

Hilcorp Energy Company

Farmington, NM

San Juan Basin

Southern Ute 703H

Pilot Hole

WP3

Anticollision Report

05 April, 2023

Halliburton

Anticollision Report

| | | | |
|---------------------------|------------------------|-------------------------------------|------------------------------|
| Company: | Hilcorp Energy Company | Local Co-ordinate Reference: | Well Southern Ute 703H |
| Project: | Farmington, NM | TVD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Site Error: | 5.0 usft | North Reference: | Grid |
| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---|-----------------------|-------------------------|
| Reference | WP3 | | |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| Interpolation Method: | MD + Stations Interval 25.0usft | Error Model: | ISCWSA |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum centre distance of 3,000.0usft | Error Surface: | Pedal Curve |
| Warning Levels Evaluated at: | 2.00 Sigma | Casing Method: | Through Borehole Radius |

| | | | | |
|----------------------------|------------------|--------------------------|------------------|--|
| Survey Tool Program | Date | 4/5/2023 | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 0.0 | 3,476.0 | WP3 (Pilot Hole) | 3_MWD+HRGM | B001Mb: HRGM declination correction only |

| | | | | | | |
|--|--|-------------------------------------|--|---|--------------------------|-----------------------------|
| 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 | | | | | | |
| San Juan Basin | | | | | | |
| Southern Ute 004 - ST00 - ST00 | 3,476.0 | 2,968.0 | 958.4 | -1,129.4 | 0.459 | Collision RiskProcedures Re |
| Southern Ute 004E - ST00 - ST00 | 3,476.0 | 2,964.0 | 198.6 | -1,893.6 | 0.095 | Collision RiskProcedures Re |

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|------------------------------|---|------------------------------|------------------------------|-------------------------------|----------------------|------------------------------|---------------------|---------------------------|-------------------------------|--------------------------------|---------------------------|----------|
| Offset Design: | San Juan Basin - Southern Ute 004 - ST00 - ST00 | | | | | | | | | | Offset Site Error: | 5.0 usft |
| Survey Program: | 5600-3_Blind | | | | | | | | | | Offset Well Error: | 1.0 usft |
| Reference | Offset | Semi Major Axis | | Offset Wellbore Centre | | Distance | | Minimum Separation | Separation Factor | Warning | | |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | | | |
| 25.0 | 25.0 | 25.0 | 25.0 | 1.0 | 17.5 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,903.1 | 20.68 | 93.017 |
| 50.0 | 50.0 | 50.0 | 50.0 | 1.0 | 34.9 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,885.7 | 38.13 | 50.456 |
| 75.0 | 75.0 | 75.0 | 75.0 | 1.0 | 52.4 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,868.2 | 55.59 | 34.606 |
| 100.0 | 100.0 | 100.0 | 100.0 | 1.0 | 69.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,850.7 | 73.07 | 26.330 |
| 125.0 | 125.0 | 125.0 | 125.0 | 1.1 | 87.3 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,833.3 | 90.55 | 21.247 |
| 150.0 | 150.0 | 150.0 | 150.0 | 1.1 | 104.7 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,815.8 | 108.03 | 17.807 |
| 175.0 | 175.0 | 175.0 | 175.0 | 1.2 | 122.2 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,798.3 | 125.53 | 15.326 |
| 200.0 | 200.0 | 200.0 | 200.0 | 1.2 | 139.6 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,780.8 | 143.03 | 13.451 |
| 225.0 | 225.0 | 225.0 | 225.0 | 1.3 | 157.1 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,763.3 | 160.53 | 11.984 |
| 250.0 | 250.0 | 250.0 | 250.0 | 1.3 | 174.5 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,745.8 | 178.04 | 10.805 |
| 275.0 | 275.0 | 275.0 | 275.0 | 1.4 | 192.0 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,728.3 | 195.55 | 9.838 |
| 300.0 | 300.0 | 300.0 | 300.0 | 1.4 | 209.4 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,710.7 | 213.07 | 9.029 |
| 325.0 | 325.0 | 325.0 | 325.0 | 1.5 | 226.9 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,693.2 | 230.59 | 8.343 |
| 350.0 | 350.0 | 350.0 | 350.0 | 1.6 | 244.3 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,675.7 | 248.11 | 7.754 |
| 375.0 | 375.0 | 375.0 | 375.0 | 1.6 | 261.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,658.2 | 265.63 | 7.242 |
| 400.0 | 400.0 | 400.0 | 400.0 | 1.7 | 279.3 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,640.7 | 283.16 | 6.794 |
| 425.0 | 425.0 | 425.0 | 425.0 | 1.8 | 296.7 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,623.1 | 300.68 | 6.398 |
| 450.0 | 450.0 | 450.0 | 450.0 | 1.9 | 314.2 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,605.6 | 318.21 | 6.046 |
| 475.0 | 475.0 | 475.0 | 475.0 | 1.9 | 331.6 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,588.1 | 335.74 | 5.730 |
| 500.0 | 500.0 | 500.0 | 500.0 | 2.0 | 349.1 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,570.5 | 353.27 | 5.446 |
| 525.0 | 525.0 | 525.0 | 525.0 | 2.1 | 366.5 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,553.0 | 370.80 | 5.188 |
| 550.0 | 550.0 | 550.0 | 550.0 | 2.2 | 384.0 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,535.5 | 388.33 | 4.954 |
| 575.0 | 575.0 | 575.0 | 575.0 | 2.2 | 401.4 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,517.9 | 405.87 | 4.740 |
| 600.0 | 600.0 | 600.0 | 600.0 | 2.3 | 418.9 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,500.4 | 423.40 | 4.544 |

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

Halliburton
Anticollision Report

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| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
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| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

