168.7 | 3,808.5 | 3,756.7 | 73.505 | | |
| 6,200.0 | 5,785.8 | 4,544.4 | 4,186.0 | 35.9 | 31.8 | 163.77 | -1,143.6 | 1,196.3 | 3,853.6 | 3,800.9 | 73.171 | | |
| 6,300.0 | 5,885.8 | 4,634.1 | 4,266.6 | 35.9 | 32.5 | 154.25 | -1,171.0 | 1,224.4 | 3,895.8 | 3,842.5 | 73.075 | | |
| 6,400.0 | 5,985.8 | 4,724.0 | 4,347.4 | 36.0 | 33.2 | 154.04 | -1,198.4 | 1,252.6 | 3,937.4 | 3,883.5 | 73.072 | | |
| 6,500.0 | 6,085.8 | 4,813.9 | 4,428.3 | 36.0 | 34.0 | 153.83 | -1,225.8 | 1,280.8 | 3,979.0 | 3,924.6 | 73.063 | | |
| 6,600.0 | 6,185.8 | 4,903.9 | 4,509.2 | 36.0 | 34.7 | 153.62 | -1,253.3 | 1,308.9 | 4,020.7 | 3,965.7 | 73.055 | | |
| 6,700.0 | 6,285.8 | 4,993.8 | 4,590.1 | 36.0 | 35.5 | 153.42 | -1,280.7 | 1,337.1 | 4,062.4 | 4,006.8 | 73.046 | | |
| 6,800.0 | 6,385.8 | 5,083.8 | 4,671.0 | 36.0 | 36.2 | 153.21 | -1,308.1 | 1,365.2 | 4,104.1 | 4,048.9 | 73.037 | | |
| 6,900.0 | 6,485.8 | 5,173.8 | 4,751.9 | 36.0 | 36.9 | 153.00 | -1,335.5 | 1,393.3 | 4,145.8 | 4,091.0 | 73.028 | | |
| 7,000.0 | 6,585.8 | 5,263.8 | 4,832.8 | 36.0 | 37.6 | 152.79 | -1,362.9 | 1,421.4 | 4,187.5 | 4,133.1 | 73.019 | | |
| 7,100.0 | 6,685.8 | 5,353.8 | 4,913.7 | 36.0 | 38.3 | 152.58 | -1,390.3 | 1,449.5 | 4,229.2 | 4,175.2 | 73.010 | | |
| 7,200.0 | 6,785.8 | 5,443.8 | 4,994.6 | 36.0 | 39.0 | 152.37 | -1,417.7 | 1,477.6 | 4,270.9 | 4,217.3 | 73.001 | | |
| 7,300.0 | 6,885.8 | 5,533.8 | 5,075.5 | 36.0 | 39.7 | 152.16 | -1,445.1 | 1,505.7 | 4,312.6 | 4,259.4 | 72.992 | | |
| 7,400.0 | 6,985.8 | 5,623.8 | 5,156.4 | 36.0 | 40.4 | 151.95 | -1,472.5 | 1,533.8 | 4,354.3 | 4,301.5 | 72.983 | | |
| 7,500.0 | 7,085.8 | 5,713.8 | 5,237.3 | 36.0 | 41.1 | 151.74 | -1,500.0 | 1,561.9 | 4,396.0 | 4,343.6 | 72.974 | | |
| 7,600.0 | 7,185.8 | 5,803.8 | 5,318.2 | 36.0 | 41.8 | 151.53 | -1,527.4 | 1,590.0 | 4,437.7 | 4,385.7 | 72.965 | | |
| 7,700.0 | 7,285.8 | 5,893.8 | 5,399.1 | 36.0 | 42.5 | 151.32 | -1,554.8 | 1,618.1 | 4,479.4 | 4,427.8 | 72.956 | | |
| 7,800.0 | 7,385.8 | 5,983.8 | 5,480.0 | 36.0 | 43.2 | 151.11 | -1,582.2 | 1,646.2 | 4,521.1 | 4,469.9 | 72.947 | | |
| 7,900.0 | 7,485.8 | 6,073.8 | 5,560.9 | 36.0 | 43.9 | 150.90 | -1,609.6 | 1,674.3 | 4,562.8 | 4,512.0 | 72.938 | | |
| 8,000.0 | 7,585.8 | 6,163.8 | 5,641.8 | 36.0 | 44.6 | 150.69 | -1,637.0 | 1,702.4 | 4,604.5 | 4,554.1 | 72.929 | | |
| 8,100.0 | 7,685.8 | 6,253.8 | 5,722.7 | 36.0 | 45.3 | 150.48 | -1,664.4 | 1,730.5 | 4,646.2 | 4,596.2 | 72.920 | | |
| 8,200.0 | 7,785.8 | 6,343.8 | 5,803.6 | 36.0 | 46.0 | 150.27 | -1,691.8 | 1,758.6 | 4,687.9 | 4,638.3 | 72.911 | | |
| 8,203.9 | 7,789.6 | 6,347.7 | 5,807.5 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.0 | 3,994.0 | 58.874 | | |
| 8,300.0 | 7,885.8 | 6,437.8 | 5,888.5 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.1 | 3,994.1 | 58.872 | | |
| 8,400.0 | 7,985.8 | 6,527.8 | 5,969.4 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.2 | 3,994.2 | 58.870 | | |
| 8,500.0 | 8,085.8 | 6,617.8 | 6,050.3 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.3 | 3,994.3 | 58.868 | | |
| 8,600.0 | 8,185.8 | 6,707.8 | 6,131.2 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.4 | 3,994.4 | 58.866 | | |
| 8,700.0 | 8,285.8 | 6,797.8 | 6,212.1 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.5 | 3,994.5 | 58.864 | | |
| 8,800.0 | 8,385.8 | 6,887.8 | 6,293.0 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.6 | 3,994.6 | 58.862 | | |
| 8,900.0 | 8,485.8 | 6,977.8 | 6,373.9 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.7 | 3,994.7 | 58.860 | | |
| 9,000.0 | 8,585.8 | 7,067.8 | 6,454.8 | 36.4 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,063.8 | 3,994.8 | 58.858 | | |
| 9,067.2 | 8,653.0 | 7,135.0 | 6,522.0 | 36.7 | 43.0 | 151.61 | -1,553.6 | 1,617.2 | 4,140.1 | 4,071.5 | 60.394 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 178.74 | -14.1 | 0.3 | 14.1 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | 178.74 | -14.1 | 0.3 | 14.1 | 12.6 | 8.927 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | 178.74 | -14.1 | 0.3 | 14.1 | 11.3 | 4.999 | CC, ES | |
| 300.0 | 300.0 | 299.7 | 299.7 | 2.3 | 1.6 | 173.11 | -14.5 | 0.7 | 16.3 | 12.3 | 4.144 | | |
| 400.0 | 399.8 | 398.7 | 398.6 | 3.5 | 2.9 | 167.85 | -17.6 | 3.7 | 24.8 | 18.7 | 4.094 | SF | |
| 500.0 | 499.5 | 496.3 | 495.8 | 4.4 | 4.3 | 163.07 | -23.6 | 9.5 | 40.3 | 32.2 | 5.003 | | |
| 600.0 | 598.7 | 591.8 | 590.6 | 5.2 | 5.3 | 159.98 | -32.4 | 18.0 | 62.7 | 53.0 | 6.477 | | |
| 700.0 | 697.5 | 684.6 | 682.0 | 5.8 | 6.2 | 161.89 | -43.7 | 28.9 | 92.0 | 80.9 | 8.307 | | |
| 800.0 | 795.7 | 774.0 | 769.5 | 6.5 | 6.9 | 162.81 | -57.0 | 41.7 | 128.0 | 115.7 | 10.399 | | |
| 900.0 | 893.2 | 859.4 | 852.3 | 7.1 | 7.6 | 163.29 | -72.1 | 56.3 | 170.5 | 157.1 | 12.689 | | |
| 1,000.0 | 989.9 | 940.4 | 930.0 | 7.7 | 8.2 | 163.55 | -88.4 | 72.0 | 219.1 | 204.7 | 15.149 | | |
| 1,100.0 | 1,085.7 | 1,016.7 | 1,002.5 | 8.2 | 8.7 | 163.68 | -105.5 | 88.6 | 273.5 | 258.1 | 17.758 | | |
| 1,200.0 | 1,180.4 | 1,088.1 | 1,069.6 | 8.8 | 9.2 | 163.72 | -123.2 | 105.6 | 333.2 | 316.9 | 20.502 | | |
| 1,300.0 | 1,273.9 | 1,154.5 | 1,131.2 | 9.4 | 9.6 | 163.68 | -140.9 | 122.7 | 397.8 | 380.7 | 23.368 | | |
| 1,400.0 | 1,366.2 | 1,215.9 | 1,187.6 | 9.9 | 10.0 | 163.59 | -158.4 | 139.6 | 466.9 | 449.2 | 26.343 | | |
| 1,500.0 | 1,457.2 | 1,272.5 | 1,238.9 | 10.3 | 10.3 | 163.40 | -175.5 | 156.1 | 540.0 | 521.8 | 29.553 | | |
| 1,600.0 | 1,547.7 | 1,325.7 | 1,286.6 | 10.7 | 10.7 | 163.12 | -192.4 | 172.5 | 615.3 | 596.6 | 32.826 | | |
| 1,700.0 | 1,638.3 | 1,376.3 | 1,331.5 | 11.1 | 11.0 | 162.84 | -209.2 | 188.7 | 692.0 | 672.8 | 36.038 | | |
| 1,800.0 | 1,728.8 | 1,424.4 | 1,373.7 | 11.4 | 11.2 | 162.58 | -225.9 | 204.8 | 769.9 | 750.3 | 39.282 | | |
| 1,900.0 | 1,819.4 | 1,473.2 | 1,415.9 | 11.8 | 11.4 | 162.32 | -243.4 | 221.7 | 849.1 | 829.1 | 42.463 | | |
| 2,000.0 | 1,910.0 | 1,529.4 | 1,464.3 | 12.3 | 11.6 | 162.04 | -264.0 | 241.6 | 928.9 | 908.5 | 45.439 | | |
| 2,100.0 | 2,000.5 | 1,589.6 | 1,516.2 | 12.7 | 11.8 | 161.79 | -286.0 | 262.9 | 1,008.7 | 987.8 | 48.105 | | |
| 2,200.0 | 2,091.1 | 1,649.8 | 1,568.0 | 13.1 | 12.0 | 161.57 | -308.1 | 284.1 | 1,088.5 | 1,067.0 | 50.595 | | |
| 2,300.0 | 2,181.6 | 1,710.0 | 1,619.8 | 13.6 | 12.2 | 161.38 | -330.1 | 305.4 | 1,168.4 | 1,146.3 | 52.929 | | |
| 2,400.0 | 2,272.2 | 1,770.2 | 1,671.6 | 14.0 | 12.4 | 161.22 | -352.1 | 326.7 | 1,248.2 | 1,225.6 | 55.115 | | |
| 2,500.0 | 2,362.8 | 1,830.4 | 1,723.4 | 14.5 | 12.6 | 161.08 | -374.1 | 348.0 | 1,328.0 | 1,304.8 | 57.165 | | |
| 2,600.0 | 2,453.3 | 1,890.5 | 1,775.2 | 15.0 | 12.8 | 160.95 | -396.2 | 369.2 | 1,407.9 | 1,384.1 | 59.085 | | |
| 2,700.0 | 2,543.9 | 1,950.7 | 1,827.1 | 15.5 | 13.0 | 160.84 | -418.2 | 390.5 | 1,487.7 | 1,463.3 | 60.891 | | |
| 2,800.0 | 2,634.4 | 2,010.9 | 1,878.9 | 16.0 | 13.3 | 160.74 | -440.2 | 411.8 | 1,567.6 | 1,542.5 | 62.581 | | |
| 2,900.0 | 2,725.0 | 2,071.1 | 1,930.7 | 16.5 | 13.5 | 160.64 | -462.2 | 433.0 | 1,647.4 | 1,621.7 | 64.173 | | |
| 3,000.0 | 2,815.6 | 2,131.3 | 1,982.5 | 17.1 | 13.7 | 160.56 | -484.3 | 454.3 | 1,727.2 | 1,701.0 | 65.693 | | |
| 3,100.0 | 2,906.1 | 2,191.5 | 2,034.3 | 17.8 | 14.0 | 160.48 | -506.3 | 475.6 | 1,807.1 | 1,780.2 | 67.070 | | |
| 3,200.0 | 2,996.7 | 2,251.7 | 2,086.1 | 18.4 | 14.4 | 160.41 | -528.3 | 496.8 | 1,886.9 | 1,859.3 | 68.266 | | |
| 3,300.0 | 3,087.2 | 2,311.9 | 2,138.0 | 19.1 | 15.0 | 160.35 | -550.3 | 518.1 | 1,966.8 | 1,938.5 | 69.609 | | |
| 3,400.0 | 3,177.8 | 2,372.0 | 2,189.8 | 19.8 | 15.6 | 160.29 | -572.4 | 539.4 | 2,046.6 | 2,017.7 | 70.771 | | |
| 3,500.0 | 3,268.4 | 2,432.2 | 2,241.6 | 20.5 | 16.2 | 160.24 | -594.4 | 560.7 | 2,126.5 | 2,096.9 | 71.879 | | |
| 3,600.0 | 3,358.9 | 2,492.4 | 2,293.4 | 21.2 | 16.7 | 160.19 | -616.4 | 581.9 | 2,206.3 | 2,176.1 | 72.926 | | |
| 3,700.0 | 3,449.5 | 2,552.6 | 2,345.2 | 21.9 | 17.3 | 160.14 | -638.4 | 603.2 | 2,286.2 | 2,255.3 | 73.904 | | |
| 3,800.0 | 3,540.0 | 2,612.8 | 2,397.0 | 22.6 | 17.9 | 160.09 | -660.5 | 624.5 | 2,366.0 | 2,334.4 | 74.838 | | |
| 3,900.0 | 3,630.6 | 2,673.0 | 2,448.9 | 23.3 | 18.5 | 160.05 | -682.5 | 645.7 | 2,445.9 | 2,413.6 | 75.714 | | |
| 4,000.0 | 3,721.2 | 2,733.2 | 2,500.7 | 24.0 | 19.1 | 160.02 | -704.5 | 667.0 | 2,525.7 | 2,492.8 | 76.545 | | |
| 4,100.0 | 3,811.7 | 2,793.4 | 2,552.5 | 24.7 | 19.6 | 159.98 | -726.5 | 688.3 | 2,605.6 | 2,571.9 | 77.336 | | |
| 4,200.0 | 3,902.3 | 2,853.5 | 2,604.3 | 25.4 | 20.2 | 159.95 | -748.6 | 709.5 | 2,685.5 | 2,651.1 | 78.079 | | |
| 4,300.0 | 3,992.8 | 2,913.7 | 2,656.1 | 26.2 | 20.8 | 159.91 | -770.6 | 730.8 | 2,765.3 | 2,730.2 | 78.793 | | |
| 4,400.0 | 4,083.4 | 2,973.2 | 2,707.3 | 26.9 | 21.4 | 159.88 | -792.4 | 751.8 | 2,845.2 | 2,809.4 | 79.500 | | |
| 4,500.0 | 4,174.0 | 3,019.6 | 2,747.3 | 27.6 | 21.8 | 159.88 | -809.6 | 767.9 | 2,925.2 | 2,888.9 | 80.545 | | |
| 4,600.0 | 4,264.5 | 3,064.8 | 2,786.3 | 28.3 | 22.3 | 159.90 | -827.1 | 782.8 | 3,005.5 | 2,968.6 | 81.585 | | |
| 4,700.0 | 4,355.1 | 3,109.4 | 2,824.7 | 29.0 | 22.7 | 159.94 | -844.8 | 796.9 | 3,086.0 | 3,048.7 | 82.621 | | |
| 4,800.0 | 4,445.6 | 3,158.0 | 2,866.5 | 29.7 | 23.2 | 160.02 | -864.7 | 811.4 | 3,166.9 | 3,129.0 | 83.540 | | |
| 4,900.0 | 4,536.2 | 3,210.4 | 2,911.6 | 30.4 | 23.7 | 160.12 | -886.6 | 826.7 | 3,247.9 | 3,209.4 | 84.334 | | |
| 5,000.0 | 4,626.8 | 3,268.8 | 2,961.9 | 31.1 | 24.3 | 160.22 | -911.0 | 843.7 | 3,329.0 | 3,289.8 | 84.918 | | |
| 5,100.0 | 4,717.9 | 3,328.3 | 3,013.2 | 31.8 | 24.8 | 161.08 | -935.8 | 861.0 | 3,409.3 | 3,369.4 | 85.434 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - Currier BCU 0993-16-13E - OH - Design #3 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|---|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 3,390.5 | 3,066.7 | 32.5 | 25.4 | 161.93 | -961.7 | 879.1 | 3,487.6 | 3,447.0 | 85.770 | | |
| 5,300.0 | 4,904.1 | 3,455.2 | 3,122.4 | 33.1 | 26.0 | 162.67 | -988.7 | 897.9 | 3,563.8 | 3,522.4 | 85.984 | | |
| 5,400.0 | 4,999.0 | 3,522.4 | 3,180.3 | 33.6 | 26.6 | 163.31 | -1,016.8 | 917.5 | 3,637.9 | 3,595.6 | 86.098 | | |
| 5,500.0 | 5,094.9 | 3,592.1 | 3,240.2 | 34.1 | 27.3 | 163.87 | -1,045.8 | 937.8 | 3,709.6 | 3,666.5 | 86.121 | | |
| 5,600.0 | 5,191.8 | 3,664.1 | 3,302.2 | 34.5 | 28.0 | 164.35 | -1,075.9 | 958.8 | 3,778.9 | 3,735.0 | 86.059 | | |
| 5,700.0 | 5,289.5 | 3,738.3 | 3,366.2 | 34.9 | 28.7 | 164.76 | -1,106.8 | 980.4 | 3,845.8 | 3,801.1 | 85.922 | | |
| 5,800.0 | 5,387.8 | 3,814.8 | 3,432.0 | 35.2 | 29.4 | 165.12 | -1,138.7 | 1,002.6 | 3,910.2 | 3,864.6 | 85.721 | | |
| 5,900.0 | 5,486.8 | 3,893.3 | 3,499.5 | 35.5 | 30.1 | 165.43 | -1,171.5 | 1,025.5 | 3,971.9 | 3,925.5 | 85.463 | | |
| 6,000.0 | 5,586.1 | 3,973.7 | 3,568.8 | 35.7 | 30.9 | 165.69 | -1,205.0 | 1,048.9 | 4,031.0 | 3,983.7 | 85.160 | | |
| 6,100.0 | 5,685.8 | 4,056.1 | 3,639.7 | 35.8 | 31.7 | 165.90 | -1,239.4 | 1,072.9 | 4,087.3 | 4,039.1 | 84.827 | | |
| 6,200.0 | 5,785.8 | 4,140.2 | 3,712.1 | 35.9 | 32.5 | 166.08 | -1,274.5 | 1,097.4 | 4,140.8 | 4,091.8 | 84.488 | | |
| 6,300.0 | 5,885.8 | 4,225.9 | 3,785.9 | 35.9 | 33.3 | 156.66 | -1,310.2 | 1,122.3 | 4,191.6 | 4,141.9 | 84.434 | | |
| 6,400.0 | 5,985.8 | 4,312.0 | 3,860.0 | 36.0 | 34.1 | 156.53 | -1,346.1 | 1,147.4 | 4,241.7 | 4,191.5 | 84.486 | | |
| 6,500.0 | 6,085.8 | 4,398.1 | 3,934.2 | 36.0 | 34.9 | 156.39 | -1,382.1 | 1,172.5 | 4,291.8 | 4,241.0 | 84.530 | | |
| 6,600.0 | 6,185.8 | 4,484.2 | 4,008.3 | 36.0 | 35.7 | 156.26 | -1,418.0 | 1,197.5 | 4,342.0 | 4,290.6 | 84.569 | | |
| 6,700.0 | 6,285.8 | 4,570.3 | 4,082.4 | 36.0 | 36.5 | 156.13 | -1,453.9 | 1,222.6 | 4,392.1 | 4,340.2 | 84.605 | | |
| 6,800.0 | 6,385.8 | 4,656.4 | 4,156.5 | 36.0 | 37.3 | 156.01 | -1,489.8 | 1,247.7 | 4,442.3 | 4,389.8 | 84.637 | | |
| 6,900.0 | 6,485.8 | 4,742.5 | 4,230.7 | 36.1 | 38.2 | 155.89 | -1,525.7 | 1,272.7 | 4,492.5 | 4,439.4 | 84.666 | | |
| 7,000.0 | 6,585.8 | 4,828.6 | 4,304.9 | 36.1 | 39.0 | 155.76 | -1,561.6 | 1,297.7 | 4,542.7 | 4,489.6 | 84.695 | | |
| 7,100.0 | 6,685.8 | 4,914.7 | 4,379.1 | 36.1 | 39.6 | 155.64 | -1,597.5 | 1,322.7 | 4,592.9 | 4,539.8 | 84.724 | | |
| 7,200.0 | 6,785.8 | 5,000.8 | 4,453.3 | 36.2 | 40.2 | 155.52 | -1,633.4 | 1,347.7 | 4,643.1 | 4,589.9 | 84.753 | | |
| 7,300.0 | 6,885.8 | 5,086.9 | 4,527.5 | 36.2 | 40.8 | 155.40 | -1,669.3 | 1,372.7 | 4,693.3 | 4,640.1 | 84.782 | | |
| 7,400.0 | 6,985.8 | 5,173.0 | 4,601.7 | 36.2 | 41.4 | 155.28 | -1,705.2 | 1,397.7 | 4,743.5 | 4,690.3 | 84.811 | | |
| 7,500.0 | 7,085.8 | 5,259.1 | 4,675.9 | 36.2 | 42.0 | 155.16 | -1,741.1 | 1,422.7 | 4,793.7 | 4,740.5 | 84.840 | | |
| 7,600.0 | 7,185.8 | 5,345.2 | 4,750.1 | 36.3 | 42.6 | 155.04 | -1,777.0 | 1,447.7 | 4,843.9 | 4,790.7 | 84.869 | | |
| 7,700.0 | 7,285.8 | 5,431.3 | 4,824.3 | 36.3 | 43.2 | 154.92 | -1,812.9 | 1,472.7 | 4,894.1 | 4,840.9 | 84.898 | | |
| 7,800.0 | 7,385.8 | 5,517.4 | 4,898.5 | 36.3 | 43.8 | 154.80 | -1,848.8 | 1,497.7 | 4,944.3 | 4,891.1 | 84.927 | | |
| 7,900.0 | 7,485.8 | 5,603.5 | 4,972.7 | 36.3 | 44.4 | 154.68 | -1,884.7 | 1,522.7 | 4,994.5 | 4,941.3 | 84.956 | | |
| 8,000.0 | 7,585.8 | 5,689.6 | 5,046.9 | 36.4 | 45.0 | 154.56 | -1,920.6 | 1,547.7 | 5,044.7 | 4,991.5 | 84.985 | | |
| 8,100.0 | 7,685.8 | 5,775.7 | 5,121.1 | 36.4 | 45.6 | 154.44 | -1,956.5 | 1,572.7 | 5,094.9 | 5,041.7 | 85.014 | | |
| 8,200.0 | 7,785.8 | 5,861.8 | 5,195.3 | 36.4 | 46.2 | 154.32 | -1,992.4 | 1,597.7 | 5,145.1 | 5,091.9 | 85.043 | | |
| 8,300.0 | 7,885.8 | 5,947.9 | 5,269.5 | 36.4 | 46.8 | 154.20 | -2,028.3 | 1,622.7 | 5,195.3 | 5,142.1 | 85.072 | | |
| 8,400.0 | 7,985.8 | 6,034.0 | 5,343.7 | 36.5 | 47.4 | 154.08 | -2,064.2 | 1,647.7 | 5,245.5 | 5,192.3 | 85.101 | | |
| 8,500.0 | 8,085.8 | 6,120.1 | 5,417.9 | 36.5 | 48.0 | 153.96 | -2,100.1 | 1,672.7 | 5,295.7 | 5,242.5 | 85.130 | | |
| 8,600.0 | 8,185.8 | 6,206.2 | 5,492.1 | 36.5 | 48.6 | 153.84 | -2,136.0 | 1,697.7 | 5,345.9 | 5,292.7 | 85.159 | | |
| 8,700.0 | 8,285.8 | 6,292.3 | 5,566.3 | 36.6 | 49.2 | 153.72 | -2,171.9 | 1,722.7 | 5,396.1 | 5,342.9 | 85.188 | | |
| 8,800.0 | 8,385.8 | 6,378.4 | 5,640.5 | 36.6 | 49.8 | 153.60 | -2,207.8 | 1,747.7 | 5,446.3 | 5,393.1 | 85.217 | | |
| 8,900.0 | 8,485.8 | 6,464.5 | 5,714.7 | 36.6 | 50.4 | 153.48 | -2,243.7 | 1,772.7 | 5,496.5 | 5,443.3 | 85.246 | | |
| 9,000.0 | 8,585.8 | 6,550.6 | 5,788.9 | 36.6 | 51.0 | 153.36 | -2,279.6 | 1,797.7 | 5,546.7 | 5,493.5 | 85.275 | | |
| 9,067.2 | 8,653.0 | 6,604.5 | 5,853.0 | 36.7 | 51.6 | 153.24 | -2,315.5 | 1,822.7 | 5,596.9 | 5,543.7 | 85.304 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft | |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|------------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|--|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft | |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N/-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -144.35 | -57.5 | -41.2 | 70.7 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -144.35 | -57.5 | -41.2 | 70.7 | 69.1 | 44.643 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -144.35 | -57.5 | -41.2 | 70.7 | 67.9 | 24.997 | CC, ES | | |
| 300.0 | 300.0 | 298.0 | 298.0 | 2.3 | 1.7 | -150.14 | -58.3 | -41.6 | 73.1 | 69.2 | 18.726 | | | |
| 400.0 | 399.8 | 394.3 | 394.2 | 3.5 | 3.1 | -152.42 | -62.5 | -43.5 | 82.5 | 76.2 | 13.103 | | | |
| 500.0 | 499.5 | 489.0 | 488.5 | 4.4 | 4.3 | -155.25 | -70.3 | -47.0 | 99.2 | 90.8 | 11.807 | SF | | |
| 600.0 | 598.7 | 581.5 | 580.2 | 5.2 | 5.3 | -157.88 | -81.3 | -51.9 | 123.3 | 113.1 | 12.162 | | | |
| 700.0 | 697.5 | 670.9 | 668.3 | 5.8 | 6.1 | -155.93 | -95.2 | -58.1 | 154.2 | 142.6 | 13.305 | | | |
| 800.0 | 795.7 | 757.0 | 752.5 | 6.5 | 6.9 | -154.98 | -111.5 | -65.4 | 191.5 | 178.7 | 14.909 | | | |
| 900.0 | 893.2 | 839.1 | 832.2 | 7.1 | 7.5 | -154.44 | -129.7 | -73.5 | 234.9 | 221.0 | 16.822 | | | |
| 1,000.0 | 989.9 | 917.1 | 907.1 | 7.7 | 8.1 | -154.04 | -149.4 | -82.4 | 284.1 | 269.1 | 18.980 | | | |
| 1,100.0 | 1,085.7 | 990.6 | 977.0 | 8.2 | 8.6 | -153.65 | -170.1 | -91.6 | 338.7 | 322.8 | 21.342 | | | |
| 1,200.0 | 1,180.4 | 1,059.5 | 1,041.9 | 8.8 | 9.1 | -153.22 | -191.4 | -101.1 | 398.3 | 381.6 | 23.878 | | | |
| 1,300.0 | 1,273.9 | 1,123.8 | 1,101.7 | 9.4 | 9.5 | -152.73 | -212.8 | -110.7 | 462.5 | 445.1 | 26.559 | | | |
| 1,400.0 | 1,366.2 | 1,183.4 | 1,156.6 | 9.9 | 9.9 | -152.14 | -234.1 | -120.2 | 531.1 | 513.0 | 29.371 | | | |
| 1,500.0 | 1,457.2 | 1,238.6 | 1,206.8 | 10.3 | 10.2 | -151.90 | -254.9 | -129.5 | 603.4 | 584.9 | 32.513 | | | |
| 1,600.0 | 1,547.7 | 1,292.9 | 1,255.7 | 10.7 | 10.4 | -152.75 | -276.4 | -139.2 | 677.9 | 659.0 | 35.754 | | | |
| 1,700.0 | 1,638.3 | 1,358.5 | 1,314.6 | 11.1 | 10.6 | -153.58 | -302.8 | -151.0 | 753.0 | 733.6 | 38.691 | | | |
| 1,800.0 | 1,728.8 | 1,424.2 | 1,373.6 | 11.4 | 10.8 | -154.26 | -329.3 | -162.8 | 828.2 | 808.2 | 41.444 | | | |
| 1,900.0 | 1,819.4 | 1,489.9 | 1,432.5 | 11.8 | 11.0 | -154.83 | -355.7 | -174.7 | 903.4 | 882.9 | 44.022 | | | |
| 2,000.0 | 1,910.0 | 1,555.5 | 1,491.4 | 12.3 | 11.2 | -155.31 | -382.2 | -186.5 | 978.6 | 957.6 | 46.427 | | | |
| 2,100.0 | 2,000.5 | 1,621.2 | 1,550.3 | 12.7 | 11.5 | -155.73 | -408.7 | -198.3 | 1,053.9 | 1,032.3 | 48.678 | | | |
| 2,200.0 | 2,091.1 | 1,686.9 | 1,609.2 | 13.1 | 11.7 | -156.09 | -435.1 | -210.2 | 1,129.2 | 1,106.9 | 50.779 | | | |
| 2,300.0 | 2,181.6 | 1,752.5 | 1,668.2 | 13.6 | 11.9 | -156.40 | -461.6 | -222.0 | 1,204.5 | 1,181.6 | 52.737 | | | |
| 2,400.0 | 2,272.2 | 1,818.2 | 1,727.1 | 14.0 | 12.2 | -156.68 | -488.0 | -233.9 | 1,279.8 | 1,256.3 | 54.569 | | | |
| 2,500.0 | 2,362.8 | 1,883.8 | 1,786.0 | 14.5 | 12.4 | -156.92 | -514.5 | -245.7 | 1,355.1 | 1,331.1 | 56.278 | | | |
| 2,600.0 | 2,453.3 | 1,949.5 | 1,844.9 | 15.0 | 12.7 | -157.14 | -540.9 | -257.5 | 1,430.5 | 1,405.8 | 57.874 | | | |
| 2,700.0 | 2,543.9 | 2,015.2 | 1,903.9 | 15.5 | 12.9 | -157.34 | -567.4 | -269.4 | 1,505.8 | 1,480.4 | 59.369 | | | |
| 2,800.0 | 2,634.4 | 2,080.8 | 1,962.8 | 16.0 | 13.2 | -157.52 | -593.9 | -281.2 | 1,581.2 | 1,555.1 | 60.765 | | | |
| 2,900.0 | 2,725.0 | 2,146.5 | 2,021.7 | 16.5 | 13.5 | -157.68 | -620.3 | -293.0 | 1,656.5 | 1,629.8 | 62.072 | | | |
| 3,000.0 | 2,815.6 | 2,212.2 | 2,080.6 | 17.1 | 13.7 | -157.83 | -646.8 | -304.9 | 1,731.9 | 1,704.5 | 63.298 | | | |
| 3,100.0 | 2,906.1 | 2,277.8 | 2,139.5 | 17.8 | 14.0 | -157.97 | -673.2 | -316.7 | 1,807.3 | 1,779.2 | 64.446 | | | |
| 3,200.0 | 2,996.7 | 2,343.5 | 2,198.5 | 18.4 | 14.3 | -158.10 | -699.7 | -328.6 | 1,882.6 | 1,853.9 | 65.524 | | | |
| 3,300.0 | 3,087.2 | 2,409.2 | 2,257.4 | 19.1 | 14.6 | -158.21 | -726.1 | -340.4 | 1,958.0 | 1,928.6 | 66.537 | | | |
| 3,400.0 | 3,177.8 | 2,474.8 | 2,316.3 | 19.8 | 14.9 | -158.32 | -752.6 | -352.2 | 2,033.4 | 2,003.3 | 67.489 | | | |
| 3,500.0 | 3,268.4 | 2,540.5 | 2,375.2 | 20.5 | 15.1 | -158.42 | -779.1 | -364.1 | 2,108.8 | 2,077.9 | 68.389 | | | |
| 3,600.0 | 3,358.9 | 2,606.2 | 2,434.2 | 21.2 | 15.5 | -158.51 | -805.5 | -375.9 | 2,184.1 | 2,152.6 | 69.225 | | | |
| 3,700.0 | 3,449.5 | 2,671.8 | 2,493.1 | 21.9 | 16.0 | -158.60 | -832.0 | -387.7 | 2,259.5 | 2,227.3 | 70.010 | | | |
| 3,800.0 | 3,540.0 | 2,737.5 | 2,552.0 | 22.6 | 16.5 | -158.68 | -858.4 | -399.6 | 2,334.9 | 2,301.9 | 70.769 | | | |
| 3,900.0 | 3,630.6 | 2,803.2 | 2,610.9 | 23.3 | 17.0 | -158.76 | -884.9 | -411.4 | 2,410.3 | 2,376.6 | 71.479 | | | |
| 4,000.0 | 3,721.2 | 2,868.8 | 2,669.8 | 24.0 | 17.5 | -158.83 | -911.3 | -423.3 | 2,485.7 | 2,451.3 | 72.147 | | | |
| 4,100.0 | 3,811.7 | 2,934.5 | 2,728.8 | 24.7 | 18.0 | -158.89 | -937.8 | -435.1 | 2,561.1 | 2,525.9 | 72.780 | | | |
| 4,200.0 | 3,902.3 | 3,000.2 | 2,787.7 | 25.4 | 18.5 | -158.96 | -964.2 | -446.9 | 2,636.5 | 2,600.6 | 73.381 | | | |
| 4,300.0 | 3,992.8 | 3,065.8 | 2,846.6 | 26.2 | 19.0 | -159.02 | -990.7 | -458.8 | 2,711.9 | 2,675.2 | 73.947 | | | |
| 4,400.0 | 4,083.4 | 3,131.5 | 2,905.5 | 26.9 | 19.5 | -159.07 | -1,017.2 | -470.6 | 2,787.3 | 2,749.9 | 74.485 | | | |
| 4,500.0 | 4,174.0 | 3,197.2 | 2,964.5 | 27.6 | 20.0 | -159.13 | -1,043.6 | -482.4 | 2,862.7 | 2,824.5 | 74.997 | | | |
| 4,600.0 | 4,264.5 | 3,262.8 | 3,023.4 | 28.3 | 20.5 | -159.18 | -1,070.1 | -494.3 | 2,938.1 | 2,899.2 | 75.481 | | | |
| 4,700.0 | 4,355.1 | 3,328.5 | 3,082.3 | 29.0 | 21.0 | -159.23 | -1,096.5 | -506.1 | 3,013.5 | 2,973.8 | 75.942 | | | |
| 4,800.0 | 4,445.6 | 3,394.1 | 3,141.2 | 29.7 | 21.5 | -159.27 | -1,123.0 | -517.9 | 3,088.9 | 3,048.5 | 76.381 | | | |
| 4,900.0 | 4,536.2 | 3,459.8 | 3,200.1 | 30.4 | 22.0 | -159.32 | -1,149.4 | -529.8 | 3,164.3 | 3,123.1 | 76.797 | | | |