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|---|------------------------------|------------------------------|------------------------------|-------------------------|----------------------|------------------------------|-------------------------------|---------------------|-------------------------------|--------------------------------|--------------------------|--------------------------------------|----------|
| Offset Design: San Juan Basin - Southern Ute 004 - ST00 - ST00 | | | | | | | | | | | | Offset Site Error: | 5.0 usft |
| Survey Program: 5600-3_Blind | | | | | | | | | | | | Offset Well Error: | 1.0 usft |
| Reference | | Offset | | Semi Major Axis | | | Offset Wellbore Centre | | Distance | | Separation Factor | Warning | |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | | | |
| 625.0 | 625.0 | 625.0 | 625.0 | 2.4 | 436.3 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,482.9 | 440.93 | 4.363 | |
| 650.0 | 650.0 | 650.0 | 650.0 | 2.5 | 453.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,465.3 | 458.47 | 4.196 | |
| 675.0 | 675.0 | 675.0 | 675.0 | 2.6 | 471.2 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,447.8 | 476.00 | 4.042 | |
| 700.0 | 700.0 | 700.0 | 700.0 | 2.7 | 488.7 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,430.3 | 493.54 | 3.898 | |
| 725.0 | 725.0 | 725.0 | 725.0 | 2.7 | 506.1 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,412.7 | 511.08 | 3.764 | |
| 750.0 | 750.0 | 750.0 | 750.0 | 2.8 | 523.6 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,395.2 | 528.61 | 3.639 | |
| 775.0 | 775.0 | 775.0 | 775.0 | 2.9 | 541.0 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,377.7 | 546.15 | 3.522 | |
| 800.0 | 800.0 | 800.0 | 800.0 | 3.0 | 558.5 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,360.1 | 563.69 | 3.413 | |
| 825.0 | 825.0 | 825.0 | 825.0 | 3.1 | 576.0 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,342.6 | 581.22 | 3.310 | |
| 850.0 | 850.0 | 850.0 | 850.0 | 3.2 | 593.4 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,325.0 | 598.76 | 3.213 | |
| 875.0 | 875.0 | 875.0 | 875.0 | 3.2 | 610.9 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,307.5 | 616.30 | 3.122 | |
| 900.0 | 900.0 | 900.0 | 900.0 | 3.3 | 628.3 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,290.0 | 633.84 | 3.035 | |
| 925.0 | 925.0 | 925.0 | 925.0 | 3.4 | 645.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,272.4 | 651.38 | 2.953 | |
| 950.0 | 950.0 | 950.0 | 950.0 | 3.5 | 663.2 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,254.9 | 668.92 | 2.876 | |
| 975.0 | 975.0 | 975.0 | 975.0 | 3.6 | 680.7 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,237.4 | 686.46 | 2.803 | |
| 1,000.0 | 1,000.0 | 1,000.0 | 1,000.0 | 3.7 | 698.1 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,219.8 | 704.00 | 2.733 | |
| 1,025.0 | 1,025.0 | 1,025.0 | 1,025.0 | 3.8 | 715.6 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,202.3 | 721.53 | 2.666 | |
| 1,050.0 | 1,050.0 | 1,050.0 | 1,050.0 | 3.8 | 733.0 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,184.7 | 739.07 | 2.603 | |
| 1,075.0 | 1,075.0 | 1,075.0 | 1,075.0 | 3.9 | 750.5 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,167.2 | 756.61 | 2.543 | |
| 1,100.0 | 1,100.0 | 1,100.0 | 1,100.0 | 4.0 | 767.9 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,149.7 | 774.15 | 2.485 | |
| 1,125.0 | 1,125.0 | 1,125.0 | 1,125.0 | 4.1 | 785.4 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,132.1 | 791.69 | 2.430 | |
| 1,150.0 | 1,150.0 | 1,150.0 | 1,150.0 | 4.2 | 802.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,114.6 | 809.23 | 2.377 | |
| 1,175.0 | 1,175.0 | 1,175.0 | 1,175.0 | 4.3 | 820.3 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,097.0 | 826.77 | 2.327 | |
| 1,200.0 | 1,200.0 | 1,200.0 | 1,200.0 | 4.4 | 837.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,079.5 | 844.31 | 2.279 | |
| 1,225.0 | 1,225.0 | 1,225.0 | 1,225.0 | 4.5 | 855.2 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,062.0 | 861.86 | 2.232 | |
| 1,250.0 | 1,250.0 | 1,250.0 | 1,250.0 | 4.5 | 872.7 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,044.4 | 879.40 | 2.188 | |
| 1,275.0 | 1,275.0 | 1,275.0 | 1,275.0 | 4.6 | 890.1 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,026.9 | 896.94 | 2.145 | |
| 1,300.0 | 1,300.0 | 1,300.0 | 1,300.0 | 4.7 | 907.6 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 1,009.3 | 914.48 | 2.104 | |
| 1,325.0 | 1,325.0 | 1,325.0 | 1,325.0 | 4.8 | 925.0 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 991.8 | 932.02 | 2.064 | |
| 1,350.0 | 1,350.0 | 1,350.0 | 1,350.0 | 4.9 | 942.5 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 974.3 | 949.56 | 2.026 | |
| 1,375.0 | 1,375.0 | 1,375.0 | 1,375.0 | 5.0 | 959.9 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 956.7 | 967.10 | 1.989 Collision RiskProcedures Req'd | |
| 1,400.0 | 1,400.0 | 1,400.0 | 1,400.0 | 5.1 | 977.4 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 939.2 | 984.64 | 1.954 Collision RiskProcedures Req'd | |
| 1,425.0 | 1,425.0 | 1,425.0 | 1,425.0 | 5.2 | 994.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 921.6 | 1,002.18 | 1.920 Collision RiskProcedures Req'd | |
| 1,450.0 | 1,450.0 | 1,450.0 | 1,450.0 | 5.2 | 1,012.3 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 904.1 | 1,019.72 | 1.887 Collision RiskProcedures Req'd | |
| 1,475.0 | 1,475.0 | 1,475.0 | 1,475.0 | 5.3 | 1,029.7 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 886.5 | 1,037.26 | 1.855 Collision RiskProcedures Req'd | |
| 1,500.0 | 1,500.0 | 1,500.0 | 1,500.0 | 5.4 | 1,047.2 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 869.0 | 1,054.80 | 1.824 Collision RiskProcedures Req'd | |
| 1,525.0 | 1,525.0 | 1,525.0 | 1,525.0 | 5.5 | 1,064.6 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 851.5 | 1,072.35 | 1.794 Collision RiskProcedures Req'd | |
| 1,550.0 | 1,550.0 | 1,550.0 | 1,550.0 | 5.6 | 1,082.1 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 833.9 | 1,089.89 | 1.765 Collision RiskProcedures Req'd | |
| 1,575.0 | 1,575.0 | 1,575.0 | 1,575.0 | 5.7 | 1,099.5 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 816.4 | 1,107.43 | 1.737 Collision RiskProcedures Req'd | |
| 1,600.0 | 1,600.0 | 1,600.0 | 1,600.0 | 5.8 | 1,117.0 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 798.8 | 1,124.97 | 1.710 Collision RiskProcedures Req'd | |
| 1,625.0 | 1,625.0 | 1,625.0 | 1,625.0 | 5.9 | 1,134.5 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 781.3 | 1,142.51 | 1.684 Collision RiskProcedures Req'd | |
| 1,650.0 | 1,650.0 | 1,650.0 | 1,650.0 | 5.9 | 1,151.9 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 763.8 | 1,160.05 | 1.658 Collision RiskProcedures Req'd | |
| 1,675.0 | 1,675.0 | 1,675.0 | 1,675.0 | 6.0 | 1,169.4 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 746.2 | 1,177.59 | 1.634 Collision RiskProcedures Req'd | |
| 1,700.0 | 1,700.0 | 1,700.0 | 1,700.0 | 6.1 | 1,186.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 728.7 | 1,195.14 | 1.610 Collision RiskProcedures Req'd | |
| 1,725.0 | 1,725.0 | 1,725.0 | 1,725.0 | 6.2 | 1,204.3 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 711.1 | 1,212.68 | 1.586 Collision RiskProcedures Req'd | |
| 1,750.0 | 1,750.0 | 1,750.0 | 1,750.0 | 6.3 | 1,221.7 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 693.6 | 1,230.22 | 1.564 Collision RiskProcedures Req'd | |
| 1,775.0 | 1,775.0 | 1,775.0 | 1,775.0 | 6.4 | 1,239.2 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 676.0 | 1,247.76 | 1.542 Collision RiskProcedures Req'd | |
| 1,800.0 | 1,800.0 | 1,800.0 | 1,800.0 | 6.5 | 1,256.6 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 658.5 | 1,265.30 | 1.520 Collision RiskProcedures Req'd | |
| 1,825.0 | 1,825.0 | 1,825.0 | 1,825.0 | 6.6 | 1,274.1 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 641.0 | 1,282.84 | 1.500 Collision RiskProcedures Req'd | |
| 1,826.0 | 1,826.0 | 1,826.0 | 1,826.0 | 6.6 | 1,274.8 | -123.31 | -1,056.4 | -1,607.8 | 1,923.8 | 640.3 | 1,283.55 | 1.499 Collision RiskProcedures Req'd | |
| 1,850.0 | 1,850.0 | 1,850.0 | 1,850.0 | 6.6 | 1,291.5 | 13.70 | -1,056.4 | -1,607.8 | 1,923.5 | 623.2 | 1,300.38 | 1.479 Collision RiskProcedures Req'd | |
| 1,875.0 | 1,875.0 | 1,875.0 | 1,875.0 | 6.7 | 1,309.0 | 13.72 | -1,056.4 | -1,607.8 | 1,922.7 | 604.8 | 1,317.91 | 1.459 Collision RiskProcedures Req'd | |

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

Halliburton
Anticollision Report

| | | | |
|---------------------------|------------------------|-------------------------------------|------------------------------|
| Company: | Hilcorp Energy Company | Local Co-ordinate Reference: | Well Southern Ute 703H |
| Project: | Farmington, NM | TVD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Site Error: | 5.0 usft | North Reference: | Grid |
| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

| | | | | | | | | | | | | | |
|---|--------------------------------------|--------------------------------------|--------------------------------------|-----------------------------|--------------------------|--------------------------------------|-------------------------------|-------------------------|---------------------------------------|--|--|------------------------------|--------------------------------|
| Offset Design: San Juan Basin - Southern Ute 004 - ST00 - ST00 | | | | | | | | | | | | Offset Site Error: | 5.0 usft |
| Survey Program: 5600-3_Blind | | | | | | | | | | | | Offset Well Error: | 1.0 usft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (°) | Offset Wellbore Centre | | Distance | | Minimum Separation (usft) | Separation Factor | Warning |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | | +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | | | |
| 1,900.0 | 1,899.9 | 1,899.9 | 1,899.9 | 6.8 | 1,326.4 | 13.75 | -1,056.4 | -1,607.8 | 1,921.3 | 585.8 | 1,335.41 | 1.439 | Collision RiskProcedures Req'd |
| 1,925.0 | 1,924.9 | 1,924.9 | 1,924.9 | 6.9 | 1,343.8 | 13.79 | -1,056.4 | -1,607.8 | 1,919.2 | 566.4 | 1,352.89 | 1.419 | Collision RiskProcedures Req'd |
| 1,950.0 | 1,949.7 | 1,949.7 | 1,949.7 | 7.0 | 1,361.1 | 13.84 | -1,056.4 | -1,607.8 | 1,916.6 | 546.3 | 1,370.32 | 1.399 | Collision RiskProcedures Req'd |
| 1,975.0 | 1,974.5 | 1,974.5 | 1,974.5 | 7.1 | 1,378.4 | 13.91 | -1,056.4 | -1,607.8 | 1,913.5 | 525.8 | 1,387.71 | 1.379 | Collision RiskProcedures Req'd |
| 2,000.0 | 1,999.2 | 1,999.2 | 1,999.2 | 7.1 | 1,395.7 | 13.98 | -1,056.4 | -1,607.8 | 1,909.7 | 504.7 | 1,405.03 | 1.359 | Collision RiskProcedures Req'd |
| 2,025.0 | 2,023.8 | 2,023.8 | 2,023.8 | 7.2 | 1,412.9 | 14.08 | -1,056.4 | -1,607.8 | 1,905.4 | 483.1 | 1,422.29 | 1.340 | Collision RiskProcedures Req'd |
| 2,050.0 | 2,048.3 | 2,048.3 | 2,048.3 | 7.3 | 1,430.0 | 14.18 | -1,056.4 | -1,607.8 | 1,900.5 | 461.0 | 1,439.47 | 1.320 | Collision RiskProcedures Req'd |
| 2,075.0 | 2,072.6 | 2,072.6 | 2,072.6 | 7.4 | 1,447.0 | 14.30 | -1,056.4 | -1,607.8 | 1,895.0 | 438.5 | 1,456.55 | 1.301 | Collision RiskProcedures Req'd |
| 2,100.0 | 2,096.9 | 2,096.9 | 2,096.9 | 7.5 | 1,463.9 | 14.43 | -1,056.4 | -1,607.8 | 1,889.0 | 415.5 | 1,473.54 | 1.282 | Collision RiskProcedures Req'd |
| 2,125.0 | 2,120.9 | 2,120.9 | 2,120.9 | 7.6 | 1,480.7 | 14.57 | -1,056.4 | -1,607.8 | 1,882.4 | 392.0 | 1,490.42 | 1.263 | Collision RiskProcedures Req'd |
| 2,150.0 | 2,144.8 | 2,144.8 | 2,144.8 | 7.7 | 1,497.3 | 14.73 | -1,056.4 | -1,607.8 | 1,875.3 | 368.1 | 1,507.18 | 1.244 | Collision RiskProcedures Req'd |
| 2,175.0 | 2,168.5 | 2,168.5 | 2,168.5 | 7.8 | 1,513.9 | 14.91 | -1,056.4 | -1,607.8 | 1,867.6 | 343.8 | 1,523.82 | 1.226 | Collision RiskProcedures Req'd |
| 2,200.0 | 2,192.0 | 2,192.0 | 2,192.0 | 7.8 | 1,530.3 | 15.10 | -1,056.4 | -1,607.8 | 1,859.3 | 319.0 | 1,540.31 | 1.207 | Collision RiskProcedures Req'd |
| 2,225.0 | 2,215.3 | 2,215.3 | 2,215.3 | 7.9 | 1,546.6 | 15.31 | -1,056.4 | -1,607.8 | 1,850.6 | 293.9 | 1,556.66 | 1.189 | Collision RiskProcedures Req'd |
| 2,250.0 | 2,238.4 | 2,238.4 | 2,238.4 | 8.0 | 1,562.7 | 15.54 | -1,056.4 | -1,607.8 | 1,841.2 | 268.4 | 1,572.85 | 1.171 | Collision RiskProcedures Req'd |
| 2,275.0 | 2,261.2 | 2,261.2 | 2,261.2 | 8.1 | 1,578.6 | 15.78 | -1,056.4 | -1,607.8 | 1,831.4 | 242.5 | 1,588.87 | 1.153 | Collision RiskProcedures Req'd |
| 2,300.0 | 2,283.8 | 2,283.8 | 2,283.8 | 8.2 | 1,594.4 | 16.04 | -1,056.4 | -1,607.8 | 1,821.0 | 216.3 | 1,604.72 | 1.135 | Collision RiskProcedures Req'd |
| 2,325.0 | 2,306.1 | 2,306.1 | 2,306.1 | 8.4 | 1,610.0 | 16.33 | -1,056.4 | -1,607.8 | 1,810.1 | 189.7 | 1,620.39 | 1.117 | Collision RiskProcedures Req'd |
| 2,350.0 | 2,328.2 | 2,328.2 | 2,328.2 | 8.5 | 1,625.4 | 16.63 | -1,056.4 | -1,607.8 | 1,798.7 | 162.8 | 1,635.86 | 1.100 | Collision RiskProcedures Req'd |
| 2,375.0 | 2,349.9 | 2,349.9 | 2,349.9 | 8.6 | 1,640.6 | 16.96 | -1,056.4 | -1,607.8 | 1,786.8 | 135.7 | 1,651.13 | 1.082 | Collision RiskProcedures Req'd |
| 2,400.0 | 2,371.4 | 2,371.4 | 2,371.4 | 8.7 | 1,655.5 | 17.31 | -1,056.4 | -1,607.8 | 1,774.4 | 108.2 | 1,666.19 | 1.065 | Collision RiskProcedures Req'd |
| 2,425.0 | 2,392.5 | 2,392.5 | 2,392.5 | 8.8 | 1,670.3 | 17.69 | -1,056.4 | -1,607.8 | 1,761.5 | 80.5 | 1,681.03 | 1.048 | Collision RiskProcedures Req'd |
| 2,450.0 | 2,413.3 | 2,413.3 | 2,413.3 | 9.0 | 1,684.8 | 18.09 | -1,056.4 | -1,607.8 | 1,748.1 | 52.5 | 1,695.65 | 1.031 | Collision RiskProcedures Req'd |