| 5,000.0 | 4,626.8 | 3,525.5 | 3,259.1 | 31.1 | 22.5 | -159.36 | -1,175.9 | -541.6 | 3,239.7 | 3,197.7 | 77.194 | | | |
| 5,100.0 | 4,717.9 | 3,592.1 | 3,318.8 | 31.8 | 23.0 | -160.06 | -1,202.7 | -553.6 | 3,314.3 | 3,271.6 | 77.535 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - Currier BCU 0993-16-13W - OH - Design #2 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|---|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 3,661.1 | 3,380.7 | 32.5 | 23.5 | -160.76 | -1,230.5 | -566.1 | 3,386.7 | 3,343.1 | 77.719 | | |
| 5,300.0 | 4,904.1 | 3,732.4 | 3,444.7 | 33.1 | 24.1 | -161.37 | -1,259.3 | -578.9 | 3,456.8 | 3,412.3 | 77.802 | | |
| 5,400.0 | 4,999.0 | 3,805.9 | 3,510.7 | 33.6 | 24.7 | -161.89 | -1,288.9 | -592.2 | 3,524.4 | 3,479.1 | 77.802 | | |
| 5,500.0 | 5,094.9 | 3,881.7 | 3,578.7 | 34.1 | 25.2 | -162.34 | -1,319.4 | -605.8 | 3,589.6 | 3,543.5 | 77.727 | | |
| 5,600.0 | 5,191.8 | 3,959.5 | 3,648.5 | 34.5 | 25.8 | -162.73 | -1,350.8 | -619.9 | 3,652.3 | 3,605.2 | 77.585 | | |
| 5,700.0 | 5,289.5 | 4,039.3 | 3,720.1 | 34.9 | 26.4 | -163.06 | -1,382.9 | -634.2 | 3,712.3 | 3,664.3 | 77.383 | | |
| 5,800.0 | 5,387.8 | 4,120.9 | 3,793.3 | 35.2 | 27.1 | -163.34 | -1,415.8 | -649.0 | 3,769.6 | 3,720.8 | 77.129 | | |
| 5,900.0 | 5,486.8 | 4,204.3 | 3,868.2 | 35.5 | 27.7 | -163.57 | -1,449.4 | -664.0 | 3,824.2 | 3,774.4 | 76.832 | | |
| 6,000.0 | 5,586.1 | 4,289.4 | 3,944.6 | 35.7 | 28.4 | -163.76 | -1,483.7 | -679.3 | 3,876.0 | 3,825.3 | 76.500 | | |
| 6,100.0 | 5,685.8 | 4,376.1 | 4,022.3 | 35.8 | 29.0 | -163.91 | -1,518.6 | -695.0 | 3,924.9 | 3,873.3 | 76.146 | | |
| 6,200.0 | 5,785.8 | 4,464.2 | 4,101.4 | 35.9 | 29.7 | -164.02 | -1,554.1 | -710.8 | 3,970.8 | 3,918.4 | 75.792 | | |
| 6,300.0 | 5,885.8 | 4,553.6 | 4,181.7 | 35.9 | 30.4 | -173.49 | -1,590.1 | -727.0 | 4,014.0 | 3,960.9 | 75.682 | | |
| 6,400.0 | 5,985.8 | 4,643.4 | 4,262.2 | 36.0 | 31.1 | -173.30 | -1,626.3 | -743.1 | 4,056.4 | 4,002.8 | 75.670 | | |
| 6,500.0 | 6,085.8 | 4,733.1 | 4,342.7 | 36.0 | 31.8 | -173.12 | -1,662.5 | -759.3 | 4,098.9 | 4,044.8 | 75.653 | | |
| 6,600.0 | 6,185.8 | 4,822.8 | 4,423.2 | 36.0 | 32.5 | -172.94 | -1,698.6 | -775.5 | 4,141.5 | 4,086.7 | 75.636 | | |
| 6,700.0 | 6,285.8 | 4,912.6 | 4,503.7 | 36.0 | 33.2 | -172.76 | -1,734.8 | -791.7 | 4,184.1 | 4,128.7 | 75.617 | | |
| 6,800.0 | 6,385.8 | 5,002.4 | 4,584.2 | 36.0 | 34.0 | -172.58 | -1,771.0 | -807.9 | 4,226.7 | 4,170.9 | 75.598 | | |
| 6,900.0 | 6,485.8 | 5,092.2 | 4,664.7 | 36.0 | 34.7 | -172.40 | -1,807.2 | -824.1 | 4,269.3 | 4,213.1 | 75.579 | | |
| 7,000.0 | 6,585.8 | 5,182.0 | 4,745.2 | 36.0 | 35.4 | -172.22 | -1,843.4 | -840.3 | 4,311.9 | 4,255.3 | 75.560 | | |
| 7,100.0 | 6,685.8 | 5,271.8 | 4,825.7 | 36.0 | 36.1 | -172.04 | -1,879.6 | -856.5 | 4,354.5 | 4,297.5 | 75.541 | | |
| 7,200.0 | 6,785.8 | 5,361.6 | 4,906.2 | 36.0 | 36.8 | -171.86 | -1,915.8 | -872.7 | 4,397.1 | 4,339.7 | 75.522 | | |
| 7,300.0 | 6,885.8 | 5,451.4 | 4,986.7 | 36.0 | 37.5 | -171.68 | -1,952.0 | -888.9 | 4,439.7 | 4,381.9 | 75.503 | | |
| 7,400.0 | 6,985.8 | 5,541.2 | 5,067.2 | 36.0 | 38.2 | -171.50 | -1,988.2 | -905.1 | 4,482.3 | 4,424.1 | 75.484 | | |
| 7,500.0 | 7,085.8 | 5,631.0 | 5,147.7 | 36.0 | 38.9 | -171.32 | -2,024.4 | -921.3 | 4,524.9 | 4,466.3 | 75.465 | | |
| 7,600.0 | 7,185.8 | 5,720.8 | 5,228.2 | 36.0 | 39.6 | -171.14 | -2,060.6 | -937.5 | 4,567.5 | 4,508.5 | 75.446 | | |
| 7,700.0 | 7,285.8 | 5,810.6 | 5,308.7 | 36.0 | 40.3 | -170.96 | -2,096.8 | -953.7 | 4,610.1 | 4,550.7 | 75.427 | | |
| 7,800.0 | 7,385.8 | 5,900.4 | 5,389.2 | 36.0 | 41.0 | -170.78 | -2,133.0 | -969.9 | 4,652.7 | 4,592.9 | 75.408 | | |
| 7,900.0 | 7,485.8 | 5,990.2 | 5,469.7 | 36.0 | 41.7 | -170.60 | -2,169.2 | -986.1 | 4,695.3 | 4,635.1 | 75.389 | | |
| 8,000.0 | 7,585.8 | 6,080.0 | 5,550.2 | 36.0 | 42.4 | -170.42 | -2,205.4 | -1,002.3 | 4,737.9 | 4,677.3 | 75.370 | | |
| 8,100.0 | 7,685.8 | 6,169.8 | 5,630.7 | 36.0 | 43.1 | -170.24 | -2,241.6 | -1,018.5 | 4,780.5 | 4,719.5 | 75.351 | | |
| 8,200.0 | 7,785.8 | 6,259.6 | 5,711.2 | 36.0 | 43.8 | -170.06 | -2,277.8 | -1,034.7 | 4,823.1 | 4,761.7 | 75.332 | | |
| 8,300.0 | 7,885.8 | 6,349.4 | 5,791.7 | 36.0 | 44.5 | -169.88 | -2,314.0 | -1,050.9 | 4,865.7 | 4,803.9 | 75.313 | | |
| 8,400.0 | 7,985.8 | 6,439.2 | 5,872.2 | 36.0 | 45.2 | -169.70 | -2,350.2 | -1,067.1 | 4,908.3 | 4,846.1 | 75.294 | | |
| 8,500.0 | 8,085.8 | 6,529.0 | 5,952.7 | 36.0 | 45.9 | -169.52 | -2,386.4 | -1,083.3 | 4,950.9 | 4,888.3 | 75.275 | | |
| 8,600.0 | 8,185.8 | 6,618.8 | 6,033.2 | 36.0 | 46.6 | -169.34 | -2,422.6 | -1,099.5 | 4,993.5 | 4,930.5 | 75.256 | | |
| 8,700.0 | 8,285.8 | 6,708.6 | 6,113.7 | 36.0 | 47.3 | -169.16 | -2,458.8 | -1,115.7 | 5,036.1 | 4,972.7 | 75.237 | | |
| 8,800.0 | 8,385.8 | 6,798.4 | 6,194.2 | 36.0 | 48.0 | -168.98 | -2,495.0 | -1,131.9 | 5,078.7 | 5,014.9 | 75.218 | | |
| 8,900.0 | 8,485.8 | 6,888.2 | 6,274.7 | 36.0 | 48.7 | -168.80 | -2,531.2 | -1,148.1 | 5,121.3 | 5,057.1 | 75.199 | | |
| 9,000.0 | 8,585.8 | 6,978.0 | 6,355.2 | 36.0 | 49.4 | -168.62 | -2,567.4 | -1,164.3 | 5,163.9 | 5,099.3 | 75.180 | | |
| 9,067.2 | 8,653.0 | 7,047.2 | 6,414.7 | 36.7 | 50.0 | -168.44 | -2,603.6 | -1,180.5 | 5,206.5 | 5,141.5 | 75.161 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|---------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -162.77 | -21.4 | -6.6 | 22.4 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -162.77 | -21.4 | -6.6 | 22.4 | 20.8 | 14.118 | | | |
| 108.4 | 108.4 | 108.4 | 108.4 | 0.8 | 0.8 | -162.77 | -21.4 | -6.6 | 22.4 | 20.7 | 13.312 | CC | | |
| 200.0 | 200.0 | 199.9 | 199.9 | 1.4 | 1.2 | -162.94 | -21.4 | -6.6 | 22.4 | 19.8 | 8.461 | ES | | |
| 300.0 | 300.0 | 299.1 | 299.0 | 2.3 | 2.4 | -173.79 | -24.0 | -4.9 | 26.2 | 21.8 | 5.928 | | | |
| 400.0 | 399.8 | 397.3 | 397.0 | 3.5 | 3.9 | 177.47 | -30.0 | -1.0 | 37.1 | 30.2 | 5.369 | SF | | |
| 500.0 | 499.5 | 493.8 | 492.8 | 4.4 | 5.0 | 170.96 | -39.3 | 5.1 | 55.5 | 46.6 | 6.254 | | | |
| 600.0 | 598.7 | 587.8 | 585.7 | 5.2 | 5.9 | 166.90 | -51.7 | 13.2 | 81.2 | 70.7 | 7.746 | | | |
| 700.0 | 697.5 | 678.7 | 674.7 | 5.8 | 6.7 | 168.36 | -66.6 | 22.9 | 114.0 | 102.1 | 9.614 | | | |
| 800.0 | 795.7 | 765.7 | 759.3 | 6.5 | 7.4 | 169.11 | -83.7 | 34.1 | 153.5 | 140.4 | 11.752 | | | |
| 900.0 | 893.2 | 848.4 | 839.0 | 7.1 | 8.0 | 169.53 | -102.4 | 46.3 | 199.4 | 185.3 | 14.092 | | | |
| 1,000.0 | 989.9 | 926.4 | 913.3 | 7.7 | 8.6 | 169.80 | -122.3 | 59.2 | 251.4 | 236.2 | 16.606 | | | |
| 1,100.0 | 1,085.7 | 1,000.0 | 982.6 | 8.2 | 9.1 | 169.96 | -142.9 | 72.7 | 308.9 | 292.9 | 19.262 | | | |
| 1,200.0 | 1,180.4 | 1,067.6 | 1,045.6 | 8.8 | 9.5 | 170.08 | -163.5 | 86.1 | 371.7 | 354.9 | 22.085 | | | |
| 1,300.0 | 1,273.9 | 1,130.6 | 1,103.5 | 9.4 | 9.9 | 170.15 | -184.1 | 99.6 | 439.3 | 421.7 | 25.021 | | | |
| 1,400.0 | 1,366.2 | 1,188.4 | 1,156.2 | 9.9 | 10.3 | 170.17 | -204.2 | 112.7 | 511.1 | 492.9 | 28.073 | | | |
| 1,500.0 | 1,457.2 | 1,241.4 | 1,203.9 | 10.3 | 10.6 | 170.07 | -223.5 | 125.3 | 586.9 | 568.2 | 31.366 | | | |
| 1,600.0 | 1,547.7 | 1,300.0 | 1,255.9 | 10.7 | 11.0 | 169.66 | -246.0 | 140.0 | 664.7 | 645.4 | 34.425 | | | |
| 1,700.0 | 1,638.3 | 1,338.3 | 1,289.6 | 11.1 | 11.2 | 169.42 | -261.3 | 150.0 | 743.6 | 724.1 | 38.045 | | | |
| 1,800.0 | 1,728.8 | 1,383.2 | 1,328.6 | 11.4 | 11.4 | 169.15 | -279.8 | 162.0 | 823.8 | 803.9 | 41.316 | | | |
| 1,900.0 | 1,819.4 | 1,425.7 | 1,365.3 | 11.8 | 11.7 | 168.90 | -298.0 | 173.9 | 905.1 | 884.8 | 44.551 | | | |
| 2,000.0 | 1,910.0 | 1,466.2 | 1,399.8 | 12.3 | 11.9 | 168.68 | -315.8 | 185.5 | 987.4 | 966.8 | 47.753 | | | |
| 2,100.0 | 2,000.5 | 1,500.0 | 1,428.2 | 12.7 | 12.1 | 168.50 | -331.0 | 195.4 | 1,070.7 | 1,049.8 | 51.129 | | | |
| 2,200.0 | 2,091.1 | 1,541.4 | 1,462.7 | 13.1 | 12.3 | 168.29 | -350.1 | 207.9 | 1,154.8 | 1,133.5 | 54.218 | | | |
| 2,300.0 | 2,181.6 | 1,576.6 | 1,491.7 | 13.6 | 12.4 | 168.11 | -366.8 | 218.8 | 1,239.8 | 1,218.2 | 57.468 | | | |
| 2,400.0 | 2,272.2 | 1,628.6 | 1,534.4 | 14.0 | 12.6 | 167.87 | -391.8 | 235.1 | 1,325.1 | 1,303.1 | 60.124 | | | |
| 2,500.0 | 2,362.8 | 1,680.7 | 1,577.1 | 14.5 | 12.8 | 167.66 | -416.7 | 251.4 | 1,410.5 | 1,388.0 | 62.632 | | | |
| 2,600.0 | 2,453.3 | 1,732.7 | 1,619.8 | 15.0 | 12.9 | 167.48 | -441.6 | 267.6 | 1,495.8 | 1,472.8 | 65.004 | | | |
| 2,700.0 | 2,543.9 | 1,784.8 | 1,662.5 | 15.5 | 13.1 | 167.31 | -466.6 | 283.9 | 1,581.2 | 1,557.7 | 67.245 | | | |
| 2,800.0 | 2,634.4 | 1,836.8 | 1,705.2 | 16.0 | 13.3 | 167.16 | -491.5 | 300.2 | 1,666.5 | 1,642.5 | 69.370 | | | |
| 2,900.0 | 2,725.0 | 1,888.9 | 1,747.9 | 16.5 | 13.5 | 167.03 | -516.5 | 316.4 | 1,751.9 | 1,727.4 | 71.378 | | | |
| 3,000.0 | 2,815.6 | 1,940.9 | 1,790.6 | 17.1 | 13.6 | 166.91 | -541.4 | 332.7 | 1,837.3 | 1,812.2 | 73.289 | | | |
| 3,100.0 | 2,906.1 | 1,993.0 | 1,833.3 | 17.8 | 13.8 | 166.80 | -566.3 | 349.0 | 1,922.6 | 1,897.0 | 75.087 | | | |
| 3,200.0 | 2,996.7 | 2,045.0 | 1,876.0 | 18.4 | 14.0 | 166.70 | -591.3 | 365.3 | 2,008.0 | 1,981.9 | 76.827 | | | |
| 3,300.0 | 3,087.2 | 2,097.1 | 1,918.7 | 19.1 | 14.2 | 166.60 | -616.2 | 381.5 | 2,093.4 | 2,066.7 | 78.419 | | | |
| 3,400.0 | 3,177.8 | 2,149.1 | 1,961.3 | 19.8 | 14.6 | 166.52 | -641.1 | 397.8 | 2,178.7 | 2,151.5 | 79.863 | | | |
| 3,500.0 | 3,268.4 | 2,201.2 | 2,004.0 | 20.5 | 15.2 | 166.44 | -666.1 | 414.1 | 2,264.1 | 2,236.3 | 81.412 | | | |
| 3,600.0 | 3,358.9 | 2,253.2 | 2,046.7 | 21.2 | 15.8 | 166.36 | -691.0 | 430.4 | 2,349.5 | 2,321.1 | 82.777 | | | |
| 3,700.0 | 3,449.5 | 2,305.3 | 2,089.4 | 21.9 | 16.3 | 166.30 | -716.0 | 446.6 | 2,434.9 | 2,405.9 | 84.111 | | | |
| 3,800.0 | 3,540.0 | 2,357.3 | 2,132.1 | 22.6 | 16.9 | 166.23 | -740.9 | 462.9 | 2,520.2 | 2,490.7 | 85.351 | | | |
| 3,900.0 | 3,630.6 | 2,409.4 | 2,174.8 | 23.3 | 17.4 | 166.17 | -765.8 | 479.2 | 2,605.6 | 2,575.5 | 86.549 | | | |
| 4,000.0 | 3,721.2 | 2,461.4 | 2,217.5 | 24.0 | 18.0 | 166.12 | -790.8 | 495.5 | 2,691.0 | 2,660.3 | 87.674 | | | |
| 4,100.0 | 3,811.7 | 2,513.5 | 2,260.2 | 24.7 | 18.5 | 166.06 | -815.7 | 511.7 | 2,776.4 | 2,745.1 | 88.754 | | | |
| 4,200.0 | 3,902.3 | 2,565.5 | 2,302.9 | 25.4 | 19.1 | 166.01 | -840.6 | 528.0 | 2,861.7 | 2,829.9 | 89.775 | | | |
| 4,300.0 | 3,992.8 | 2,617.6 | 2,345.6 | 26.2 | 19.7 | 165.97 | -865.6 | 544.3 | 2,947.1 | 2,914.6 | 90.753 | | | |
| 4,400.0 | 4,083.4 | 2,669.6 | 2,388.3 | 26.9 | 20.2 | 165.92 | -890.5 | 560.5 | 3,032.5 | 2,999.4 | 91.681 | | | |
| 4,500.0 | 4,174.0 | 2,721.7 | 2,431.0 | 27.6 | 20.8 | 165.88 | -915.5 | 576.8 | 3,117.9 | 3,084.2 | 92.569 | | | |
| 4,600.0 | 4,264.5 | 2,773.7 | 2,473.6 | 28.3 | 21.3 | 165.84 | -940.4 | 593.1 | 3,203.2 | 3,168.9 | 93.414 | | | |
| 4,700.0 | 4,355.1 | 2,825.8 | 2,516.3 | 29.0 | 21.9 | 165.81 | -965.3 | 609.4 | 3,288.6 | 3,253.7 | 94.221 | | | |
| 4,800.0 | 4,445.6 | 2,877.8 | 2,559.0 | 29.7 | 22.5 | 165.77 | -990.3 | 625.6 | 3,374.0 | 3,338.5 | 94.991 | | | |
| 4,900.0 | 4,536.2 | 2,929.9 | 2,601.7 | 30.4 | 23.0 | 165.74 | -1,015.2 | 641.9 | 3,459.4 | 3,423.2 | 95.726 | | | |
| 5,000.0 | 4,626.8 | 2,981.9 | 2,644.4 | 31.1 | 23.6 | 165.70 | -1,040.1 | 658.2 | 3,544.8 | 3,508.0 | 96.430 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - Currier BCU 0993-16-14E - OH - Design #2 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|---|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,100.0 | 4,717.9 | 3,035.1 | 2,688.0 | 31.8 | 24.1 | 166.33 | -1,065.6 | 674.8 | 3,629.5 | 3,592.1 | 97.052 | | |
| 5,200.0 | 4,810.3 | 3,091.0 | 2,733.8 | 32.5 | 24.7 | 166.95 | -1,092.4 | 692.3 | 3,712.3 | 3,674.3 | 97.468 | | |
| 5,300.0 | 4,904.1 | 3,149.6 | 2,781.9 | 33.1 | 25.4 | 167.48 | -1,120.5 | 710.6 | 3,793.3 | 3,754.5 | 97.735 | | |
| 5,400.0 | 4,999.0 | 3,211.0 | 2,832.2 | 33.6 | 26.0 | 167.93 | -1,149.9 | 729.8 | 3,872.2 | 3,832.6 | 97.883 | | |
| 5,500.0 | 5,094.9 | 3,274.9 | 2,884.7 | 34.1 | 26.7 | 168.32 | -1,180.5 | 749.8 | 3,948.9 | 3,908.6 | 97.916 | | |
| 5,600.0 | 5,191.8 | 3,341.3 | 2,939.2 | 34.5 | 27.4 | 168.65 | -1,212.3 | 770.5 | 4,023.4 | 3,982.3 | 97.848 | | |
| 5,700.0 | 5,289.5 | 3,410.2 | 2,995.7 | 34.9 | 28.2 | 168.92 | -1,245.3 | 792.1 | 4,095.6 | 4,053.7 | 97.690 | | |
| 5,800.0 | 5,387.8 | 3,481.5 | 3,054.1 | 35.2 | 29.0 | 169.16 | -1,279.5 | 814.4 | 4,165.4 | 4,122.7 | 97.450 | | |
| 5,900.0 | 5,486.8 | 3,555.0 | 3,114.4 | 35.5 | 29.8 | 169.35 | -1,314.7 | 837.3 | 4,232.7 | 4,189.2 | 97.142 | | |
| 6,000.0 | 5,586.1 | 3,630.7 | 3,176.5 | 35.7 | 30.6 | 169.51 | -1,351.0 | 861.0 | 4,297.5 | 4,253.1 | 96.780 | | |
| 6,100.0 | 5,685.8 | 3,708.5 | 3,240.3 | 35.8 | 31.4 | 169.64 | -1,388.2 | 885.3 | 4,359.6 | 4,314.4 | 96.381 | | |
| 6,200.0 | 5,785.8 | 3,788.3 | 3,305.7 | 35.9 | 32.3 | 169.74 | -1,426.4 | 910.3 | 4,419.0 | 4,373.0 | 95.974 | | |
| 6,300.0 | 5,885.8 | 3,869.9 | 3,372.7 | 35.9 | 33.2 | 160.27 | -1,465.5 | 935.8 | 4,475.8 | 4,429.2 | 95.905 | | |
| 6,400.0 | 5,985.8 | 3,951.9 | 3,439.9 | 36.0 | 34.1 | 160.10 | -1,504.8 | 961.4 | 4,532.0 | 4,484.8 | 95.961 | | |
| 6,500.0 | 6,085.8 | 4,033.9 | 3,507.2 | 36.0 | 34.9 | 159.94 | -1,544.1 | 987.1 | 4,588.2 | 4,540.4 | 96.006 | | |
| 6,600.0 | 6,185.8 | 4,115.9 | 3,574.5 | 36.0 | 35.8 | 159.78 | -1,583.4 | 1,012.7 | 4,644.4 | 4,596.0 | 96.045 | | |
| 6,700.0 | 6,285.8 | 4,197.9 | 3,641.8 | 36.0 | 36.7 | 159.63 | -1,622.7 | 1,038.4 | 4,700.6 | 4,651.7 | 96.079 | | |
| 6,800.0 | 6,385.8 | 4,280.0 | 3,709.0 | 36.0 | 37.6 | 159.48 | -1,662.0 | 1,064.0 | 4,756.9 | 4,707.4 | 96.108 | | |
| 6,900.0 | 6,485.8 | 4,362.0 | 3,776.3 | 36.1 | 38.5 | 159.33 | -1,701.3 | 1,089.6 | 4,813.2 | 4,763.1 | 96.132 | | |
| 7,000.0 | 6,585.8 | 4,444.0 | 3,843.6 | 36.1 | 39.4 | 159.18 | -1,740.6 | 1,115.3 | 4,869.5 | 4,818.8 | 96.152 | | |
| 7,100.0 | 6,685.8 | 4,526.0 | 3,910.8 | 36.1 | 40.3 | 159.04 | -1,779.9 | 1,140.9 | 4,925.8 | 4,874.6 | 96.168 | | |
| 7,200.0 | 6,785.8 | 4,608.0 | 3,978.1 | 36.2 | 41.2 | 158.89 | -1,819.2 | 1,166.5 | 4,982.0 | 4,930.3 | 96.184 | | |
| 7,300.0 | 6,885.8 | 4,689.0 | 4,045.4 | 36.2 | 42.1 | 158.74 | -1,858.5 | 1,192.1 | 5,038.2 | 4,985.5 | 96.199 | | |
| 7,400.0 | 6,985.8 | 4,770.0 | 4,112.7 | 36.2 | 43.0 | 158.59 | -1,897.8 | 1,217.7 | 5,094.4 | 5,040.7 | 96.214 | | |
| 7,500.0 | 7,085.8 | 4,851.0 | 4,180.0 | 36.2 | 43.9 | 158.44 | -1,937.1 | 1,243.3 | 5,150.6 | 5,096.0 | 96.229 | | |
| 7,600.0 | 7,185.8 | 4,932.0 | 4,247.3 | 36.3 | 44.8 | 158.29 | -1,976.4 | 1,268.9 | 5,206.8 | 5,151.2 | 96.244 | | |
| 7,700.0 | 7,285.8 | 5,013.0 | 4,314.6 | 36.3 | 45.7 | 158.14 | -2,015.7 | 1,294.5 | 5,263.0 | 5,206.4 | 96.259 | | |
| 7,800.0 | 7,385.8 | 5,094.0 | 4,381.9 | 36.3 | 46.6 | 157.99 | -2,055.0 | 1,320.1 | 5,319.2 | 5,261.6 | 96.274 | | |
| 7,900.0 | 7,485.8 | 5,175.0 | 4,449.2 | 36.3 | 47.5 | 157.84 | -2,094.3 | 1,345.7 | 5,375.4 | 5,316.8 | 96.289 | | |
| 8,000.0 | 7,585.8 | 5,256.0 | 4,516.5 | 36.4 | 48.4 | 157.69 | -2,133.6 | 1,371.3 | 5,431.6 | 5,372.0 | 96.304 | | |
| 8,100.0 | 7,685.8 | 5,337.0 | 4,583.8 | 36.4 | 49.3 | 157.54 | -2,172.9 | 1,396.9 | 5,487.8 | 5,427.2 | 96.319 | | |
| 8,200.0 | 7,785.8 | 5,418.0 | 4,651.1 | 36.4 | 50.2 | 157.39 | -2,212.2 | 1,422.5 | 5,544.0 | 5,482.4 | 96.334 | | |
| 8,210.0 | 7,795.8 | 5,441.0 | 4,661.1 | 36.4 | 50.3 | 157.38 | -2,215.0 | 1,424.0 | 5,548.0 | 5,485.0 | 96.336 | | |
| 8,300.0 | 7,885.8 | 5,522.0 | 4,728.4 | 36.4 | 51.1 | 157.23 | -2,254.3 | 1,449.6 | 5,604.2 | 5,540.2 | 96.351 | | |
| 8,400.0 | 7,985.8 | 5,603.0 | 4,795.7 | 36.5 | 52.0 | 157.08 | -2,293.6 | 1,475.2 | 5,660.4 | 5,595.4 | 96.366 | | |
| 8,500.0 | 8,085.8 | 5,684.0 | 4,863.0 | 36.5 | 52.9 | 156.93 | -2,332.9 | 1,500.8 | 5,716.6 | 5,650.6 | 96.381 | | |
| 8,600.0 | 8,185.8 | 5,765.0 | 4,930.3 | 36.5 | 53.8 | 156.78 | -2,372.2 | 1,526.4 | 5,772.8 | 5,705.8 | 96.396 | | |
| 8,700.0 | 8,285.8 | 5,846.0 | 4,997.6 | 36.6 | 54.7 | 156.63 | -2,411.5 | 1,552.0 | 5,829.0 | 5,761.0 | 96.411 | | |
| 8,800.0 | 8,385.8 | 5,927.0 | 5,064.9 | 36.6 | 55.6 | 156.48 | -2,450.8 | 1,577.6 | 5,885.2 | 5,816.2 | 96.426 | | |
| 8,900.0 | 8,485.8 | 6,008.0 | 5,132.2 | 36.6 | 56.5 | 156.33 | -2,490.1 | 1,603.2 | 5,941.4 | 5,871.4 | 96.441 | | |
| 9,000.0 | 8,585.8 | 6,089.0 | 5,199.5 | 36.6 | 57.4 | 156.18 | -2,529.4 | 1,628.8 | 5,997.6 | 5,926.6 | 96.456 | | |
| 9,067.2 | 8,653.0 | 6,170.0 | 5,266.8 | 36.7 | 58.3 | 156.03 | -2,568.7 | 1,654.4 | 6,053.8 | 5,981.8 | 96.471 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|------------------------------|---------------------|---------------------------------|-------------------------|-------------------|---------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N/-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -147.53 | -43.0 | -27.4 | 51.0 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -147.53 | -43.0 | -27.4 | 51.0 | 49.4 | 32.191 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -147.53 | -43.0 | -27.4 | 51.0 | 48.2 | 18.024 | CC, ES | | |
| 300.0 | 300.0 | 298.1 | 298.1 | 2.3 | 2.1 | -154.69 | -45.1 | -27.2 | 54.3 | 50.1 | 12.894 | | | |
| 400.0 | 399.8 | 395.3 | 395.1 | 3.5 | 3.7 | -159.78 | -51.3 | -26.6 | 64.5 | 57.8 | 9.609 | SF | | |
| 500.0 | 499.5 | 490.7 | 489.9 | 4.4 | 4.5 | -165.32 | -61.4 | -25.8 | 82.2 | 73.8 | 9.758 | | | |
| 600.0 | 598.7 | 583.4 | 581.7 | 5.2 | 4.9 | -169.23 | -74.7 | -25.8 | 107.6 | 97.9 | 11.105 | | | |
| 700.0 | 697.5 | 673.1 | 669.9 | 5.8 | 5.6 | -167.36 | -90.7 | -27.5 | 140.2 | 129.1 | 12.636 | | | |
| 800.0 | 795.7 | 759.3 | 754.0 | 6.5 | 6.3 | -166.01 | -108.9 | -30.6 | 179.2 | 166.8 | 14.481 | | | |
| 900.0 | 893.2 | 841.4 | 833.6 | 7.1 | 6.9 | -164.88 | -128.9 | -35.0 | 224.4 | 210.8 | 16.566 | | | |
| 1,000.0 | 989.9 | 919.4 | 908.4 | 7.7 | 7.5 | -163.88 | -150.2 | -40.3 | 275.3 | 260.7 | 18.865 | | | |
| 1,100.0 | 1,085.7 | 992.8 | 978.1 | 8.2 | 8.1 | -162.93 | -172.3 | -46.4 | 331.5 | 315.9 | 21.343 | | | |
| 1,200.0 | 1,180.4 | 1,061.5 | 1,042.7 | 8.8 | 8.5 | -162.01 | -194.8 | -53.1 | 392.6 | 376.3 | 23.978 | | | |
| 1,300.0 | 1,273.9 | 1,125.6 | 1,102.3 | 9.4 | 9.0 | -161.10 | -217.3 | -60.2 | 458.4 | 441.2 | 26.742 | | | |
| 1,400.0 | 1,366.2 | 1,185.0 | 1,157.0 | 9.9 | 9.4 | -160.16 | -239.5 | -67.4 | 528.3 | 510.5 | 29.626 | | | |
| 1,500.0 | 1,457.2 | 1,239.9 | 1,206.9 | 10.3 | 9.7 | -159.59 | -261.1 | -74.7 | 601.9 | 583.6 | 32.754 | | | |
| 1,600.0 | 1,547.7 | 1,300.0 | 1,260.9 | 10.7 | 10.1 | -160.04 | -285.9 | -83.3 | 677.7 | 658.7 | 35.659 | | | |
| 1,700.0 | 1,638.3 | 1,341.1 | 1,297.5 | 11.1 | 10.3 | -160.26 | -303.6 | -89.6 | 754.6 | 735.3 | 39.102 | | | |
| 1,800.0 | 1,728.8 | 1,400.0 | 1,349.3 | 11.4 | 10.7 | -160.47 | -330.0 | -99.2 | 833.0 | 813.0 | 41.761 | | | |
| 1,900.0 | 1,819.4 | 1,433.1 | 1,378.1 | 11.8 | 10.9 | -160.55 | -345.3 | -104.8 | 912.3 | 892.1 | 45.281 | | | |
| 2,000.0 | 1,910.0 | 1,475.9 | 1,415.0 | 12.3 | 11.1 | -160.61 | -365.6 | -112.4 | 992.7 | 972.2 | 48.319 | | | |
| 2,100.0 | 2,000.5 | 1,516.8 | 1,449.8 | 12.7 | 11.3 | -160.64 | -385.7 | -120.0 | 1,074.2 | 1,053.3 | 51.467 | | | |
| 2,200.0 | 2,091.1 | 1,572.1 | 1,496.6 | 13.1 | 11.5 | -160.65 | -413.1 | -130.5 | 1,156.2 | 1,134.9 | 54.179 | | | |
| 2,300.0 | 2,181.6 | 1,629.3 | 1,545.0 | 13.6 | 11.7 | -160.66 | -441.6 | -141.4 | 1,238.3 | 1,216.4 | 56.668 | | | |
| 2,400.0 | 2,272.2 | 1,686.5 | 1,593.4 | 14.0 | 11.9 | -160.68 | -470.0 | -152.2 | 1,320.3 | 1,297.9 | 59.009 | | | |
| 2,500.0 | 2,362.8 | 1,743.6 | 1,641.8 | 14.5 | 12.1 | -160.69 | -498.5 | -163.1 | 1,402.4 | 1,379.4 | 61.204 | | | |
| 2,600.0 | 2,453.3 | 1,800.8 | 1,690.2 | 15.0 | 12.3 | -160.69 | -526.9 | -174.0 | 1,484.4 | 1,460.9 | 63.275 | | | |
| 2,700.0 | 2,543.9 | 1,858.0 | 1,738.6 | 15.5 | 12.5 | -160.70 | -555.3 | -184.8 | 1,566.4 | 1,542.4 | 65.216 | | | |
| 2,800.0 | 2,634.4 | 1,915.2 | 1,787.0 | 16.0 | 12.8 | -160.71 | -583.8 | -195.7 | 1,648.5 | 1,623.9 | 67.050 | | | |
| 2,900.0 | 2,725.0 | 1,972.4 | 1,835.4 | 16.5 | 13.0 | -160.72 | -612.2 | -206.5 | 1,730.5 | 1,705.3 | 68.765 | | | |
| 3,000.0 | 2,815.6 | 2,029.5 | 1,883.8 | 17.1 | 13.3 | -160.72 | -640.7 | -217.4 | 1,812.6 | 1,786.8 | 70.387 | | | |
| 3,100.0 | 2,906.1 | 2,086.7 | 1,932.2 | 17.8 | 13.5 | -160.73 | -669.1 | -228.2 | 1,894.6 | 1,868.3 | 71.918 | | | |
| 3,200.0 | 2,996.7 | 2,143.9 | 1,980.6 | 18.4 | 13.8 | -160.73 | -697.5 | -239.1 | 1,976.6 | 1,949.7 | 73.357 | | | |
| 3,300.0 | 3,087.2 | 2,201.1 | 2,029.0 | 19.1 | 14.2 | -160.74 | -726.0 | -250.0 | 2,058.7 | 2,031.1 | 74.720 | | | |
| 3,400.0 | 3,177.8 | 2,258.3 | 2,077.4 | 19.8 | 14.6 | -160.74 | -754.4 | -260.8 | 2,140.7 | 2,112.5 | 75.999 | | | |