| 2,475.0 | 2,433.8 | 2,433.8 | 2,433.8 | 9.1 | 1,699.1 | 18.53 | -1,056.4 | -1,607.8 | 1,734.3 | 24.3 | 1,710.02 | 1.014 | Collision RiskProcedures Req'd |
| 2,500.0 | 2,454.0 | 2,454.0 | 2,454.0 | 9.3 | 1,713.2 | 18.99 | -1,056.4 | -1,607.8 | 1,720.0 | -4.2 | 1,724.15 | 0.998 | Collision RiskProcedures Req'd |
| 2,525.0 | 2,473.7 | 2,473.7 | 2,473.7 | 9.4 | 1,727.0 | 19.49 | -1,056.4 | -1,607.8 | 1,705.2 | -32.8 | 1,738.03 | 0.981 | Collision RiskProcedures Req'd |
| 2,550.0 | 2,493.1 | 2,493.1 | 2,493.1 | 9.6 | 1,740.5 | 20.02 | -1,056.4 | -1,607.8 | 1,690.0 | -61.6 | 1,751.66 | 0.965 | Collision RiskProcedures Req'd |
| 2,575.0 | 2,512.1 | 2,512.1 | 2,512.1 | 9.7 | 1,753.8 | 20.59 | -1,056.4 | -1,607.8 | 1,674.4 | -90.6 | 1,765.01 | 0.949 | Collision RiskProcedures Req'd |
| 2,600.0 | 2,530.7 | 2,530.7 | 2,530.7 | 9.9 | 1,766.8 | 21.20 | -1,056.4 | -1,607.8 | 1,658.3 | -119.7 | 1,778.08 | 0.933 | Collision RiskProcedures Req'd |
| 2,625.0 | 2,548.9 | 2,548.9 | 2,548.9 | 10.1 | 1,779.5 | 21.85 | -1,056.4 | -1,607.8 | 1,641.9 | -149.0 | 1,790.87 | 0.917 | Collision RiskProcedures Req'd |
| 2,650.0 | 2,566.7 | 2,566.7 | 2,566.7 | 10.3 | 1,791.9 | 22.55 | -1,056.4 | -1,607.8 | 1,625.0 | -178.4 | 1,803.38 | 0.901 | Collision RiskProcedures Req'd |
| 2,675.0 | 2,584.1 | 2,584.1 | 2,584.1 | 10.5 | 1,804.0 | 23.30 | -1,056.4 | -1,607.8 | 1,607.7 | -207.8 | 1,815.58 | 0.886 | Collision RiskProcedures Req'd |
| 2,700.0 | 2,601.0 | 2,601.0 | 2,601.0 | 10.7 | 1,815.8 | 24.10 | -1,056.4 | -1,607.8 | 1,590.1 | -237.4 | 1,827.48 | 0.870 | Collision RiskProcedures Req'd |
| 2,725.0 | 2,617.5 | 2,617.5 | 2,617.5 | 10.9 | 1,827.3 | 24.96 | -1,056.4 | -1,607.8 | 1,572.1 | -267.0 | 1,839.07 | 0.855 | Collision RiskProcedures Req'd |
| 2,750.0 | 2,633.5 | 2,633.5 | 2,633.5 | 11.1 | 1,838.5 | 25.89 | -1,056.4 | -1,607.8 | 1,553.8 | -296.6 | 1,850.34 | 0.840 | Collision RiskProcedures Req'd |
| 2,775.0 | 2,649.1 | 2,649.1 | 2,649.1 | 11.4 | 1,849.4 | 26.88 | -1,056.4 | -1,607.8 | 1,535.1 | -326.2 | 1,861.29 | 0.825 | Collision RiskProcedures Req'd |
| 2,800.0 | 2,664.2 | 2,664.2 | 2,664.2 | 11.6 | 1,859.9 | 27.94 | -1,056.4 | -1,607.8 | 1,516.0 | -355.9 | 1,871.90 | 0.810 | Collision RiskProcedures Req'd |
| 2,825.0 | 2,678.8 | 2,678.8 | 2,678.8 | 11.9 | 1,870.1 | 29.08 | -1,056.4 | -1,607.8 | 1,496.7 | -385.5 | 1,882.19 | 0.795 | Collision RiskProcedures Req'd |
| 2,850.0 | 2,692.9 | 2,692.9 | 2,692.9 | 12.1 | 1,880.0 | 30.31 | -1,056.4 | -1,607.8 | 1,477.1 | -415.1 | 1,892.13 | 0.781 | Collision RiskProcedures Req'd |
| 2,875.0 | 2,706.5 | 2,706.5 | 2,706.5 | 12.4 | 1,889.5 | 31.62 | -1,056.4 | -1,607.8 | 1,457.1 | -444.6 | 1,901.72 | 0.766 | Collision RiskProcedures Req'd |
| 2,900.0 | 2,719.6 | 2,719.6 | 2,719.6 | 12.6 | 1,898.6 | 33.03 | -1,056.4 | -1,607.8 | 1,436.9 | -474.0 | 1,910.96 | 0.752 | Collision RiskProcedures Req'd |
| 2,925.0 | 2,732.2 | 2,732.2 | 2,732.2 | 12.9 | 1,907.4 | 34.54 | -1,056.4 | -1,607.8 | 1,416.4 | -503.4 | 1,919.84 | 0.738 | Collision RiskProcedures Req'd |
| 2,950.0 | 2,744.3 | 2,744.3 | 2,744.3 | 13.2 | 1,915.8 | 36.17 | -1,056.4 | -1,607.8 | 1,395.7 | -532.6 | 1,928.36 | 0.724 | Collision RiskProcedures Req'd |
| 2,975.0 | 2,755.8 | 2,755.8 | 2,755.8 | 13.5 | 1,923.9 | 37.90 | -1,056.4 | -1,607.8 | 1,374.8 | -561.7 | 1,936.52 | 0.710 | Collision RiskProcedures Req'd |
| 3,000.0 | 2,766.8 | 2,766.8 | 2,766.8 | 13.8 | 1,931.6 | 39.76 | -1,056.4 | -1,607.8 | 1,353.6 | -590.7 | 1,944.29 | 0.696 | Collision RiskProcedures Req'd |
| 3,007.8 | 2,770.1 | 2,770.1 | 2,770.1 | 13.9 | 1,933.9 | 40.37 | -1,056.4 | -1,607.8 | 1,347.0 | -599.7 | 1,946.65 | 0.692 | Collision RiskProcedures Req'd |
| 3,025.0 | 2,777.4 | 2,777.4 | 2,777.4 | 14.1 | 1,939.0 | 40.72 | -1,056.4 | -1,607.8 | 1,332.3 | -619.5 | 1,951.79 | 0.683 | Collision RiskProcedures Req'd |
| 3,050.0 | 2,788.0 | 2,788.0 | 2,788.0 | 14.5 | 1,946.3 | 41.24 | -1,056.4 | -1,607.8 | 1,311.1 | -648.2 | 1,959.28 | 0.669 | Collision RiskProcedures Req'd |
| 3,075.0 | 2,798.5 | 2,798.5 | 2,798.5 | 14.8 | 1,953.7 | 41.77 | -1,056.4 | -1,607.8 | 1,289.8 | -676.9 | 1,966.76 | 0.656 | Collision RiskProcedures Req'd |
| 3,100.0 | 2,809.1 | 2,809.1 | 2,809.1 | 15.1 | 1,961.1 | 42.31 | -1,056.4 | -1,607.8 | 1,268.7 | -705.6 | 1,974.25 | 0.643 | Collision RiskProcedures Req'd |
| 3,125.0 | 2,819.7 | 2,819.7 | 2,819.7 | 15.4 | 1,968.5 | 42.86 | -1,056.4 | -1,607.8 | 1,247.5 | -734.2 | 1,981.75 | 0.630 | Collision RiskProcedures Req'd |
| 3,150.0 | 2,830.2 | 2,830.2 | 2,830.2 | 15.8 | 1,975.9 | 43.42 | -1,056.4 | -1,607.8 | 1,226.5 | -762.8 | 1,989.25 | 0.617 | Collision RiskProcedures Req'd |