| 3,500.0 | 3,268.4 | 2,315.4 | 2,125.9 | 20.5 | 15.0 | -160.74 | -782.8 | -271.7 | 2,222.8 | 2,194.0 | 77.212 | | | |
| 3,600.0 | 3,358.9 | 2,372.6 | 2,174.3 | 21.2 | 15.4 | -160.75 | -811.3 | -282.5 | 2,304.8 | 2,275.4 | 78.356 | | | |
| 3,700.0 | 3,449.5 | 2,429.8 | 2,222.7 | 21.9 | 15.9 | -160.75 | -839.7 | -293.4 | 2,386.8 | 2,356.8 | 79.438 | | | |
| 3,800.0 | 3,540.0 | 2,487.0 | 2,271.1 | 22.6 | 16.4 | -160.75 | -868.2 | -304.3 | 2,468.9 | 2,438.2 | 80.463 | | | |
| 3,900.0 | 3,630.6 | 2,544.1 | 2,319.5 | 23.3 | 16.9 | -160.76 | -896.6 | -315.1 | 2,550.9 | 2,519.6 | 81.431 | | | |
| 4,000.0 | 3,721.2 | 2,601.3 | 2,367.9 | 24.0 | 17.4 | -160.76 | -925.0 | -326.0 | 2,633.0 | 2,601.0 | 82.352 | | | |
| 4,100.0 | 3,811.7 | 2,658.5 | 2,416.3 | 24.7 | 17.9 | -160.76 | -953.5 | -336.8 | 2,715.0 | 2,682.4 | 83.220 | | | |
| 4,200.0 | 3,902.3 | 2,715.7 | 2,464.7 | 25.4 | 18.4 | -160.76 | -981.9 | -347.7 | 2,797.0 | 2,763.8 | 84.047 | | | |
| 4,300.0 | 3,992.8 | 2,772.9 | 2,513.1 | 26.2 | 19.0 | -160.77 | -1,010.4 | -358.5 | 2,879.1 | 2,845.1 | 84.830 | | | |
| 4,400.0 | 4,083.4 | 2,830.0 | 2,561.5 | 26.9 | 19.5 | -160.77 | -1,038.8 | -369.4 | 2,961.1 | 2,926.5 | 85.575 | | | |
| 4,500.0 | 4,174.0 | 2,887.2 | 2,609.9 | 27.6 | 20.0 | -160.77 | -1,067.2 | -380.3 | 3,043.1 | 3,007.9 | 86.283 | | | |
| 4,600.0 | 4,264.5 | 2,944.4 | 2,658.3 | 28.3 | 20.5 | -160.77 | -1,095.7 | -391.1 | 3,125.2 | 3,089.2 | 86.955 | | | |
| 4,700.0 | 4,355.1 | 3,001.6 | 2,706.7 | 29.0 | 21.0 | -160.78 | -1,124.1 | -402.0 | 3,207.2 | 3,170.6 | 87.596 | | | |
| 4,800.0 | 4,445.6 | 3,058.8 | 2,755.1 | 29.7 | 21.5 | -160.78 | -1,152.5 | -412.8 | 3,289.3 | 3,252.0 | 88.204 | | | |
| 4,900.0 | 4,536.2 | 3,115.9 | 2,803.5 | 30.4 | 22.1 | -160.78 | -1,181.0 | -423.7 | 3,371.3 | 3,333.3 | 88.785 | | | |
| 5,000.0 | 4,626.8 | 3,173.1 | 2,851.9 | 31.1 | 22.6 | -160.78 | -1,209.4 | -434.6 | 3,453.3 | 3,414.7 | 89.338 | | | |
| 5,100.0 | 4,717.9 | 3,231.3 | 2,901.1 | 31.8 | 23.1 | -161.55 | -1,238.4 | -445.6 | 3,534.7 | 3,495.3 | 89.822 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 3,292.1 | 2,952.6 | 32.5 | 23.7 | -162.32 | -1,268.6 | -457.2 | 3,614.0 | 3,573.9 | 90.123 | | |
| 5,300.0 | 4,904.1 | 3,355.5 | 3,006.3 | 33.1 | 24.3 | -162.98 | -1,300.1 | -469.2 | 3,691.3 | 3,650.5 | 90.298 | | |
| 5,400.0 | 4,999.0 | 3,421.3 | 3,062.0 | 33.6 | 24.9 | -163.55 | -1,332.9 | -481.7 | 3,766.5 | 3,724.8 | 90.370 | | |
| 5,500.0 | 5,094.9 | 3,489.6 | 3,119.8 | 34.1 | 25.5 | -164.04 | -1,366.8 | -494.7 | 3,839.4 | 3,796.9 | 90.348 | | |
| 5,600.0 | 5,191.8 | 3,560.2 | 3,179.6 | 34.5 | 26.1 | -164.46 | -1,402.0 | -508.1 | 3,910.0 | 3,866.6 | 90.240 | | |
| 5,700.0 | 5,289.5 | 3,633.1 | 3,241.2 | 34.9 | 26.8 | -164.82 | -1,438.2 | -521.9 | 3,978.1 | 3,934.0 | 90.058 | | |
| 5,800.0 | 5,387.8 | 3,708.1 | 3,304.7 | 35.2 | 27.5 | -165.13 | -1,475.5 | -536.1 | 4,043.8 | 3,998.8 | 89.810 | | |
| 5,900.0 | 5,486.8 | 3,785.1 | 3,370.0 | 35.5 | 28.2 | -165.38 | -1,513.8 | -550.8 | 4,106.9 | 4,061.0 | 89.505 | | |
| 6,000.0 | 5,586.1 | 3,864.2 | 3,436.9 | 35.7 | 28.9 | -165.59 | -1,553.1 | -565.8 | 4,167.4 | 4,120.7 | 89.157 | | |
| 6,100.0 | 5,685.8 | 3,945.1 | 3,505.4 | 35.8 | 29.7 | -165.77 | -1,593.4 | -581.1 | 4,225.2 | 4,177.6 | 88.780 | | |
| 6,200.0 | 5,785.8 | 4,027.8 | 3,575.3 | 35.9 | 30.4 | -165.90 | -1,634.5 | -596.9 | 4,280.2 | 4,231.8 | 88.401 | | |
| 6,300.0 | 5,885.8 | 4,112.0 | 3,646.7 | 35.9 | 31.2 | -175.39 | -1,676.4 | -612.9 | 4,332.5 | 4,283.5 | 88.318 | | |
| 6,400.0 | 5,985.8 | 4,196.7 | 3,718.3 | 36.0 | 32.0 | -175.20 | -1,718.5 | -628.9 | 4,384.2 | 4,334.6 | 88.351 | | |
| 6,500.0 | 6,085.8 | 4,281.3 | 3,790.0 | 36.0 | 32.8 | -175.01 | -1,760.6 | -645.0 | 4,435.9 | 4,385.8 | 88.374 | | |
| 6,600.0 | 6,185.8 | 4,366.0 | 3,861.7 | 36.0 | 33.6 | -174.82 | -1,802.7 | -661.1 | 4,487.7 | 4,436.9 | 88.393 | | |
| 6,700.0 | 6,285.8 | 4,450.6 | 3,933.3 | 36.0 | 34.3 | -174.64 | -1,844.8 | -677.2 | 4,539.5 | 4,488.2 | 88.410 | | |
| 6,800.0 | 6,385.8 | 4,535.3 | 4,005.0 | 36.0 | 35.1 | -174.47 | -1,886.9 | -693.2 | 4,591.4 | 4,539.4 | 88.424 | | |
| 6,900.0 | 6,485.8 | 4,619.9 | 4,076.6 | 36.1 | 35.9 | -174.30 | -1,929.0 | -709.3 | 4,643.2 | 4,590.7 | 88.435 | | |
| 7,000.0 | 6,585.8 | 4,704.4 | 4,148.3 | 36.1 | 36.7 | -174.13 | -1,971.1 | -725.4 | 4,695.0 | 4,642.0 | 88.446 | | |
| 7,100.0 | 6,685.8 | 4,789.4 | 4,220.0 | 36.1 | 37.5 | -173.96 | -2,013.2 | -741.5 | 4,746.8 | 4,693.1 | 88.457 | | |
| 7,200.0 | 6,785.8 | 4,874.4 | 4,291.7 | 36.2 | 38.3 | -173.79 | -2,055.3 | -757.6 | 4,798.6 | 4,744.2 | 88.468 | | |
| 7,300.0 | 6,885.8 | 4,959.4 | 4,363.3 | 36.2 | 39.1 | -173.62 | -2,097.4 | -773.7 | 4,850.4 | 4,795.3 | 88.479 | | |
| 7,400.0 | 6,985.8 | 5,044.4 | 4,435.0 | 36.2 | 39.9 | -173.45 | -2,139.5 | -789.8 | 4,902.2 | 4,846.4 | 88.490 | | |
| 7,500.0 | 7,085.8 | 5,129.4 | 4,506.7 | 36.2 | 40.7 | -173.28 | -2,181.6 | -805.9 | 4,954.0 | 4,897.5 | 88.501 | | |
| 7,600.0 | 7,185.8 | 5,214.4 | 4,578.3 | 36.3 | 41.5 | -173.11 | -2,223.7 | -822.0 | 5,005.8 | 4,948.6 | 88.512 | | |
| 7,700.0 | 7,285.8 | 5,299.4 | 4,650.0 | 36.3 | 42.3 | -172.94 | -2,265.8 | -838.1 | 5,057.6 | 4,999.7 | 88.523 | | |
| 7,800.0 | 7,385.8 | 5,384.4 | 4,721.7 | 36.3 | 43.1 | -172.77 | -2,307.9 | -854.2 | 5,109.4 | 5,050.8 | 88.534 | | |
| 7,900.0 | 7,485.8 | 5,469.4 | 4,793.3 | 36.3 | 43.9 | -172.60 | -2,350.0 | -870.3 | 5,161.2 | 5,101.9 | 88.545 | | |
| 8,000.0 | 7,585.8 | 5,554.4 | 4,865.0 | 36.4 | 44.7 | -172.43 | -2,392.1 | -886.4 | 5,213.0 | 5,153.0 | 88.556 | | |
| 8,100.0 | 7,685.8 | 5,639.4 | 4,936.7 | 36.4 | 45.5 | -172.26 | -2,434.2 | -902.5 | 5,264.8 | 5,204.1 | 88.567 | | |
| 8,200.0 | 7,785.8 | 5,724.4 | 5,008.3 | 36.4 | 46.3 | -172.09 | -2,476.3 | -918.6 | 5,316.6 | 5,255.2 | 88.578 | | |
| 8,300.0 | 7,885.8 | 5,809.4 | 5,080.0 | 36.4 | 47.1 | -171.92 | -2,518.4 | -934.7 | 5,368.4 | 5,306.3 | 88.589 | | |
| 8,400.0 | 7,985.8 | 5,894.4 | 5,151.7 | 36.5 | 47.9 | -171.75 | -2,560.5 | -950.8 | 5,420.2 | 5,357.4 | 88.600 | | |
| 8,500.0 | 8,085.8 | 5,979.4 | 5,223.3 | 36.5 | 48.7 | -171.58 | -2,602.6 | -966.9 | 5,472.0 | 5,408.5 | 88.611 | | |
| 8,600.0 | 8,185.8 | 6,064.4 | 5,295.0 | 36.5 | 49.5 | -171.41 | -2,644.7 | -983.0 | 5,523.8 | 5,459.6 | 88.622 | | |
| 8,700.0 | 8,285.8 | 6,149.4 | 5,366.7 | 36.6 | 50.3 | -171.24 | -2,686.8 | -999.1 | 5,575.6 | 5,510.7 | 88.633 | | |
| 8,800.0 | 8,385.8 | 6,234.4 | 5,438.3 | 36.6 | 51.1 | -171.07 | -2,728.9 | -1,015.2 | 5,627.4 | 5,561.8 | 88.644 | | |
| 8,900.0 | 8,485.8 | 6,319.4 | 5,510.0 | 36.6 | 51.9 | -170.90 | -2,771.0 | -1,031.3 | 5,679.2 | 5,612.9 | 88.655 | | |
| 9,000.0 | 8,585.8 | 6,404.4 | 5,581.7 | 36.6 | 52.7 | -170.73 | -2,813.1 | -1,047.4 | 5,731.0 | 5,664.0 | 88.666 | | |
| 9,067.2 | 8,653.0 | 6,466.6 | 5,633.3 | 36.7 | 53.5 | -170.56 | -2,855.2 | -1,063.5 | 5,782.8 | 5,715.1 | 88.677 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -154.67 | -28.6 | -13.5 | 31.6 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -154.67 | -28.6 | -13.5 | 31.6 | 30.0 | 19.963 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.4 | 1.4 | -154.67 | -28.6 | -13.5 | 31.6 | 28.8 | 11.178 | CC, ES | |
| 300.0 | 300.0 | 299.1 | 299.0 | 2.3 | 2.1 | -163.55 | -30.4 | -12.5 | 34.6 | 30.4 | 8.347 | | |
| 400.0 | 399.8 | 397.3 | 397.0 | 3.5 | 3.7 | -171.88 | -36.0 | -9.3 | 44.1 | 37.6 | 6.754 | SF | |
| 500.0 | 499.5 | 493.8 | 493.0 | 4.4 | 4.9 | -179.69 | -44.9 | -4.3 | 61.2 | 52.6 | 7.137 | | |
| 600.0 | 598.7 | 587.9 | 586.1 | 5.2 | 5.8 | 174.72 | -57.1 | 2.6 | 85.8 | 75.5 | 8.346 | | |
| 700.0 | 697.5 | 678.9 | 675.4 | 5.8 | 6.6 | 174.97 | -72.0 | 11.0 | 117.6 | 105.9 | 10.038 | | |
| 800.0 | 795.7 | 766.0 | 760.3 | 6.5 | 7.3 | 174.85 | -89.1 | 20.7 | 156.3 | 143.4 | 12.054 | | |
| 900.0 | 893.2 | 848.9 | 840.3 | 7.1 | 7.9 | 174.66 | -108.0 | 31.4 | 201.6 | 187.5 | 14.307 | | |
| 1,000.0 | 989.9 | 927.1 | 915.0 | 7.7 | 8.4 | 174.50 | -128.1 | 42.8 | 253.0 | 237.9 | 16.757 | | |
| 1,100.0 | 1,085.7 | 1,000.0 | 983.9 | 8.2 | 8.9 | 174.37 | -148.8 | 54.6 | 310.1 | 294.1 | 19.387 | | |
| 1,200.0 | 1,180.4 | 1,068.6 | 1,048.0 | 8.8 | 9.4 | 174.27 | -170.1 | 66.6 | 372.4 | 355.6 | 22.151 | | |
| 1,300.0 | 1,273.9 | 1,131.7 | 1,106.3 | 9.4 | 9.8 | 174.19 | -191.1 | 78.5 | 439.6 | 422.1 | 25.059 | | |
| 1,400.0 | 1,366.2 | 1,189.7 | 1,159.3 | 9.9 | 10.2 | 174.13 | -211.7 | 90.2 | 511.2 | 493.0 | 28.091 | | |
| 1,500.0 | 1,457.2 | 1,242.8 | 1,207.2 | 10.3 | 10.5 | 173.94 | -231.5 | 101.4 | 586.7 | 568.0 | 31.371 | | |
| 1,600.0 | 1,547.7 | 1,300.0 | 1,258.2 | 10.7 | 10.8 | 173.37 | -253.9 | 114.1 | 664.3 | 645.0 | 34.475 | | |
| 1,700.0 | 1,638.3 | 1,339.9 | 1,293.5 | 11.1 | 11.1 | 173.01 | -270.2 | 123.3 | 743.1 | 723.6 | 38.040 | | |
| 1,800.0 | 1,728.8 | 1,384.8 | 1,332.7 | 11.4 | 11.3 | 172.64 | -289.2 | 134.1 | 823.1 | 803.2 | 41.310 | | |
| 1,900.0 | 1,819.4 | 1,427.5 | 1,369.6 | 11.8 | 11.6 | 172.32 | -307.8 | 144.6 | 904.3 | 884.0 | 44.547 | | |
| 2,000.0 | 1,910.0 | 1,468.0 | 1,404.3 | 12.3 | 11.8 | 172.03 | -326.1 | 155.0 | 986.5 | 965.8 | 47.753 | | |
| 2,100.0 | 2,000.5 | 1,500.0 | 1,431.4 | 12.7 | 12.0 | 171.82 | -340.9 | 163.4 | 1,069.7 | 1,048.8 | 51.213 | | |
| 2,200.0 | 2,091.1 | 1,543.2 | 1,467.6 | 13.1 | 12.2 | 171.54 | -361.4 | 175.0 | 1,153.7 | 1,132.4 | 54.082 | | |
| 2,300.0 | 2,181.6 | 1,578.2 | 1,496.6 | 13.6 | 12.4 | 171.33 | -378.4 | 184.6 | 1,238.6 | 1,216.9 | 57.210 | | |
| 2,400.0 | 2,272.2 | 1,600.0 | 1,514.5 | 14.0 | 12.5 | 171.21 | -389.2 | 190.7 | 1,324.3 | 1,302.5 | 60.866 | | |
| 2,500.0 | 2,362.8 | 1,643.3 | 1,549.7 | 14.5 | 12.7 | 170.97 | -411.1 | 203.1 | 1,410.6 | 1,388.3 | 63.403 | | |
| 2,600.0 | 2,453.3 | 1,673.6 | 1,574.1 | 15.0 | 12.9 | 170.80 | -426.8 | 212.0 | 1,497.6 | 1,475.1 | 66.469 | | |
| 2,700.0 | 2,543.9 | 1,700.0 | 1,595.2 | 15.5 | 13.0 | 170.67 | -440.7 | 219.9 | 1,585.2 | 1,562.5 | 69.644 | | |
| 2,800.0 | 2,634.4 | 1,730.2 | 1,619.0 | 16.0 | 13.2 | 170.51 | -456.8 | 229.0 | 1,673.5 | 1,650.4 | 72.679 | | |
| 2,900.0 | 2,725.0 | 1,756.7 | 1,639.7 | 16.5 | 13.3 | 170.38 | -471.2 | 237.2 | 1,762.2 | 1,739.0 | 75.816 | | |
| 3,000.0 | 2,815.6 | 1,788.3 | 1,664.2 | 17.1 | 13.4 | 170.23 | -488.6 | 247.0 | 1,851.5 | 1,828.0 | 78.701 | | |
| 3,100.0 | 2,906.1 | 1,833.1 | 1,698.8 | 17.8 | 13.5 | 170.03 | -513.3 | 261.0 | 1,940.9 | 1,916.9 | 80.986 | | |
| 3,200.0 | 2,996.7 | 1,877.8 | 1,733.4 | 18.4 | 13.7 | 169.85 | -538.0 | 275.0 | 2,030.2 | 2,005.8 | 83.160 | | |
| 3,300.0 | 3,087.2 | 1,922.6 | 1,768.1 | 19.1 | 13.8 | 169.69 | -562.7 | 289.0 | 2,119.6 | 2,094.8 | 85.233 | | |
| 3,400.0 | 3,177.8 | 1,967.4 | 1,802.7 | 19.8 | 14.0 | 169.54 | -587.4 | 303.0 | 2,209.0 | 2,183.7 | 87.202 | | |
| 3,500.0 | 3,268.4 | 2,012.1 | 1,837.3 | 20.5 | 14.1 | 169.40 | -612.1 | 317.0 | 2,298.4 | 2,272.6 | 89.088 | | |
| 3,600.0 | 3,358.9 | 2,056.9 | 1,871.9 | 21.2 | 14.2 | 169.27 | -636.8 | 330.9 | 2,387.8 | 2,361.5 | 90.897 | | |
| 3,700.0 | 3,449.5 | 2,101.6 | 1,906.5 | 21.9 | 14.4 | 169.15 | -661.5 | 344.9 | 2,477.2 | 2,450.4 | 92.570 | | |
| 3,800.0 | 3,540.0 | 2,146.4 | 1,941.1 | 22.6 | 14.9 | 169.04 | -686.2 | 358.9 | 2,566.6 | 2,539.3 | 94.098 | | |
| 3,900.0 | 3,630.6 | 2,191.2 | 1,975.7 | 23.3 | 15.4 | 168.93 | -710.9 | 372.9 | 2,656.0 | 2,628.2 | 95.711 | | |
| 4,000.0 | 3,721.2 | 2,235.9 | 2,010.3 | 24.0 | 15.9 | 168.83 | -735.6 | 386.9 | 2,745.4 | 2,717.1 | 97.216 | | |
| 4,100.0 | 3,811.7 | 2,280.7 | 2,044.9 | 24.7 | 16.5 | 168.74 | -760.3 | 400.9 | 2,834.8 | 2,806.0 | 98.640 | | |
| 4,200.0 | 3,902.3 | 2,325.4 | 2,079.6 | 25.4 | 17.0 | 168.66 | -785.0 | 414.9 | 2,924.2 | 2,894.9 | 99.997 | | |
| 4,300.0 | 3,992.8 | 2,370.2 | 2,114.2 | 26.2 | 17.5 | 168.58 | -809.7 | 428.9 | 3,013.6 | 2,983.8 | 101.289 | | |
| 4,400.0 | 4,083.4 | 2,415.0 | 2,148.8 | 26.9 | 18.0 | 168.50 | -834.3 | 442.8 | 3,103.0 | 3,072.7 | 102.530 | | |
| 4,500.0 | 4,174.0 | 2,459.7 | 2,183.4 | 27.6 | 18.6 | 168.43 | -859.0 | 456.8 | 3,192.4 | 3,161.6 | 103.706 | | |
| 4,600.0 | 4,264.5 | 2,504.5 | 2,218.0 | 28.3 | 19.1 | 168.36 | -883.7 | 470.8 | 3,281.8 | 3,250.5 | 104.844 | | |
| 4,700.0 | 4,355.1 | 2,549.3 | 2,252.6 | 29.0 | 19.6 | 168.30 | -908.4 | 484.8 | 3,371.2 | 3,339.4 | 105.917 | | |
| 4,800.0 | 4,445.6 | 2,594.0 | 2,287.2 | 29.7 | 20.2 | 168.23 | -933.1 | 498.8 | 3,460.6 | 3,428.3 | 106.956 | | |
| 4,900.0 | 4,536.2 | 2,638.8 | 2,321.8 | 30.4 | 20.7 | 168.18 | -957.8 | 512.8 | 3,550.0 | 3,517.1 | 107.940 | | |
| 5,000.0 | 4,626.8 | 2,683.5 | 2,356.4 | 31.1 | 21.2 | 168.12 | -982.5 | 526.8 | 3,639.4 | 3,606.0 | 108.888 | | |
| 5,100.0 | 4,717.9 | 2,729.4 | 2,391.9 | 31.8 | 21.8 | 168.73 | -1,007.8 | 541.1 | 3,728.3 | 3,694.3 | 109.736 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | Currier 0993-16-07 Pad - Currier BCU 0993-16-15E - OH - Design #3 | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|----------------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|---|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,200.0 | 4,810.3 | 2,778.3 | 2,429.7 | 32.5 | 22.4 | 169.33 | -1,034.8 | 556.4 | 3,815.5 | 3,780.9 | 110.344 | | |
| 5,300.0 | 4,904.1 | 2,830.0 | 2,469.7 | 33.1 | 23.0 | 169.83 | -1,063.4 | 572.5 | 3,901.0 | 3,865.8 | 110.770 | | |
| 5,400.0 | 4,999.0 | 2,884.6 | 2,511.9 | 33.6 | 23.6 | 170.25 | -1,093.5 | 589.6 | 3,984.6 | 3,948.7 | 111.044 | | |
| 5,500.0 | 5,094.9 | 2,942.0 | 2,556.3 | 34.1 | 24.3 | 170.60 | -1,125.2 | 607.6 | 4,066.4 | 4,029.8 | 111.172 | | |
| 5,600.0 | 5,191.8 | 3,002.2 | 2,602.8 | 34.5 | 25.0 | 170.90 | -1,158.3 | 626.3 | 4,146.1 | 4,108.8 | 111.175 | | |
| 5,700.0 | 5,289.5 | 3,064.9 | 2,651.4 | 34.9 | 25.8 | 171.15 | -1,193.0 | 646.0 | 4,223.7 | 4,185.6 | 111.053 | | |
| 5,800.0 | 5,387.8 | 3,130.3 | 2,701.9 | 35.2 | 26.6 | 171.36 | -1,229.0 | 666.4 | 4,299.0 | 4,260.3 | 110.830 | | |
| 5,900.0 | 5,486.8 | 3,198.1 | 2,754.3 | 35.5 | 27.4 | 171.53 | -1,266.5 | 687.6 | 4,372.1 | 4,332.6 | 110.519 | | |
| 6,000.0 | 5,586.1 | 3,268.4 | 2,808.7 | 35.7 | 28.2 | 171.68 | -1,305.2 | 709.5 | 4,442.8 | 4,402.5 | 110.131 | | |
| 6,100.0 | 5,685.8 | 3,340.9 | 2,864.8 | 35.8 | 29.1 | 171.79 | -1,345.2 | 732.2 | 4,511.0 | 4,469.9 | 109.692 | | |
| 6,200.0 | 5,785.8 | 3,415.7 | 2,922.6 | 35.9 | 30.0 | 171.88 | -1,386.5 | 755.6 | 4,576.7 | 4,534.8 | 109.239 | | |
| 6,300.0 | 5,885.8 | 3,492.6 | 2,982.0 | 35.9 | 30.9 | 162.40 | -1,428.9 | 779.6 | 4,639.9 | 4,597.4 | 109.180 | | |
| 6,400.0 | 5,985.8 | 3,569.9 | 3,041.8 | 36.0 | 31.9 | 162.24 | -1,471.6 | 803.8 | 4,702.5 | 4,659.5 | 109.262 | | |
| 6,500.0 | 6,085.8 | 3,647.2 | 3,101.6 | 36.0 | 32.8 | 162.09 | -1,514.2 | 827.9 | 4,765.1 | 4,721.5 | 109.327 | | |
| 6,600.0 | 6,185.8 | 3,724.5 | 3,161.4 | 36.0 | 33.7 | 161.94 | -1,556.9 | 852.1 | 4,827.8 | 4,783.6 | 109.384 | | |
| 6,700.0 | 6,285.8 | 3,801.8 | 3,221.2 | 36.0 | 34.7 | 161.79 | -1,599.6 | 876.2 | 4,890.4 | 4,845.7 | 109.431 | | |
| 6,800.0 | 6,385.8 | 3,879.2 | 3,281.0 | 36.0 | 35.6 | 161.65 | -1,642.2 | 900.4 | 4,953.1 | 4,907.9 | 109.469 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|-----------------------|------------------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|---------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Offset Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -150.28 | -35.8 | -20.4 | 41.2 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -150.28 | -35.8 | -20.4 | 41.2 | 39.6 | 26.025 | | | |
| 113.0 | 113.0 | 113.0 | 113.0 | 0.9 | 0.9 | -150.28 | -35.8 | -20.4 | 41.2 | 39.5 | 23.701 | CC | | |
| 200.0 | 200.0 | 199.9 | 199.9 | 1.4 | 1.3 | -150.30 | -35.8 | -20.4 | 41.2 | 38.5 | 15.092 | ES | | |
| 300.0 | 300.0 | 298.6 | 298.5 | 2.3 | 2.5 | -158.71 | -38.2 | -19.6 | 44.6 | 40.1 | 9.929 | | | |
| 400.0 | 399.8 | 396.3 | 396.0 | 3.5 | 4.0 | -165.75 | -44.5 | -17.3 | 54.6 | 47.8 | 8.009 | SF | | |
| 500.0 | 499.5 | 492.3 | 491.4 | 4.4 | 5.1 | -172.81 | -54.5 | -13.6 | 72.2 | 63.3 | 8.174 | | | |
| 600.0 | 598.7 | 585.5 | 583.6 | 5.2 | 5.4 | -177.63 | -67.7 | -9.8 | 97.5 | 87.4 | 9.652 | | | |
| 700.0 | 697.5 | 675.9 | 672.5 | 5.8 | 6.0 | -175.77 | -83.7 | -7.7 | 129.9 | 118.6 | 11.482 | | | |
| 800.0 | 795.7 | 762.7 | 757.4 | 6.5 | 6.5 | -174.10 | -102.0 | -7.3 | 168.8 | 156.4 | 13.527 | | | |
| 900.0 | 893.2 | 845.7 | 837.9 | 7.1 | 7.1 | -172.57 | -122.1 | -8.4 | 213.9 | 200.3 | 15.746 | | | |
| 1,000.0 | 989.9 | 924.5 | 913.7 | 7.7 | 7.6 | -171.16 | -143.5 | -10.7 | 264.6 | 250.0 | 18.126 | | | |
| 1,100.0 | 1,085.7 | 1,000.0 | 985.6 | 8.2 | 8.1 | -169.86 | -166.2 | -14.1 | 320.7 | 305.1 | 20.616 | | | |
| 1,200.0 | 1,180.4 | 1,068.4 | 1,050.1 | 8.8 | 8.5 | -168.64 | -188.5 | -18.2 | 381.7 | 365.3 | 23.315 | | | |
| 1,300.0 | 1,273.9 | 1,133.3 | 1,110.7 | 9.4 | 8.9 | -167.48 | -211.3 | -22.9 | 447.3 | 430.1 | 26.099 | | | |
| 1,400.0 | 1,366.2 | 1,200.0 | 1,172.3 | 9.9 | 9.4 | -166.37 | -236.2 | -28.7 | 517.2 | 499.2 | 28.787 | | | |
| 1,500.0 | 1,457.2 | 1,249.2 | 1,217.3 | 10.3 | 9.7 | -165.58 | -255.6 | -33.5 | 590.7 | 572.3 | 32.131 | | | |
| 1,600.0 | 1,547.7 | 1,300.0 | 1,263.3 | 10.7 | 10.0 | -165.68 | -276.5 | -39.0 | 666.3 | 647.5 | 35.398 | | | |
| 1,700.0 | 1,638.3 | 1,352.0 | 1,309.8 | 11.1 | 10.3 | -165.69 | -298.8 | -45.2 | 743.1 | 723.8 | 38.486 | | | |
| 1,800.0 | 1,728.8 | 1,400.0 | 1,352.4 | 11.4 | 10.6 | -165.65 | -320.2 | -51.4 | 821.2 | 801.5 | 41.582 | | | |
| 1,900.0 | 1,819.4 | 1,445.6 | 1,392.3 | 11.8 | 10.8 | -165.58 | -341.2 | -57.6 | 900.4 | 880.3 | 44.653 | | | |
| 2,000.0 | 1,910.0 | 1,500.0 | 1,439.4 | 12.3 | 11.1 | -165.45 | -367.2 | -65.7 | 980.8 | 960.0 | 47.250 | | | |
| 2,100.0 | 2,000.5 | 1,530.8 | 1,465.9 | 12.7 | 11.3 | -165.36 | -382.4 | -70.5 | 1,061.9 | 1,041.0 | 50.677 | | | |
| 2,200.0 | 2,091.1 | 1,570.7 | 1,499.6 | 13.1 | 11.5 | -165.23 | -402.4 | -76.9 | 1,144.1 | 1,122.8 | 53.644 | | | |
| 2,300.0 | 2,181.6 | 1,600.0 | 1,524.3 | 13.6 | 11.7 | -165.12 | -417.5 | -81.9 | 1,227.2 | 1,205.6 | 56.975 | | | |
| 2,400.0 | 2,272.2 | 1,645.1 | 1,561.8 | 14.0 | 11.9 | -164.95 | -441.2 | -89.9 | 1,311.0 | 1,288.9 | 59.502 | | | |
| 2,500.0 | 2,362.8 | 1,679.9 | 1,590.5 | 14.5 | 12.1 | -164.81 | -459.9 | -96.3 | 1,395.6 | 1,373.2 | 62.396 | | | |
| 2,600.0 | 2,453.3 | 1,713.2 | 1,617.6 | 15.0 | 12.3 | -164.67 | -478.2 | -102.6 | 1,480.9 | 1,458.2 | 65.372 | | | |
| 2,700.0 | 2,543.9 | 1,750.3 | 1,647.5 | 15.5 | 12.4 | -164.50 | -498.9 | -109.9 | 1,566.8 | 1,543.9 | 68.281 | | | |
| 2,800.0 | 2,634.4 | 1,801.0 | 1,688.3 | 16.0 | 12.6 | -164.30 | -527.4 | -119.9 | 1,652.9 | 1,629.5 | 70.554 | | | |
| 2,900.0 | 2,725.0 | 1,851.8 | 1,729.1 | 16.5 | 12.8 | -164.11 | -555.8 | -130.0 | 1,739.0 | 1,715.1 | 72.687 | | | |
| 3,000.0 | 2,815.6 | 1,902.5 | 1,769.9 | 17.1 | 13.0 | -163.94 | -584.3 | -140.0 | 1,825.2 | 1,800.7 | 74.720 | | | |
| 3,100.0 | 2,906.1 | 1,953.2 | 1,810.7 | 17.8 | 13.3 | -163.79 | -612.7 | -150.0 | 1,911.3 | 1,886.4 | 76.626 | | | |
| 3,200.0 | 2,996.7 | 2,004.0 | 1,851.5 | 18.4 | 13.5 | -163.64 | -641.2 | -160.1 | 1,997.4 | 1,972.0 | 78.443 | | | |
| 3,300.0 | 3,087.2 | 2,054.7 | 1,892.3 | 19.1 | 13.8 | -163.52 | -669.6 | -170.1 | 2,083.6 | 2,057.6 | 80.153 | | | |
| 3,400.0 | 3,177.8 | 2,105.5 | 1,933.1 | 19.8 | 14.1 | -163.40 | -698.1 | -180.1 | 2,169.7 | 2,143.2 | 81.784 | | | |
| 3,500.0 | 3,268.4 | 2,156.2 | 1,973.9 | 20.5 | 14.5 | -163.29 | -726.5 | -190.2 | 2,255.9 | 2,228.8 | 83.321 | | | |
| 3,600.0 | 3,358.9 | 2,206.9 | 2,014.7 | 21.2 | 14.9 | -163.18 | -755.0 | -200.2 | 2,342.0 | 2,314.4 | 84.786 | | | |
| 3,700.0 | 3,449.5 | 2,257.7 | 2,055.5 | 21.9 | 15.3 | -163.09 | -783.4 | -210.2 | 2,428.2 | 2,400.0 | 86.169 | | | |
| 3,800.0 | 3,540.0 | 2,308.4 | 2,096.3 | 22.6 | 15.7 | -163.00 | -811.9 | -220.3 | 2,514.3 | 2,485.6 | 87.488 | | | |
| 3,900.0 | 3,630.6 | 2,359.2 | 2,137.1 | 23.3 | 16.2 | -162.92 | -840.3 | -230.3 | 2,600.5 | 2,571.2 | 88.734 | | | |
| 4,000.0 | 3,721.2 | 2,409.9 | 2,177.8 | 24.0 | 16.7 | -162.84 | -868.8 | -240.3 | 2,686.6 | 2,656.7 | 89.923 | | | |
| 4,100.0 | 3,811.7 | 2,460.6 | 2,218.6 | 24.7 | 17.1 | -162.77 | -897.2 | -250.4 | 2,772.8 | 2,742.3 | 91.048 | | | |
| 4,200.0 | 3,902.3 | 2,511.4 | 2,259.4 | 25.4 | 17.6 | -162.70 | -925.7 | -260.4 | 2,858.9 | 2,827.9 | 92.122 | | | |
| 4,300.0 | 3,992.8 | 2,562.1 | 2,300.2 | 26.2 | 18.1 | -162.64 | -954.1 | -270.5 | 2,945.1 | 2,913.5 | 93.140 | | | |
| 4,400.0 | 4,083.4 | 2,612.9 | 2,341.0 | 26.9 | 18.6 | -162.58 | -982.6 | -280.5 | 3,031.2 | 2,999.0 | 94.111 | | | |
| 4,500.0 | 4,174.0 | 2,663.6 | 2,381.8 | 27.6 | 19.1 | -162.52 | -1,011.0 | -290.5 | 3,117.4 | 3,084.6 | 95.033 | | | |
| 4,600.0 | 4,264.5 | 2,714.3 | 2,422.6 | 28.3 | 19.6 | -162.47 | -1,039.5 | -300.6 | 3,203.5 | 3,170.1 | 95.914 | | | |