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

Halliburton

Anticollision Report

| | | | |
|---------------------------|------------------------|-------------------------------------|------------------------------|
| Company: | Hilcorp Energy Company | Local Co-ordinate Reference: | Well Southern Ute 703H |
| Project: | Farmington, NM | TVD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Site Error: | 5.0 usft | North Reference: | Grid |
| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

| Offset Design: San Juan Basin - Southern Ute 004 - ST00 - ST00 | | | | | | | | | | | | | Offset Site Error: 5.0 usft |
|---|-----------------------------|-----------------------------|-----------------------------|--|------------------|-----------------------------|---|-----------------|--|-------------------------------|---------------------------------|----------------------|---------------------------------------|
| Survey Program: 5600-3_Blind | | | | | | | Rule Assigned: | | | | | | Offset Well Error: 1.0 usft |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Semi Major Axis Reference (usft) | Offset (usft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning |
| 3,175.0 | 2,840.8 | 2,840.8 | 2,840.8 | 16.1 | 1,983.2 | 44.00 | -1,056.4 | -1,607.8 | 1,205.5 | -791.3 | 1,996.76 | 0.604 | Collision RiskProcedures Req'd |
| 3,200.0 | 2,851.4 | 2,851.4 | 2,851.4 | 16.4 | 1,990.6 | 44.58 | -1,056.4 | -1,607.8 | 1,184.5 | -819.7 | 2,004.27 | 0.591 | Collision RiskProcedures Req'd |
| 3,225.0 | 2,861.9 | 2,861.9 | 2,861.9 | 16.8 | 1,998.0 | 45.18 | -1,056.4 | -1,607.8 | 1,163.6 | -848.2 | 2,011.80 | 0.578 | Collision RiskProcedures Req'd |
| 3,250.0 | 2,872.5 | 2,872.5 | 2,872.5 | 17.1 | 2,005.4 | 45.80 | -1,056.4 | -1,607.8 | 1,142.8 | -876.5 | 2,019.33 | 0.566 | Collision RiskProcedures Req'd |
| 3,275.0 | 2,883.1 | 2,883.1 | 2,883.1 | 17.5 | 2,012.7 | 46.42 | -1,056.4 | -1,607.8 | 1,122.1 | -904.8 | 2,026.87 | 0.554 | Collision RiskProcedures Req'd |
| 3,300.0 | 2,893.6 | 2,893.6 | 2,893.6 | 17.8 | 2,020.1 | 47.06 | -1,056.4 | -1,607.8 | 1,101.4 | -933.0 | 2,034.41 | 0.541 | Collision RiskProcedures Req'd |
| 3,325.0 | 2,904.2 | 2,904.2 | 2,904.2 | 18.2 | 2,027.5 | 47.71 | -1,056.4 | -1,607.8 | 1,080.8 | -961.2 | 2,041.97 | 0.529 | Collision RiskProcedures Req'd |
| 3,350.0 | 2,914.8 | 2,914.8 | 2,914.8 | 18.5 | 2,034.9 | 48.38 | -1,056.4 | -1,607.8 | 1,060.3 | -989.2 | 2,049.54 | 0.517 | Collision RiskProcedures Req'd |
| 3,375.0 | 2,925.3 | 2,925.3 | 2,925.3 | 18.9 | 2,042.2 | 49.06 | -1,056.4 | -1,607.8 | 1,039.9 | -1,017.2 | 2,057.11 | 0.506 | Collision RiskProcedures Req'd |
| 3,400.0 | 2,935.9 | 2,935.9 | 2,935.9 | 19.3 | 2,049.6 | 49.75 | -1,056.4 | -1,607.8 | 1,019.6 | -1,045.1 | 2,064.70 | 0.494 | Collision RiskProcedures Req'd |
| 3,425.0 | 2,946.4 | 2,946.4 | 2,946.4 | 19.6 | 2,057.0 | 50.46 | -1,056.4 | -1,607.8 | 999.4 | -1,072.9 | 2,072.30 | 0.482 | Collision RiskProcedures Req'd |
| 3,450.0 | 2,957.0 | 2,957.0 | 2,957.0 | 20.0 | 2,064.4 | 51.19 | -1,056.4 | -1,607.8 | 979.2 | -1,100.7 | 2,079.91 | 0.471 | Collision RiskProcedures Req'd |
| 3,475.0 | 2,967.6 | 2,967.6 | 2,967.6 | 20.3 | 2,071.7 | 51.93 | -1,056.4 | -1,607.8 | 959.2 | -1,128.3 | 2,087.53 | 0.460 | Collision RiskProcedures Req'd |
| 3,476.0 | 2,968.0 | 2,968.0 | 2,968.0 | 20.4 | 2,072.0 | 51.95 | -1,056.4 | -1,607.8 | 958.4 | -1,129.4 | 2,087.84 | 0.459 | Collision RiskProcedures Req'd, CC, E |