| 4,700.0 | 4,355.1 | 2,765.1 | 2,463.4 | 29.0 | 20.1 | -162.42 | -1,067.9 | -310.6 | 3,289.7 | 3,255.7 | 96.750 | | | |
| 4,800.0 | 4,445.6 | 2,815.8 | 2,504.2 | 29.7 | 20.6 | -162.37 | -1,096.4 | -320.6 | 3,375.9 | 3,341.3 | 97.550 | | | |
| 4,900.0 | 4,536.2 | 2,866.6 | 2,545.0 | 30.4 | 21.1 | -162.32 | -1,124.8 | -330.7 | 3,462.0 | 3,426.8 | 98.311 | | | |
| 5,000.0 | 4,626.8 | 2,917.3 | 2,585.8 | 31.1 | 21.6 | -162.28 | -1,153.3 | -340.7 | 3,548.2 | 3,512.4 | 99.038 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,100.0 | 4,717.9 | 2,969.1 | 2,627.5 | 31.8 | 22.1 | -163.07 | -1,182.3 | -351.0 | 3,633.7 | 3,597.2 | 99.682 | | |
| 5,200.0 | 4,810.3 | 3,023.7 | 2,671.3 | 32.5 | 22.6 | -163.86 | -1,212.9 | -361.7 | 3,717.5 | 3,680.3 | 100.117 | | |
| 5,300.0 | 4,904.1 | 3,080.9 | 2,717.4 | 33.1 | 23.2 | -164.54 | -1,245.0 | -373.1 | 3,799.3 | 3,761.5 | 100.403 | | |
| 5,400.0 | 4,999.0 | 3,140.8 | 2,765.5 | 33.6 | 23.8 | -165.11 | -1,278.6 | -384.9 | 3,879.2 | 3,840.7 | 100.563 | | |
| 5,500.0 | 5,094.9 | 3,203.3 | 2,815.8 | 34.1 | 24.4 | -165.60 | -1,313.6 | -397.3 | 3,957.1 | 3,917.8 | 100.611 | | |
| 5,600.0 | 5,191.8 | 3,268.3 | 2,868.0 | 34.5 | 25.1 | -166.02 | -1,350.1 | -410.1 | 4,032.8 | 3,992.7 | 100.551 | | |
| 5,700.0 | 5,289.5 | 3,335.7 | 2,922.2 | 34.9 | 25.8 | -166.37 | -1,387.8 | -423.5 | 4,106.2 | 4,065.3 | 100.400 | | |
| 5,800.0 | 5,387.8 | 3,405.4 | 2,978.3 | 35.2 | 26.5 | -166.67 | -1,426.9 | -437.2 | 4,177.4 | 4,135.6 | 100.168 | | |
| 5,900.0 | 5,486.8 | 3,477.4 | 3,036.2 | 35.5 | 27.2 | -166.92 | -1,467.3 | -451.5 | 4,246.1 | 4,203.6 | 99.865 | | |
| 6,000.0 | 5,586.1 | 3,551.5 | 3,095.8 | 35.7 | 28.0 | -167.13 | -1,508.9 | -466.1 | 4,312.3 | 4,269.0 | 99.508 | | |
| 6,100.0 | 5,685.8 | 3,627.7 | 3,157.0 | 35.8 | 28.7 | -167.29 | -1,551.6 | -481.2 | 4,376.0 | 4,331.8 | 99.113 | | |
| 6,200.0 | 5,785.8 | 3,705.9 | 3,219.9 | 35.9 | 29.5 | -167.43 | -1,595.4 | -496.7 | 4,437.0 | 4,392.1 | 98.712 | | |
| 6,300.0 | 5,885.8 | 3,785.9 | 3,284.2 | 35.9 | 30.3 | -176.91 | -1,640.3 | -512.5 | 4,495.5 | 4,449.9 | 98.650 | | |
| 6,400.0 | 5,985.8 | 3,866.3 | 3,348.9 | 36.0 | 31.2 | -176.70 | -1,685.3 | -528.4 | 4,553.4 | 4,507.3 | 98.717 | | |
| 6,500.0 | 6,085.8 | 3,946.7 | 3,413.5 | 36.0 | 32.0 | -176.50 | -1,730.4 | -544.3 | 4,611.3 | 4,564.6 | 98.771 | | |
| 6,600.0 | 6,185.8 | 4,027.1 | 3,478.2 | 36.0 | 32.8 | -176.30 | -1,775.5 | -560.2 | 4,669.3 | 4,622.1 | 98.819 | | |
| 6,700.0 | 6,285.8 | 4,107.5 | 3,542.8 | 36.0 | 33.6 | -176.11 | -1,820.6 | -576.1 | 4,727.3 | 4,679.5 | 98.861 | | |
| 6,800.0 | 6,385.8 | 4,187.9 | 3,607.5 | 36.0 | 34.4 | -175.92 | -1,865.7 | -592.0 | 4,785.3 | 4,737.0 | 98.897 | | |
| 6,900.0 | 6,485.8 | 4,268.3 | 3,672.1 | 36.1 | 35.3 | -175.74 | -1,910.8 | -607.9 | 4,843.4 | 4,794.5 | 98.928 | | |
| 7,000.0 | 6,585.8 | 4,348.7 | 3,736.8 | 36.1 | 36.1 | -175.56 | -1,955.8 | -623.8 | 4,901.5 | 4,852.0 | 98.953 | | |
| 7,100.0 | 6,685.8 | 4,429.1 | 3,801.4 | 36.1 | 36.9 | -175.38 | -2,000.9 | -639.7 | 4,959.7 | 4,909.6 | 98.975 | | |
| 7,200.0 | 6,785.8 | 4,509.5 | 3,866.1 | 36.2 | 37.7 | -175.20 | -2,046.0 | -655.6 | 5,017.9 | 4,967.7 | 99.000 | | |
| 7,300.0 | 6,885.8 | 4,589.9 | 3,930.8 | 36.2 | 38.5 | -175.02 | -2,091.1 | -671.5 | 5,076.1 | 5,025.8 | 99.025 | | |
| 7,400.0 | 6,985.8 | 4,670.3 | 3,995.5 | 36.2 | 39.3 | -174.84 | -2,136.2 | -687.4 | 5,134.3 | 5,083.9 | 99.050 | | |
| 7,500.0 | 7,085.8 | 4,750.7 | 4,060.2 | 36.2 | 40.1 | -174.66 | -2,181.3 | -703.3 | 5,192.5 | 5,142.0 | 99.075 | | |
| 7,600.0 | 7,185.8 | 4,831.1 | 4,124.9 | 36.3 | 40.9 | -174.48 | -2,226.4 | -719.2 | 5,250.7 | 5,200.1 | 99.100 | | |
| 7,700.0 | 7,285.8 | 4,911.5 | 4,189.6 | 36.3 | 41.7 | -174.30 | -2,271.5 | -735.1 | 5,308.9 | 5,258.2 | 99.125 | | |
| 7,800.0 | 7,385.8 | 4,991.9 | 4,254.3 | 36.3 | 42.5 | -174.12 | -2,316.6 | -751.0 | 5,367.1 | 5,316.3 | 99.150 | | |
| 7,900.0 | 7,485.8 | 5,072.3 | 4,319.0 | 36.3 | 43.3 | -173.94 | -2,361.7 | -766.9 | 5,425.3 | 5,374.4 | 99.175 | | |
| 8,000.0 | 7,585.8 | 5,152.7 | 4,383.7 | 36.4 | 44.1 | -173.76 | -2,406.8 | -782.8 | 5,483.5 | 5,432.5 | 99.200 | | |
| 8,100.0 | 7,685.8 | 5,233.1 | 4,448.4 | 36.4 | 44.9 | -173.58 | -2,451.9 | -798.7 | 5,541.7 | 5,490.6 | 99.225 | | |
| 8,200.0 | 7,785.8 | 5,313.5 | 4,513.1 | 36.4 | 45.7 | -173.40 | -2,497.0 | -814.6 | 5,599.9 | 5,548.7 | 99.250 | | |
| 8,300.0 | 7,885.8 | 5,393.9 | 4,577.8 | 36.4 | 46.5 | -173.22 | -2,542.1 | -830.5 | 5,658.1 | 5,606.8 | 99.275 | | |
| 8,400.0 | 7,985.8 | 5,474.3 | 4,642.5 | 36.5 | 47.3 | -173.04 | -2,587.2 | -846.4 | 5,716.3 | 5,664.9 | 99.300 | | |
| 8,500.0 | 8,085.8 | 5,554.7 | 4,707.2 | 36.5 | 48.1 | -172.86 | -2,632.3 | -862.3 | 5,774.5 | 5,723.0 | 99.325 | | |
| 8,600.0 | 8,185.8 | 5,635.1 | 4,771.9 | 36.5 | 48.9 | -172.68 | -2,677.4 | -878.2 | 5,832.7 | 5,781.1 | 99.350 | | |
| 8,700.0 | 8,285.8 | 5,715.5 | 4,836.6 | 36.6 | 49.7 | -172.50 | -2,722.5 | -894.1 | 5,890.9 | 5,839.2 | 99.375 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|--------------------|---------------------------------|-------------------------|-------------------|---------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -143.36 | -64.7 | -48.1 | 80.6 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.8 | 0.8 | -143.36 | -64.7 | -48.1 | 80.6 | 79.0 | 50.900 | | | |
| 113.0 | 113.0 | 113.0 | 113.0 | 0.9 | 0.9 | -143.36 | -64.7 | -48.1 | 80.6 | 78.9 | 46.355 | CC | | |
| 200.0 | 200.0 | 199.7 | 199.7 | 1.4 | 1.3 | -143.35 | -64.7 | -48.1 | 80.7 | 77.9 | 29.512 | ES | | |
| 300.0 | 300.0 | 297.0 | 297.0 | 2.3 | 2.3 | -148.50 | -65.8 | -49.8 | 84.1 | 79.6 | 18.839 | | | |
| 400.0 | 399.8 | 393.7 | 393.6 | 3.5 | 3.4 | -149.00 | -68.9 | -54.1 | 93.7 | 87.2 | 14.378 | SF | | |
| 500.0 | 499.5 | 489.2 | 488.7 | 4.4 | 3.8 | -149.79 | -73.8 | -60.7 | 109.4 | 101.8 | 14.398 | | | |
| 600.0 | 598.7 | 582.9 | 581.7 | 5.2 | 4.3 | -151.20 | -81.4 | -68.6 | 131.3 | 122.5 | 14.920 | | | |
| 700.0 | 697.5 | 674.2 | 672.0 | 5.8 | 4.9 | -148.80 | -91.5 | -77.4 | 159.1 | 149.0 | 15.815 | | | |
| 800.0 | 795.7 | 762.9 | 759.3 | 6.5 | 5.6 | -147.86 | -103.8 | -87.0 | 192.2 | 181.0 | 17.126 | | | |
| 900.0 | 893.2 | 848.5 | 843.1 | 7.1 | 6.1 | -147.60 | -118.1 | -97.2 | 230.8 | 218.5 | 18.756 | | | |
| 1,000.0 | 989.9 | 930.7 | 923.0 | 7.7 | 6.7 | -147.61 | -134.0 | -108.0 | 274.6 | 261.3 | 20.639 | | | |
| 1,100.0 | 1,085.7 | 1,009.1 | 998.8 | 8.2 | 7.2 | -147.70 | -151.1 | -119.0 | 323.5 | 309.3 | 22.730 | | | |
| 1,200.0 | 1,180.4 | 1,083.7 | 1,070.2 | 8.8 | 7.6 | -147.76 | -169.2 | -130.2 | 377.2 | 362.1 | 24.998 | | | |
| 1,300.0 | 1,273.9 | 1,154.2 | 1,137.3 | 9.4 | 8.1 | -147.74 | -187.8 | -141.4 | 435.5 | 419.6 | 27.415 | | | |
| 1,400.0 | 1,366.2 | 1,220.6 | 1,199.9 | 9.9 | 8.5 | -147.61 | -206.8 | -152.5 | 498.1 | 481.5 | 29.957 | | | |
| 1,500.0 | 1,457.2 | 1,282.8 | 1,258.2 | 10.3 | 8.8 | -147.80 | -225.8 | -163.5 | 564.7 | 547.4 | 32.755 | | | |
| 1,600.0 | 1,547.7 | 1,351.3 | 1,321.9 | 10.7 | 9.2 | -149.09 | -247.7 | -175.9 | 633.1 | 615.3 | 35.473 | | | |
| 1,700.0 | 1,638.3 | 1,423.4 | 1,388.9 | 11.1 | 9.5 | -150.20 | -270.8 | -189.0 | 701.8 | 683.3 | 37.980 | | | |
| 1,800.0 | 1,728.8 | 1,495.4 | 1,455.9 | 11.4 | 9.7 | -151.12 | -293.9 | -202.0 | 770.6 | 751.5 | 40.384 | | | |
| 1,900.0 | 1,819.4 | 1,567.5 | 1,522.8 | 11.8 | 10.0 | -151.88 | -317.0 | -215.1 | 839.5 | 819.8 | 42.600 | | | |
| 2,000.0 | 1,910.0 | 1,639.5 | 1,589.8 | 12.3 | 10.3 | -152.53 | -340.1 | -228.2 | 908.5 | 888.1 | 44.648 | | | |
| 2,100.0 | 2,000.5 | 1,711.6 | 1,656.8 | 12.7 | 10.6 | -153.09 | -363.2 | -241.3 | 977.5 | 956.5 | 46.539 | | | |
| 2,200.0 | 2,091.1 | 1,783.7 | 1,723.8 | 13.1 | 10.9 | -153.58 | -386.3 | -254.4 | 1,046.6 | 1,024.9 | 48.283 | | | |
| 2,300.0 | 2,181.6 | 1,855.7 | 1,790.8 | 13.6 | 11.2 | -154.00 | -409.4 | -267.5 | 1,115.6 | 1,093.3 | 49.893 | | | |
| 2,400.0 | 2,272.2 | 1,927.8 | 1,857.8 | 14.0 | 11.5 | -154.38 | -432.4 | -280.5 | 1,184.8 | 1,161.7 | 51.384 | | | |
| 2,500.0 | 2,362.8 | 1,999.8 | 1,924.8 | 14.5 | 11.8 | -154.71 | -455.5 | -293.6 | 1,253.9 | 1,230.1 | 52.764 | | | |
| 2,600.0 | 2,453.3 | 2,071.9 | 1,991.8 | 15.0 | 12.1 | -155.01 | -478.6 | -306.7 | 1,323.1 | 1,298.6 | 54.040 | | | |
| 2,700.0 | 2,543.9 | 2,143.9 | 2,058.8 | 15.5 | 12.4 | -155.28 | -501.7 | -319.8 | 1,392.3 | 1,367.0 | 55.224 | | | |
| 2,800.0 | 2,634.4 | 2,216.0 | 2,125.8 | 16.0 | 12.7 | -155.53 | -524.8 | -332.9 | 1,461.5 | 1,435.5 | 56.325 | | | |
| 2,900.0 | 2,725.0 | 2,288.1 | 2,192.8 | 16.5 | 13.0 | -155.75 | -547.9 | -345.9 | 1,530.7 | 1,504.0 | 57.348 | | | |
| 3,000.0 | 2,815.6 | 2,360.1 | 2,259.8 | 17.1 | 13.4 | -155.96 | -571.0 | -359.0 | 1,599.9 | 1,572.4 | 58.300 | | | |
| 3,100.0 | 2,906.1 | 2,432.2 | 2,326.8 | 17.8 | 13.7 | -156.14 | -594.1 | -372.1 | 1,669.1 | 1,640.9 | 59.188 | | | |
| 3,200.0 | 2,996.7 | 2,504.2 | 2,393.8 | 18.4 | 14.0 | -156.32 | -617.2 | -385.2 | 1,738.4 | 1,709.4 | 60.017 | | | |
| 3,300.0 | 3,087.2 | 2,576.3 | 2,460.8 | 19.1 | 14.4 | -156.47 | -640.3 | -398.3 | 1,807.6 | 1,777.9 | 60.792 | | | |
| 3,400.0 | 3,177.8 | 2,648.4 | 2,527.7 | 19.8 | 14.7 | -156.62 | -663.3 | -411.3 | 1,876.9 | 1,846.3 | 61.517 | | | |
| 3,500.0 | 3,268.4 | 2,720.4 | 2,594.7 | 20.5 | 15.1 | -156.76 | -686.4 | -424.4 | 1,946.1 | 1,914.8 | 62.197 | | | |
| 3,600.0 | 3,358.9 | 2,792.5 | 2,661.7 | 21.2 | 15.5 | -156.89 | -709.5 | -437.5 | 2,015.4 | 1,983.3 | 62.835 | | | |
| 3,700.0 | 3,449.5 | 2,864.5 | 2,728.7 | 21.9 | 15.8 | -157.01 | -732.6 | -450.6 | 2,084.6 | 2,051.8 | 63.434 | | | |
| 3,800.0 | 3,540.0 | 2,936.6 | 2,795.7 | 22.6 | 16.2 | -157.12 | -755.7 | -463.7 | 2,153.9 | 2,120.3 | 63.997 | | | |
| 3,900.0 | 3,630.6 | 3,008.6 | 2,862.7 | 23.3 | 16.6 | -157.22 | -778.8 | -476.7 | 2,223.2 | 2,188.7 | 64.528 | | | |
| 4,000.0 | 3,721.2 | 3,080.7 | 2,929.7 | 24.0 | 17.0 | -157.32 | -801.9 | -489.8 | 2,292.5 | 2,257.2 | 65.028 | | | |
| 4,100.0 | 3,811.7 | 3,152.8 | 2,996.7 | 24.7 | 17.4 | -157.41 | -825.0 | -502.9 | 2,361.8 | 2,325.7 | 65.501 | | | |
| 4,200.0 | 3,902.3 | 3,224.8 | 3,063.7 | 25.4 | 17.8 | -157.50 | -848.1 | -516.0 | 2,431.0 | 2,394.2 | 65.947 | | | |
| 4,300.0 | 3,992.8 | 3,296.9 | 3,130.7 | 26.2 | 18.2 | -157.58 | -871.1 | -529.1 | 2,500.3 | 2,462.7 | 66.368 | | | |