Halliburton

Anticollision Report

| | | | |
|---------------------------|------------------------|-------------------------------------|------------------------------|
| Company: | Hilcorp Energy Company | Local Co-ordinate Reference: | Well Southern Ute 703H |
| Project: | Farmington, NM | TVD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Site Error: | 5.0 usft | North Reference: | Grid |
| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

| Offset Design: San Juan Basin - Southern Ute 004E - ST00 - ST00 | | | | | | | | | | | | | Offset Site Error: 5.0 usft |
|--|-----------------------|-----------------------|-----------------------|-----------|--------|-----------------------|-------------------------------------|--------------|---------------------------------|-------------------------|---------------------------|-------------------|------------------------------------|
| Survey Program: 7874-3_Blind | | | | | | | | | | | | | Offset Well Error: 1.0 usft |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference | Offset | Highside Toolface (°) | Offset Wellbore Centre +N/-S (usft) | +E/-W (usft) | Distance Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning |
| 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 1.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | | | | |
| 25.0 | 25.0 | 21.0 | 21.0 | 1.0 | 14.7 | -145.59 | -941.1 | -644.6 | 1,140.7 | 1,122.8 | 17.91 | 63.683 | |
| 50.0 | 50.0 | 46.0 | 46.0 | 1.0 | 32.2 | -145.59 | -941.1 | -644.6 | 1,140.7 | 1,105.3 | 35.37 | 32.247 | |
| 75.0 | 75.0 | 71.0 | 71.0 | 1.0 | 49.6 | -145.59 | -941.1 | -644.6 | 1,140.7 | 1,087.8 | 52.86 | 21.581 | |
| 100.0 | 100.0 | 96.0 | 96.0 | 1.0 | 67.1 | -145.59 | -941.1 | -644.6 | 1,140.7 | 1,070.3 | 70.35 | 16.215 | |
| 125.0 | 125.0 | 121.0 | 121.0 | 1.1 | 84.6 | -145.59 | -941.1 | -644.6 | 1,140.7 | 1,052.8 | 87.85 | 12.984 | |
| 150.0 | 150.0 | 146.0 | 146.0 | 1.1 | 102.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | 1,035.3 | 105.36 | 10.827 | |
| 175.0 | 175.0 | 171.0 | 171.0 | 1.2 | 119.5 | -145.59 | -941.1 | -644.6 | 1,140.7 | 1,017.8 | 122.87 | 9.283 | |
| 200.0 | 200.0 | 196.0 | 196.0 | 1.2 | 137.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | 1,000.3 | 140.39 | 8.125 | |
| 225.0 | 225.0 | 221.0 | 221.0 | 1.3 | 154.5 | -145.59 | -941.1 | -644.6 | 1,140.7 | 982.8 | 157.92 | 7.223 | |
| 250.0 | 250.0 | 246.0 | 246.0 | 1.3 | 171.9 | -145.59 | -941.1 | -644.6 | 1,140.7 | 965.2 | 175.45 | 6.502 | |
| 275.0 | 275.0 | 271.0 | 271.0 | 1.4 | 189.4 | -145.59 | -941.1 | -644.6 | 1,140.7 | 947.7 | 192.98 | 5.911 | |
| 300.0 | 300.0 | 296.0 | 296.0 | 1.4 | 206.9 | -145.59 | -941.1 | -644.6 | 1,140.7 | 930.2 | 210.52 | 5.419 | |
| 325.0 | 325.0 | 321.0 | 321.0 | 1.5 | 224.4 | -145.59 | -941.1 | -644.6 | 1,140.7 | 912.6 | 228.05 | 5.002 | |
| 350.0 | 350.0 | 346.0 | 346.0 | 1.6 | 241.8 | -145.59 | -941.1 | -644.6 | 1,140.7 | 895.1 | 245.60 | 4.645 | |
| 375.0 | 375.0 | 371.0 | 371.0 | 1.6 | 259.3 | -145.59 | -941.1 | -644.6 | 1,140.7 | 877.6 | 263.14 | 4.335 | |
| 400.0 | 400.0 | 396.0 | 396.0 | 1.7 | 276.8 | -145.59 | -941.1 | -644.6 | 1,140.7 | 860.0 | 280.68 | 4.064 | |
| 425.0 | 425.0 | 421.0 | 421.0 | 1.8 | 294.3 | -145.59 | -941.1 | -644.6 | 1,140.7 | 842.5 | 298.23 | 3.825 | |
| 450.0 | 450.0 | 446.0 | 446.0 | 1.9 | 311.7 | -145.59 | -941.1 | -644.6 | 1,140.7 | 824.9 | 315.78 | 3.612 | |
| 475.0 | 475.0 | 471.0 | 471.0 | 1.9 | 329.2 | -145.59 | -941.1 | -644.6 | 1,140.7 | 807.4 | 333.33 | 3.422 | |
| 500.0 | 500.0 | 496.0 | 496.0 | 2.0 | 346.7 | -145.59 | -941.1 | -644.6 | 1,140.7 | 789.8 | 350.88 | 3.251 | |
| 525.0 | 525.0 | 521.0 | 521.0 | 2.1 | 364.1 | -145.59 | -941.1 | -644.6 | 1,140.7 | 772.3 | 368.43 | 3.096 | |
| 550.0 | 550.0 | 546.0 | 546.0 | 2.2 | 381.6 | -145.59 | -941.1 | -644.6 | 1,140.7 | 754.7 | 385.98 | 2.955 | |
| 575.0 | 575.0 | 571.0 | 571.0 | 2.2 | 399.1 | -145.59 | -941.1 | -644.6 | 1,140.7 | 737.2 | 403.53 | 2.827 | |
| 600.0 | 600.0 | 596.0 | 596.0 | 2.3 | 416.6 | -145.59 | -941.1 | -644.6 | 1,140.7 | 719.6 | 421.09 | 2.709 | |
| 625.0 | 625.0 | 621.0 | 621.0 | 2.4 | 434.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | 702.1 | 438.64 | 2.601 | |
| 650.0 | 650.0 | 646.0 | 646.0 | 2.5 | 451.5 | -145.59 | -941.1 | -644.6 | 1,140.7 | 684.5 | 456.20 | 2.500 | |
| 675.0 | 675.0 | 671.0 | 671.0 | 2.6 | 469.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | 666.9 | 473.75 | 2.408 | |
| 700.0 | 700.0 | 696.0 | 696.0 | 2.7 | 486.5 | -145.59 | -941.1 | -644.6 | 1,140.7 | 649.4 | 491.31 | 2.322 | |
| 725.0 | 725.0 | 721.0 | 721.0 | 2.7 | 503.9 | -145.59 | -941.1 | -644.6 | 1,140.7 | 631.8 | 508.87 | 2.242 | |
| 750.0 | 750.0 | 746.0 | 746.0 | 2.8 | 521.4 | -145.59 | -941.1 | -644.6 | 1,140.7 | 614.3 | 526.42 | 2.167 | |
| 775.0 | 775.0 | 771.0 | 771.0 | 2.9 | 538.9 | -145.59 | -941.1 | -644.6 | 1,140.7 | 596.7 | 543.98 | 2.097 | |
| 800.0 | 800.0 | 796.0 | 796.0 | 3.0 | 556.4 | -145.59 | -941.1 | -644.6 | 1,140.7 | 579.2 | 561.54 | 2.031 | |
| 825.0 | 825.0 | 821.0 | 821.0 | 3.1 | 573.8 | -145.59 | -941.1 | -644.6 | 1,140.7 | 561.6 | 579.10 | 1.970 | Collision RiskProcedures Req'd |
| 850.0 | 850.0 | 846.0 | 846.0 | 3.2 | 591.3 | -145.59 | -941.1 | -644.6 | 1,140.7 | 544.0 | 596.65 | 1.912 | Collision RiskProcedures Req'd |
| 875.0 | 875.0 | 871.0 | 871.0 | 3.2 | 608.8 | -145.59 | -941.1 | -644.6 | 1,140.7 | 526.5 | 614.21 | 1.857 | Collision RiskProcedures Req'd |
| 900.0 | 900.0 | 896.0 | 896.0 | 3.3 | 626.2 | -145.59 | -941.1 | -644.6 | 1,140.7 | 508.9 | 631.77 | 1.806 | Collision RiskProcedures Req'd |
| 925.0 | 925.0 | 921.0 | 921.0 | 3.4 | 643.7 | -145.59 | -941.1 | -644.6 | 1,140.7 | 491.4 | 649.33 | 1.757 | Collision RiskProcedures Req'd |
| 950.0 | 950.0 | 946.0 | 946.0 | 3.5 | 661.2 | -145.59 | -941.1 | -644.6 | 1,140.7 | 473.8 | 666.89 | 1.710 | Collision RiskProcedures Req'd |
| 975.0 | 975.0 | 971.0 | 971.0 | 3.6 | 678.7 | -145.59 | -941.1 | -644.6 | 1,140.7 | 456.2 | 684.45 | 1.667 | Collision RiskProcedures Req'd |
| 1,000.0 | 1,000.0 | 996.0 | 996.0 | 3.7 | 696.1 | -145.59 | -941.1 | -644.6 | 1,140.7 | 438.7 | 702.01 | 1.625 | Collision RiskProcedures Req'd |
| 1,025.0 | 1,025.0 | 1,021.0 | 1,021.0 | 3.8 | 713.6 | -145.59 | -941.1 | -644.6 | 1,140.7 | 421.1 | 719.57 | 1.585 | Collision RiskProcedures Req'd |
| 1,050.0 | 1,050.0 | 1,046.0 | 1,046.0 | 3.8 | 731.1 | -145.59 | -941.1 | -644.6 | 1,140.7 | 403.6 | 737.13 | 1.547 | Collision RiskProcedures Req'd |
| 1,075.0 | 1,075.0 | 1,071.0 | 1,071.0 | 3.9 | 748.6 | -145.59 | -941.1 | -644.6 | 1,140.7 | 386.0 | 754.69 | 1.511 | Collision RiskProcedures Req'd |
| 1,100.0 | 1,100.0 | 1,096.0 | 1,096.0 | 4.0 | 766.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | 368.5 | 772.25 | 1.477 | Collision RiskProcedures Req'd |
| 1,125.0 | 1,125.0 | 1,121.0 | 1,121.0 | 4.1 | 783.5 | -145.59 | -941.1 | -644.6 | 1,140.7 | 350.9 | 789.81 | 1.444 | Collision RiskProcedures Req'd |
| 1,150.0 | 1,150.0 | 1,146.0 | 1,146.0 | 4.2 | 801.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | 333.3 | 807.37 | 1.413 | Collision RiskProcedures Req'd |
| 1,175.0 | 1,175.0 | 1,171.0 | 1,171.0 | 4.3 | 818.5 | -145.59 | -941.1 | -644.6 | 1,140.7 | 315.8 | 824.93 | 1.383 | Collision RiskProcedures Req'd |
| 1,200.0 | 1,200.0 | 1,196.0 | 1,196.0 | 4.4 | 835.9 | -145.59 | -941.1 | -644.6 | 1,140.7 | 298.2 | 842.49 | 1.354 | Collision RiskProcedures Req'd |
| 1,225.0 | 1,225.0 | 1,221.0 | 1,221.0 | 4.5 | 853.4 | -145.59 | -941.1 | -644.6 | 1,140.7 | 280.6 | 860.05 | 1.326 | Collision RiskProcedures Req'd |
| 1,250.0 | 1,250.0 | 1,246.0 | 1,246.0 | 4.5 | 870.9 | -145.59 | -941.1 | -644.6 | 1,140.7 | 263.1 | 877.61 | 1.300 | Collision RiskProcedures Req'd |
| 1,275.0 | 1,275.0 | 1,271.0 | 1,271.0 | 4.6 | 888.3 | -145.59 | -941.1 | -644.6 | 1,140.7 | 245.5 | 895.17 | 1.274 | Collision RiskProcedures Req'd |

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

Halliburton
Anticollision Report

| | | | |
|---------------------------|------------------------|-------------------------------------|------------------------------|
| Company: | Hilcorp Energy Company | Local Co-ordinate Reference: | Well Southern Ute 703H |
| Project: | Farmington, NM | TVD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Site Error: | 5.0 usft | North Reference: | Grid |
| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

| | | | | | | | | | | | | | |
|--|----------------------------------|----------------------------------|----------------------------------|-----------------------------|--------------------------|----------------------------------|-------------------------------|-------------------------|-----------------------------------|------------------------------------|--------------------------------------|---------------------------|--------------------------------|
| Offset Design: San Juan Basin - Southern Ute 004E - ST00 - ST00 | | | | | | | | | | | | Offset Site Error: | 5.0 usft |
| Survey Program: 7874-3_Blind | | | | | | | | | | | | Offset Well Error: | 1.0 usft |
| Reference | | Offset | | Semi Major Axis | | Highside Toolface (") | Offset Wellbore Centre | | Distance | | Minimum Separation (usft) | Separation Factor | Warning |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | | +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | | | |
| 1,300.0 | 1,300.0 | 1,296.0 | 1,296.0 | 4.7 | 905.8 | -145.59 | -941.1 | -644.6 | 1,140.7 | 228.0 | 912.73 | 1.250 | Collision RiskProcedures Req'd |
| 1,325.0 | 1,325.0 | 1,321.0 | 1,321.0 | 4.8 | 923.3 | -145.59 | -941.1 | -644.6 | 1,140.7 | 210.4 | 930.29 | 1.226 | Collision RiskProcedures Req'd |
| 1,350.0 | 1,350.0 | 1,346.0 | 1,346.0 | 4.9 | 940.8 | -145.59 | -941.1 | -644.6 | 1,140.7 | 192.8 | 947.85 | 1.203 | Collision RiskProcedures Req'd |
| 1,375.0 | 1,375.0 | 1,371.0 | 1,371.0 | 5.0 | 958.2 | -145.59 | -941.1 | -644.6 | 1,140.7 | 175.3 | 965.41 | 1.182 | Collision RiskProcedures Req'd |
| 1,400.0 | 1,400.0 | 1,396.0 | 1,396.0 | 5.1 | 975.7 | -145.59 | -941.1 | -644.6 | 1,140.7 | 157.7 | 982.98 | 1.160 | Collision RiskProcedures Req'd |
| 1,425.0 | 1,425.0 | 1,421.0 | 1,421.0 | 5.2 | 993.2 | -145.59 | -941.1 | -644.6 | 1,140.7 | 140.2 | 1,000.54 | 1.140 | Collision RiskProcedures Req'd |
| 1,450.0 | 1,450.0 | 1,446.0 | 1,446.0 | 5.2 | 1,010.7 | -145.59 | -941.1 | -644.6 | 1,140.7 | 122.6 | 1,018.10 | 1.120 | Collision RiskProcedures Req'd |
| 1,475.0 | 1,475.0 | 1,471.0 | 1,471.0 | 5.3 | 1,028.1 | -145.59 | -941.1 | -644.6 | 1,140.7 | 105.0 | 1,035.66 | 1.101 | Collision RiskProcedures Req'd |
| 1,500.0 | 1,500.0 | 1,496.0 | 1,496.0 | 5.4 | 1,045.6 | -145.59 | -941.1 | -644.6 | 1,140.7 | 87.5 | 1,053.22 | 1.083 | Collision RiskProcedures Req'd |
| 1,525.0 | 1,525.0 | 1,521.0 | 1,521.0 | 5.5 | 1,063.1 | -145.59 | -941.1 | -644.6 | 1,140.7 | 69.9 | 1,070.78 | 1.065 | Collision RiskProcedures Req'd |
| 1,550.0 | 1,550.0 | 1,546.0 | 1,546.0 | 5.6 | 1,080.6 | -145.59 | -941.1 | -644.6 | 1,140.7 | 52.4 | 1,088.34 | 1.048 | Collision RiskProcedures Req'd |
| 1,575.0 | 1,575.0 | 1,571.0 | 1,571.0 | 5.7 | 1,098.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | 34.8 | 1,105.91 | 1.031 | Collision RiskProcedures Req'd |
| 1,600.0 | 1,600.0 | 1,596.0 | 1,596.0 | 5.8 | 1,115.5 | -145.59 | -941.1 | -644.6 | 1,140.7 | 17.2 | 1,123.47 | 1.015 | Collision RiskProcedures Req'd |
| 1,625.0 | 1,625.0 | 1,621.0 | 1,621.0 | 5.9 | 1,133.0 | -145.59 | -941.1 | -644.6 | 1,140.7 | -0.3 | 1,141.03 | 1.000 | Collision RiskProcedures Req'd |
| 1,650.0 | 1,650.0 | 1,646.0 | 1,646.0 | 5.9 | 1,150.4 | -145.59 | -941.1 | -644.6 | 1,140.7 | -17.9 | 1,158.59 | 0.985 | Collision RiskProcedures Req'd |
| 1,675.0 | 1,675.0 | 1,671.0 | 1,671.0 | 6.0 | 1,167.9 | -145.59 | -941.1 | -644.6 | 1,140.7 | -35.5 | 1,176.15 | 0.970 | Collision RiskProcedures Req'd |
| 1,700.0 | 1,700.0 | 1,696.0 | 1,696.0 | 6.1 | 1,185.4 | -145.59 | -941.1 | -644.6 | 1,140.7 | -53.0 | 1,193.71 | 0.956 | Collision RiskProcedures Req'd |
| 1,725.0 | 1,725.0 | 1,721.0 | 1,721.0 | 6.2 | 1,202.9 | -145.59 | -941.1 | -644.6 | 1,140.7 | -70.6 | 1,211.28 | 0.942 | Collision RiskProcedures Req'd |
| 1,750.0 | 1,750.0 | 1,746.0 | 1,746.0 | 6.3 | 1,220.3 | -145.59 | -941.1 | -644.6 | 1,140.7 | -88.1 | 1,228.84 | 0.928 | Collision RiskProcedures Req'd |
| 1,775.0 | 1,775.0 | 1,771.0 | 1,771.0 | 6.4 | 1,237.8 | -145.59 | -941.1 | -644.6 | 1,140.7 | -105.7 | 1,246.40 | 0.915 | Collision RiskProcedures Req'd |
| 1,800.0 | 1,800.0 | 1,796.0 | 1,796.0 | 6.5 | 1,255.3 | -145.59 | -941.1 | -644.6 | 1,140.7 | -123.3 | 1,263.96 | 0.902 | Collision RiskProcedures Req'd |
| 1,825.0 | 1,825.0 | 1,821.0 | 1,821.0 | 6.6 | 1,272.8 | -145.59 | -941.1 | -644.6 | 1,140.7 | -140.8 | 1,281.52 | 0.890 | Collision RiskProcedures Req'd |
| 1,826.0 | 1,826.0 | 1,822.0 | 1,822.0 | 6.6 | 1,273.5 | -145.59 | -941.1 | -644.6 | 1,140.7 | -141.5 | 1,282.23 | 0.890 | Collision RiskProcedures Req'd |
| 1,850.0 | 1,850.0 | 1,846.0 | 1,846.0 | 6.6 | 1,290.2 | -8.59 | -941.1 | -644.6 | 1,140.4 | -158.7 | 1,299.08 | 0.878 | Collision RiskProcedures Req'd |
| 1,875.0 | 1,875.0 | 1,871.0 | 1,871.0 | 6.7 | 1,307.7 | -8.61 | -941.1 | -644.6 | 1,139.6 | -177.1 | 1,316.63 | 0.866 | Collision RiskProcedures Req'd |
| 1,900.0 | 1,899.9 | 1,895.9 | 1,895.9 | 6.8 | 1,325.1 | -8.63 | -941.1 | -644.6 | 1,138.1 | -196.1 | 1,334.15 | 0.853 | Collision RiskProcedures Req'd |
| 1,925.0 | 1,924.9 | 1,920.9 | 1,920.9 | 6.9 | 1,342.5 | -8.66 | -941.1 | -644.6 | 1,136.1 | -215.6 | 1,351.65 | 0.840 | Collision RiskProcedures Req'd |
| 1,950.0 | 1,949.7 | 1,945.7 | 1,945.7 | 7.0 | 1,359.9 | -8.70 | -941.1 | -644.6 | 1,133.4 | -235.7 | 1,369.10 | 0.828 | Collision RiskProcedures Req'd |
| 1,975.0 | 1,974.5 | 1,970.5 | 1,970.5 | 7.1 | 1,377.2 | -8.76 | -941.1 | -644.6 | 1,130.2 | -256.3 | 1,386.51 | 0.815 | Collision RiskProcedures Req'd |
| 2,000.0 | 1,999.2 | 1,995.2 | 1,995.2 | 7.1 | 1,394.5 | -8.82 | -941.1 | -644.6 | 1,126.4 | -277.5 | 1,403.86 | 0.802 | Collision RiskProcedures Req'd |
| 2,025.0 | 2,023.8 | 2,019.8 | 2,019.8 | 7.2 | 1,411.7 | -8.89 | -941.1 | -644.6 | 1,122.0 | -299.2 | 1,421.13 | 0.789 | Collision RiskProcedures Req'd |
| 2,050.0 | 2,048.3 | 2,044.3 | 2,044.3 | 7.3 | 1,428.8 | -8.98 | -941.1 | -644.6 | 1,117.0 | -321.3 | 1,438.33 | 0.777 | Collision RiskProcedures Req'd |
| 2,075.0 | 2,072.6 | 2,068.6 | 2,068.6 | 7.4 | 1,445.8 | -9.07 | -941.1 | -644.6 | 1,111.4 | -344.0 | 1,455.44 | 0.764 | Collision RiskProcedures Req'd |
| 2,100.0 | 2,096.9 | 2,092.9 | 2,092.9 | 7.5 | 1,462.8 | -9.18 | -941.1 | -644.6 | 1,105.3 | -367.2 | 1,472.44 | 0.751 | Collision RiskProcedures Req'd |
| 2,125.0 | 2,120.9 | 2,116.9 | 2,116.9 | 7.6 | 1,479.6 | -9.29 | -941.1 | -644.6 | 1,098.6 | -390.8 | 1,489.35 | 0.738 | Collision RiskProcedures Req'd |
| 2,150.0 | 2,144.8 | 2,140.8 | 2,140.8 | 7.7 | 1,496.3 | -9.42 | -941.1 | -644.6 | 1,091.3 | -414.8 | 1,506.13 | 0.725 | Collision RiskProcedures Req'd |
| 2,175.0 | 2,168.5 | 2,164.5 | 2,164.5 | 7.8 | 1,512.8 | -9.57 | -941.1 | -644.6 | 1,083.5 | -439.3 | 1,522.78 | 0.712 | Collision RiskProcedures Req'd |
| 2,200.0 | 2,192.0 | 2,188.0 | 2,188.0 | 7.8 | 1,529.3 | -9.73 | -941.1 | -644.6 | 1,075.1 | -464.2 | 1,539.29 | 0.698 | Collision RiskProcedures Req'd |
| 2,225.0 | 2,215.3 | 2,211.3 | 2,211.3 | 7.9 | 1,545.6 | -9.90 | -941.1 | -644.6 | 1,066.1 | -489.5 | 1,555.66 | 0.685 | Collision RiskProcedures Req'd |
| 2,250.0 | 2,238.4 | 2,234.4 | 2,234.4 | 8.0 | 1,561.7 | -10.09 | -941.1 | -644.6 | 1,056.6 | -515.2 | 1,571.87 | 0.672 | Collision RiskProcedures Req'd |
| 2,275.0 | 2,261.2 | 2,257.2 | 2,257.2 | 8.1 | 1,577.7 | -10.29 | -941.1 | -644.6 | 1,046.6 | -541.3 | 1,587.91 | 0.659 | Collision RiskProcedures Req'd |
| 2,300.0 | 2,283.8 | 2,279.8 | 2,279.8 | 8.2 | 1,593.4 | -10.51 | -941.1 | -644.6 | 1,036.0 | -567.8 | 1,603.78 | 0.646 | Collision RiskProcedures Req'd |
| 2,325.0 | 2,306.1 | 2,302.1 | 2,302.1 | 8.4 | 1,609.0 | -10.75 | -941.1 | -644.6 | 1,024.9 | -594.5 | 1,619.46 | 0.633 | Collision RiskProcedures Req'd |
| 2,350.0 | 2,328.2 | 2,324.2 | 2,324.2 | 8.5 | 1,624.4 | -11.01 | -941.1 | -644.6 | 1,013.3 | -621.7 | 1,634.95 | 0.620 | Collision RiskProcedures Req'd |
| 2,375.0 | 2,349.9 | 2,345.9 | 2,345.9 | 8.6 | 1,639.7 | -11.30 | -941.1 | -644.6 | 1,001.2 | -649.1 | 1,650.24 | 0.607 | Collision RiskProcedures Req'd |
| 2,400.0 | 2,371.4 | 2,367.4 | 2,367.4 | 8.7 | 1,654.6 | -11.60 | -941.1 | -644.6 | 988.5 | -676.8 | 1,665.32 | 0.594 | Collision RiskProcedures Req'd |
| 2,425.0 | 2,392.5 | 2,388.5 | 2,388.5 | 8.8 | 1,669.4 | -11.93 | -941.1 | -644.6 | 975.4 | -704.8 | 1,680.18 | 0.581 | Collision RiskProcedures Req'd |
| 2,450.0 | 2,413.3 | 2,409.3 | 2,409.3 | 9.0 | 1,684.0 | -12.29 | -941.1 | -644.6 | 961.7 | -733.1 | 1,694.81 | 0.567 | Collision RiskProcedures Req'd |
| 2,475.0 | 2,433.8 | 2,429.8 | 2,429.8 | 9.1 | 1,698.3 | -12.68 | -941.1 | -644.6 | 947.6 | -761.6 | 1,709.20 | 0.554 | Collision RiskProcedures Req'd |
| 2,500.0 | 2,454.0 | 2,450.0 | 2,450.0 | 9.3 | 1,712.4 | -13.10 | -941.1 | -644.6 | 933.1 | -790.3 | 1,723.34 | 0.541 | Collision RiskProcedures Req'd |
| 2,525.0 | 2,473.7 | 2,469.7 | 2,469.7 | 9.4 | 1,726.2 | -13.56 | -941.1 | -644.6 | 918.0 | -819.2 | 1,737.24 | 0.528 | Collision RiskProcedures Req'd |
| 2,550.0 | 2,493.1 | 2,489.1 | 2,489.1 | 9.6 | 1,739.7 | -14.05 | -941.1 | -644.6 | 902.5 | -848.4 | 1,750.87 | 0.515 | Collision RiskProcedures Req'd |