| 4,400.0 | 4,083.4 | 3,368.9 | 3,197.7 | 26.9 | 18.6 | -157.66 | -894.2 | -542.1 | 2,569.6 | 2,531.1 | 66.769 | | | |
| 4,500.0 | 4,174.0 | 3,441.0 | 3,264.7 | 27.6 | 19.0 | -157.73 | -917.3 | -555.2 | 2,638.9 | 2,599.6 | 67.142 | | | |
| 4,600.0 | 4,264.5 | 3,513.0 | 3,331.7 | 28.3 | 19.5 | -157.80 | -940.4 | -568.3 | 2,708.2 | 2,668.1 | 67.504 | | | |
| 4,700.0 | 4,355.1 | 3,585.1 | 3,398.7 | 29.0 | 19.9 | -157.87 | -963.5 | -581.4 | 2,777.5 | 2,736.6 | 67.845 | | | |
| 4,800.0 | 4,445.6 | 3,657.2 | 3,465.7 | 29.7 | 20.3 | -157.93 | -986.6 | -594.5 | 2,846.8 | 2,805.1 | 68.169 | | | |
| 4,900.0 | 4,536.2 | 3,729.2 | 3,532.7 | 30.4 | 20.8 | -157.99 | -1,009.7 | -607.5 | 2,916.1 | 2,873.5 | 68.477 | | | |
| 5,000.0 | 4,626.8 | 3,801.3 | 3,599.6 | 31.1 | 21.2 | -158.05 | -1,032.8 | -620.6 | 2,985.4 | 2,942.0 | 68.770 | | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

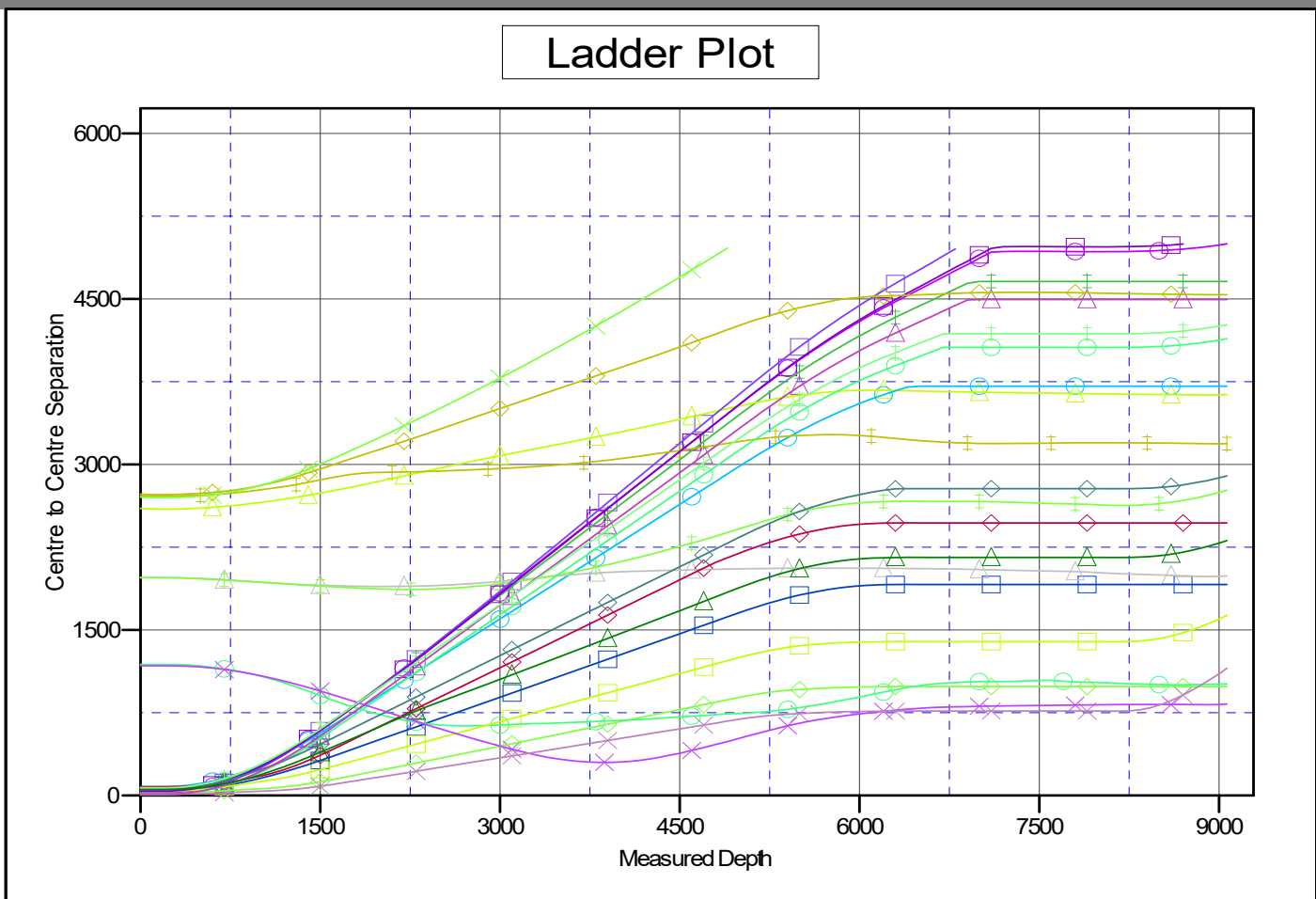
| Offset Design | | | | | | | | | | | | Offset Site Error: | 0.0 usft |
|---|-----------------------|------------------------------|-----------------------|-----------------------------|--------------------|-----------------------|-----------------------------|---------------------|---------------------------------|-------------------------|-------------------|--------------------|----------|
| Survey Program: 0-OWSG (REV5) MWD HDGM Standard | | | | | | | | | | | | Offset Well Error: | 0.0 usft |
| Reference Measured Depth (usft) | Vertical Depth (usft) | Offset Measured Depth (usft) | Vertical Depth (usft) | Semi Major Reference (usft) | Axis Offset (usft) | Highside Toolface (°) | Offset Wellbore +N-S (usft) | Centre +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Separation Factor | Warning | |
| 5,100.0 | 4,717.9 | 3,874.2 | 3,667.4 | 31.8 | 21.7 | -158.69 | -1,056.1 | -633.9 | 3,053.9 | 3,009.6 | 69.014 | | |
| 5,200.0 | 4,810.3 | 3,949.3 | 3,737.2 | 32.5 | 22.2 | -159.33 | -1,080.2 | -647.5 | 3,119.9 | 3,074.8 | 69.117 | | |
| 5,300.0 | 4,904.1 | 4,026.5 | 3,809.0 | 33.1 | 22.7 | -159.88 | -1,104.9 | -661.5 | 3,183.4 | 3,137.4 | 69.132 | | |
| 5,400.0 | 4,999.0 | 4,105.7 | 3,882.7 | 33.6 | 23.2 | -160.36 | -1,130.3 | -675.9 | 3,244.4 | 3,197.5 | 69.076 | | |
| 5,500.0 | 5,094.9 | 4,186.8 | 3,958.1 | 34.1 | 23.7 | -160.77 | -1,156.3 | -690.6 | 3,302.8 | 3,254.9 | 68.956 | | |
| 5,600.0 | 5,191.8 | 4,269.8 | 4,035.2 | 34.5 | 24.2 | -161.11 | -1,182.9 | -705.7 | 3,358.4 | 3,309.6 | 68.778 | | |
| 5,700.0 | 5,289.5 | 4,354.5 | 4,113.9 | 34.9 | 24.7 | -161.40 | -1,210.0 | -721.0 | 3,411.3 | 3,361.6 | 68.550 | | |
| 5,800.0 | 5,387.8 | 4,440.8 | 4,194.2 | 35.2 | 25.3 | -161.64 | -1,237.7 | -736.7 | 3,461.4 | 3,410.7 | 68.278 | | |
| 5,900.0 | 5,486.8 | 4,528.6 | 4,275.8 | 35.5 | 25.9 | -161.83 | -1,265.8 | -752.7 | 3,508.6 | 3,456.9 | 67.968 | | |
| 6,000.0 | 5,586.1 | 4,617.8 | 4,358.8 | 35.7 | 26.4 | -161.97 | -1,294.4 | -768.9 | 3,552.8 | 3,500.3 | 67.630 | | |
| 6,100.0 | 5,685.8 | 4,708.3 | 4,442.9 | 35.8 | 27.0 | -162.08 | -1,323.4 | -785.3 | 3,594.1 | 3,540.7 | 67.273 | | |
| 6,200.0 | 5,785.8 | 4,800.0 | 4,528.2 | 35.9 | 27.6 | -162.14 | -1,352.8 | -801.9 | 3,632.3 | 3,578.1 | 66.916 | | |
| 6,300.0 | 5,885.8 | 4,892.8 | 4,614.4 | 35.9 | 28.2 | -171.58 | -1,382.5 | -818.8 | 3,667.7 | 3,612.8 | 66.770 | | |
| 6,400.0 | 5,985.8 | 4,985.7 | 4,700.8 | 36.0 | 28.8 | -171.37 | -1,412.3 | -835.6 | 3,702.4 | 3,646.9 | 66.712 | | |
| 6,500.0 | 6,085.8 | 5,076.0 | 4,785.8 | 36.0 | 29.4 | -169.98 | -1,442.3 | -852.5 | 3,737.0 | 3,681.0 | 66.654 | | |
| 6,600.0 | 6,185.8 | 5,166.0 | 4,870.8 | 36.0 | 30.0 | -169.98 | -1,472.3 | -869.4 | 3,771.0 | 3,715.0 | 66.596 | | |
| 6,700.0 | 6,285.8 | 5,256.0 | 4,955.8 | 36.0 | 30.6 | -169.98 | -1,502.3 | -886.3 | 3,805.0 | 3,749.0 | 66.538 | | |
| 6,800.0 | 6,385.8 | 5,346.0 | 5,040.8 | 36.0 | 31.2 | -169.98 | -1,532.3 | -903.2 | 3,839.0 | 3,783.0 | 66.480 | | |
| 6,900.0 | 6,485.8 | 5,436.0 | 5,125.8 | 36.0 | 31.8 | -169.98 | -1,562.3 | -920.1 | 3,873.0 | 3,817.0 | 66.422 | | |
| 7,000.0 | 6,585.8 | 5,526.0 | 5,210.8 | 36.0 | 32.4 | -169.98 | -1,592.3 | -937.0 | 3,907.0 | 3,851.0 | 66.364 | | |
| 7,100.0 | 6,685.8 | 5,616.0 | 5,295.8 | 36.0 | 33.0 | -169.98 | -1,622.3 | -953.9 | 3,941.0 | 3,885.0 | 66.306 | | |
| 7,200.0 | 6,785.8 | 5,706.0 | 5,380.8 | 36.0 | 33.6 | -169.98 | -1,652.3 | -970.8 | 3,975.0 | 3,919.0 | 66.248 | | |
| 7,300.0 | 6,885.8 | 5,796.0 | 5,465.8 | 36.0 | 34.2 | -169.98 | -1,682.3 | -987.7 | 4,009.0 | 3,953.0 | 66.190 | | |
| 7,400.0 | 6,985.8 | 5,886.0 | 5,550.8 | 36.0 | 34.8 | -169.98 | -1,712.3 | -1,004.6 | 4,043.0 | 3,987.0 | 66.132 | | |
| 7,500.0 | 7,085.8 | 5,976.0 | 5,635.8 | 36.0 | 35.4 | -169.98 | -1,742.3 | -1,021.5 | 4,077.0 | 4,021.0 | 66.074 | | |
| 7,600.0 | 7,185.8 | 6,066.0 | 5,720.8 | 36.0 | 36.0 | -169.98 | -1,772.3 | -1,038.4 | 4,111.0 | 4,055.0 | 66.016 | | |
| 7,700.0 | 7,285.8 | 6,156.0 | 5,805.8 | 36.0 | 36.6 | -169.98 | -1,802.3 | -1,055.3 | 4,145.0 | 4,089.0 | 65.958 | | |
| 7,800.0 | 7,385.8 | 6,246.0 | 5,890.8 | 36.0 | 37.2 | -169.98 | -1,832.3 | -1,072.2 | 4,179.0 | 4,123.0 | 65.900 | | |
| 7,900.0 | 7,485.8 | 6,336.0 | 5,975.8 | 36.0 | 37.8 | -169.98 | -1,862.3 | -1,089.1 | 4,213.0 | 4,157.0 | 65.842 | | |
| 8,000.0 | 7,585.8 | 6,426.0 | 6,060.8 | 36.0 | 38.4 | -169.98 | -1,892.3 | -1,106.0 | 4,247.0 | 4,191.0 | 65.784 | | |
| 8,100.0 | 7,685.8 | 6,516.0 | 6,145.8 | 36.0 | 39.0 | -169.98 | -1,922.3 | -1,122.9 | 4,281.0 | 4,225.0 | 65.726 | | |
| 8,200.0 | 7,785.8 | 6,606.0 | 6,230.8 | 36.0 | 39.6 | -169.98 | -1,952.3 | -1,139.8 | 4,315.0 | 4,259.0 | 65.668 | | |
| 8,300.0 | 7,885.8 | 6,696.0 | 6,315.8 | 36.0 | 40.2 | -169.98 | -1,982.3 | -1,156.7 | 4,349.0 | 4,293.0 | 65.610 | | |
| 8,400.0 | 7,985.8 | 6,786.0 | 6,400.8 | 36.0 | 40.8 | -169.98 | -2,012.3 | -1,173.6 | 4,383.0 | 4,327.0 | 65.552 | | |
| 8,500.0 | 8,085.8 | 6,876.0 | 6,485.8 | 36.0 | 41.4 | -169.98 | -2,042.3 | -1,190.5 | 4,417.0 | 4,361.0 | 65.494 | | |
| 8,600.0 | 8,185.8 | 6,966.0 | 6,570.8 | 36.0 | 42.0 | -169.98 | -2,072.3 | -1,207.4 | 4,451.0 | 4,395.0 | 65.436 | | |
| 8,700.0 | 8,285.8 | 7,056.0 | 6,655.8 | 36.0 | 42.6 | -169.98 | -2,102.3 | -1,224.3 | 4,485.0 | 4,429.0 | 65.378 | | |
| 8,800.0 | 8,385.8 | 7,146.0 | 6,740.8 | 36.0 | 43.2 | -169.98 | -2,132.3 | -1,241.2 | 4,519.0 | 4,463.0 | 65.320 | | |
| 8,900.0 | 8,485.8 | 7,236.0 | 6,825.8 | 36.0 | 43.8 | -169.98 | -2,162.3 | -1,258.1 | 4,553.0 | 4,497.0 | 65.262 | | |
| 9,000.0 | 8,585.8 | 7,326.0 | 6,910.8 | 36.0 | 44.4 | -169.98 | -2,192.3 | -1,275.0 | 4,587.0 | 4,531.0 | 65.204 | | |
| 9,067.2 | 8,653.0 | 7,373.2 | 6,953.0 | 36.7 | 44.7 | -169.98 | -2,207.7 | -1,282.7 | 4,607.0 | 4,547.0 | 65.180 | | |

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to RKB=30' @ 7487.0usft (TBD) Coordinates are relative to: Currier 0993-16-01M - Slot 16-01M
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Central Zone
 Central Meridian is -105.500000 Grid Convergence at Surface is: -1.43°



LEGEND

- (Offset) Buzzard Creek 16-8, Wellbore #1, Wellbore #1 V0
- (Offset) Currier Family 16-3, Wellbore #1, Wellbore #1 V0
- (Offset) Buzzard Creek 16-12, Wellbore #1, Wellbore #1 V0
- Currier BCU 0993-16-08M, OH, Design #3 V0
- (Offset) Buzzard Creek 15-12, Wellbore #1, Wellbore #1 V0
- Currier BCU 0993-16-06W, OH, Design #3 V0
- Currier BCU 0993-16-15E, OH, Design #3 V0
- (Offset) Buzzard Creek 21-1, Wellbore #1, Wellbore #1 V0
- Currier BCU 0993-16-14E, OH, Design #2 V0
- (Offset) Buzzard Creek 16-10, Wellbore #1, Wellbore #1 V0
- Currier 0993-16-03M, OH, Design #2 V0
- Currier BCU 0993-16-04M, OH, Design #4 V0
- Currier BCU 0993-16-05M, OH, Design #2 V0
- Currier BCU 0993-16-13E, OH, Design #3 V0
- Currier BCU Fed 0993-16-12W, OH, Design #3 V0
- Currier BCU 0993-16-11E, OH, Design #3 V0
- Currier BCU 0993-16-07M, OH, Design #2 V0
- (Offset) Buzzard Creek 16-1, Wellbore #1, Wellbore #1 V0
- Currier BCU 0993-16-15W, OH, Design #2 V0
- Currier BCU 0993-16-13W, OH, Design #2 V0
- (Offset) Currier 9-15, Wellbore #1, Wellbore #1 V0
- Currier BCU 0993-16-09M, OH, Design #2 V0

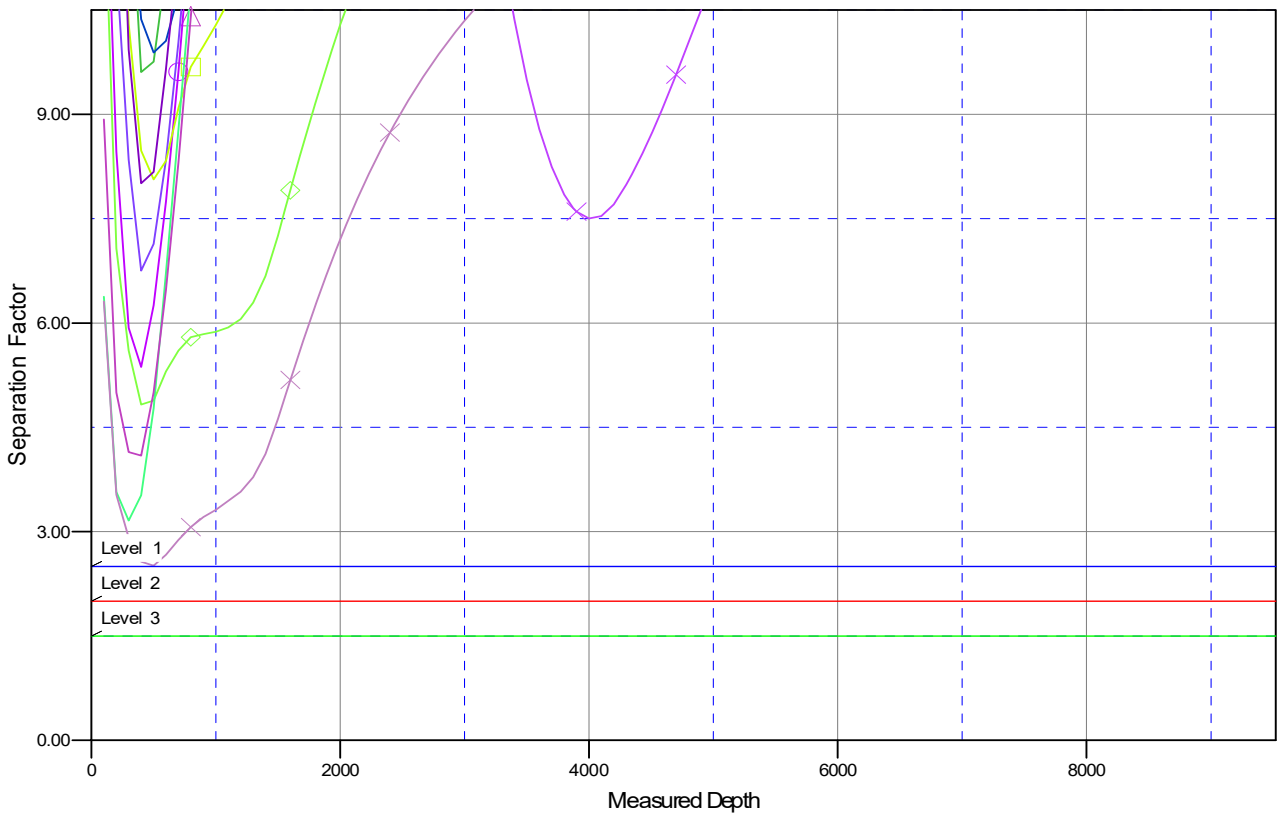
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



| | | | |
|---------------------------|------------------------|-------------------------------------|--|
| Company: | Laramie Energy, LLC | Local Co-ordinate Reference: | Well Currier 0993-16-01M - Slot 16-01M |
| Project: | Mesa County, CO | TVD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Reference Site: | Currier 0993-16-07 Pad | MD Reference: | RKB=30' @ 7487.0usft (TBD) |
| Site Error: | 0.0 usft | North Reference: | True |
| Reference Well: | Currier 0993-16-01M | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | OH | Database: | KLXDirectional-AD |
| Reference Design: | Design #3 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to RKB=30' @ 7487.0usft (TBD) Coordinates are relative to: Currier 0993-16-01M - Slot 16-01M
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Central Zone
 Central Meridian is -105.500000 Grid Convergence at Surface is: -1.43°

Separation Factor Plot



LEGEND

| | | |
|---|---|---|
| er BCU 0993-16-14W, OH, Design #3 V0 | (Offset) Buzzard Creek 16-8, Wellbore #1, Wellbore #1 V0 | (Offset) Currier Family 16-3, Wellbore #1, Wellbore #1 V0 |
| er Buzzard Creek 16-12, Wellbore #1, Wellbore #1 V0 | Currier BCU 0993-16-08M, OH, Design #3 V0 | (Offset) Buzzard Creek 15-12, Wellbore #1, Wellbore #1 V0 |
| er BCU 0993-16-06W, OH, Design #3 V0 | Currier BCU 0993-16-15E, OH, Design #3 V0 | (Offset) Buzzard Creek 21-1, Wellbore #1, Wellbore #1 V0 |
| er BCU 0993-16-14E, OH, Design #2 V0 | (Offset) Buzzard Creek 16-10, Wellbore #1, Wellbore #1 V0 | Currier 0993-16-03M, OH, Design #2 V0 |
| er 0993-16-04M, OH, Design #4 V0 | Currier BCU 0993-16-05M, OH, Design #2 V0 | Currier BCU 0993-16-13E, OH, Design #3 V0 |
| er BCU Fed 0993-16-12W, OH, Design #3 V0 | Currier BCU 0993-16-11E, OH, Design #3 V0 | Currier BCU 0993-16-07M, OH, Design #2 V0 |
| er Buzzard Creek 16-1, Wellbore #1, Wellbore #1 V0 | Currier BCU 0993-16-15W, OH, Design #2 V0 | Currier BCU 0993-16-13W, OH, Design #2 V0 |
| er Currier 9-15, Wellbore #1, Wellbore #1 V0 | Currier BCU 0993-16-09M, OH, Design #2 V0 | |