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

Halliburton

Anticollision Report

| | | | |
|---------------------------|------------------------|-------------------------------------|------------------------------|
| Company: | Hilcorp Energy Company | Local Co-ordinate Reference: | Well Southern Ute 703H |
| Project: | Farmington, NM | TVD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Site Error: | 5.0 usft | North Reference: | Grid |
| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

| Offset Design: San Juan Basin - Southern Ute 004E - ST00 - ST00 | | | | | | | | | | | | Offset Site Error: | 5.0 usft | |
|---|-----------------------|-----------------------|-----------------------|------------------|---------------|-----------------------|--------------|------------------------|------------------------|-------------------------|---------------------------|--------------------|----------------|-------------------------|
| Survey Program: | | 7874-3_Blind | | Offset | | Semi Major Axis | | Offset Wellbore Centre | | Rule Assigned: | | Offset Well Error: | | 1.0 usft |
| Measured Depth (usft) | Vertical Depth (usft) | Measured Depth (usft) | Vertical Depth (usft) | Reference (usft) | Offset (usft) | Highside Toolface (°) | +N/-S (usft) | +E/-W (usft) | Between Centres (usft) | Between Ellipses (usft) | Minimum Separation (usft) | Separation Factor | Warning | |
| 2,575.0 | 2,512.1 | 2,508.1 | 2,508.1 | 9.7 | 1,753.0 | -14.58 | -941.1 | -644.6 | 886.6 | -877.7 | 1,764.23 | 0.503 | Collision Risk | Procedures Req'd |
| 2,600.0 | 2,530.7 | 2,526.7 | 2,526.7 | 9.9 | 1,766.0 | -15.17 | -941.1 | -644.6 | 870.2 | -907.1 | 1,777.32 | 0.490 | Collision Risk | Procedures Req'd |
| 2,625.0 | 2,548.9 | 2,544.9 | 2,544.9 | 10.1 | 1,778.7 | -15.80 | -941.1 | -644.6 | 853.4 | -936.7 | 1,790.13 | 0.477 | Collision Risk | Procedures Req'd |
| 2,650.0 | 2,566.7 | 2,562.7 | 2,562.7 | 10.3 | 1,791.2 | -16.48 | -941.1 | -644.6 | 836.2 | -966.4 | 1,802.64 | 0.464 | Collision Risk | Procedures Req'd |
| 2,675.0 | 2,584.1 | 2,580.1 | 2,580.1 | 10.5 | 1,803.3 | -17.23 | -941.1 | -644.6 | 818.6 | -996.3 | 1,814.85 | 0.451 | Collision Risk | Procedures Req'd |
| 2,700.0 | 2,601.0 | 2,597.0 | 2,597.0 | 10.7 | 1,815.1 | -18.05 | -941.1 | -644.6 | 800.6 | -1,026.1 | 1,826.76 | 0.438 | Collision Risk | Procedures Req'd |
| 2,725.0 | 2,617.5 | 2,613.5 | 2,613.5 | 10.9 | 1,826.7 | -18.94 | -941.1 | -644.6 | 782.3 | -1,056.1 | 1,838.36 | 0.426 | Collision Risk | Procedures Req'd |
| 2,750.0 | 2,633.5 | 2,629.5 | 2,629.5 | 11.1 | 1,837.9 | -19.91 | -941.1 | -644.6 | 763.5 | -1,086.1 | 1,849.64 | 0.413 | Collision Risk | Procedures Req'd |
| 2,775.0 | 2,649.1 | 2,645.1 | 2,645.1 | 11.4 | 1,848.7 | -20.98 | -941.1 | -644.6 | 744.5 | -1,116.1 | 1,860.60 | 0.400 | Collision Risk | Procedures Req'd |
| 2,800.0 | 2,664.2 | 2,660.2 | 2,660.2 | 11.6 | 1,859.3 | -22.15 | -941.1 | -644.6 | 725.1 | -1,146.1 | 1,871.22 | 0.387 | Collision Risk | Procedures Req'd |
| 2,825.0 | 2,678.8 | 2,674.8 | 2,674.8 | 11.9 | 1,869.5 | -23.43 | -941.1 | -644.6 | 705.4 | -1,176.1 | 1,881.51 | 0.375 | Collision Risk | Procedures Req'd |
| 2,850.0 | 2,692.9 | 2,688.9 | 2,688.9 | 12.1 | 1,879.3 | -24.83 | -941.1 | -644.6 | 685.4 | -1,206.1 | 1,891.46 | 0.362 | Collision Risk | Procedures Req'd |
| 2,875.0 | 2,706.5 | 2,702.5 | 2,702.5 | 12.4 | 1,888.9 | -26.37 | -941.1 | -644.6 | 665.1 | -1,236.0 | 1,901.06 | 0.350 | Collision Risk | Procedures Req'd |
| 2,900.0 | 2,719.6 | 2,715.6 | 2,715.6 | 12.6 | 1,898.0 | -28.06 | -941.1 | -644.6 | 644.5 | -1,265.8 | 1,910.30 | 0.337 | Collision Risk | Procedures Req'd |
| 2,925.0 | 2,732.2 | 2,728.2 | 2,728.2 | 12.9 | 1,906.8 | -29.92 | -941.1 | -644.6 | 623.7 | -1,295.5 | 1,919.20 | 0.325 | Collision Risk | Procedures Req'd |
| 2,950.0 | 2,744.3 | 2,740.3 | 2,740.3 | 13.2 | 1,915.3 | -31.96 | -941.1 | -644.6 | 602.7 | -1,325.0 | 1,927.73 | 0.313 | Collision Risk | Procedures Req'd |
| 2,975.0 | 2,755.8 | 2,751.8 | 2,751.8 | 13.5 | 1,923.3 | -34.19 | -941.1 | -644.6 | 581.5 | -1,354.4 | 1,935.90 | 0.300 | Collision Risk | Procedures Req'd |
| 3,000.0 | 2,766.8 | 2,762.8 | 2,762.8 | 13.8 | 1,931.0 | -36.63 | -941.1 | -644.6 | 560.0 | -1,383.7 | 1,943.69 | 0.288 | Collision Risk | Procedures Req'd |
| 3,007.8 | 2,770.1 | 2,766.1 | 2,766.1 | 13.9 | 1,933.3 | -37.44 | -941.1 | -644.6 | 553.3 | -1,392.8 | 1,946.06 | 0.284 | Collision Risk | Procedures Req'd |
| 3,025.0 | 2,777.4 | 2,773.4 | 2,773.4 | 14.1 | 1,938.4 | -38.27 | -941.1 | -644.6 | 538.5 | -1,412.7 | 1,951.21 | 0.276 | Collision Risk | Procedures Req'd |
| 3,050.0 | 2,788.0 | 2,784.0 | 2,784.0 | 14.5 | 1,945.8 | -39.54 | -941.1 | -644.6 | 517.1 | -1,441.7 | 1,958.73 | 0.264 | Collision Risk | Procedures Req'd |
| 3,075.0 | 2,798.5 | 2,794.5 | 2,794.5 | 14.8 | 1,953.2 | -40.89 | -941.1 | -644.6 | 495.7 | -1,470.5 | 1,966.25 | 0.252 | Collision Risk | Procedures Req'd |
| 3,100.0 | 2,809.1 | 2,805.1 | 2,805.1 | 15.1 | 1,960.6 | -42.31 | -941.1 | -644.6 | 474.5 | -1,499.3 | 1,973.78 | 0.240 | Collision Risk | Procedures Req'd |
| 3,125.0 | 2,819.7 | 2,815.7 | 2,815.7 | 15.4 | 1,968.0 | -43.81 | -941.1 | -644.6 | 453.4 | -1,527.9 | 1,981.34 | 0.229 | Collision Risk | Procedures Req'd |
| 3,150.0 | 2,830.2 | 2,826.2 | 2,826.2 | 15.8 | 1,975.3 | -45.39 | -941.1 | -644.6 | 432.5 | -1,556.4 | 1,988.91 | 0.217 | Collision Risk | Procedures Req'd |
| 3,175.0 | 2,840.8 | 2,836.8 | 2,836.8 | 16.1 | 1,982.7 | -47.07 | -941.1 | -644.6 | 411.8 | -1,584.7 | 1,996.51 | 0.206 | Collision Risk | Procedures Req'd |
| 3,200.0 | 2,851.4 | 2,847.4 | 2,847.4 | 16.4 | 1,990.1 | -48.85 | -941.1 | -644.6 | 391.3 | -1,612.9 | 2,004.13 | 0.195 | Collision Risk | Procedures Req'd |
| 3,225.0 | 2,861.9 | 2,857.9 | 2,857.9 | 16.8 | 1,997.5 | -50.73 | -941.1 | -644.6 | 371.0 | -1,640.8 | 2,011.80 | 0.184 | Collision Risk | Procedures Req'd |
| 3,250.0 | 2,872.5 | 2,868.5 | 2,868.5 | 17.1 | 2,004.9 | -52.71 | -941.1 | -644.6 | 351.0 | -1,668.5 | 2,019.50 | 0.174 | Collision Risk | Procedures Req'd |
| 3,275.0 | 2,883.1 | 2,879.1 | 2,879.1 | 17.5 | 2,012.3 | -54.81 | -941.1 | -644.6 | 331.4 | -1,695.8 | 2,027.25 | 0.163 | Collision Risk | Procedures Req'd |
| 3,300.0 | 2,893.6 | 2,889.6 | 2,889.6 | 17.8 | 2,019.7 | -57.01 | -941.1 | -644.6 | 312.2 | -1,722.9 | 2,035.05 | 0.153 | Collision Risk | Procedures Req'd |
| 3,325.0 | 2,904.2 | 2,900.2 | 2,900.2 | 18.2 | 2,027.0 | -59.34 | -941.1 | -644.6 | 293.5 | -1,749.5 | 2,042.93 | 0.144 | Collision Risk | Procedures Req'd |
| 3,350.0 | 2,914.8 | 2,910.8 | 2,910.8 | 18.5 | 2,034.4 | -61.78 | -941.1 | -644.6 | 275.3 | -1,775.5 | 2,050.87 | 0.134 | Collision Risk | Procedures Req'd |
| 3,375.0 | 2,925.3 | 2,921.3 | 2,921.3 | 18.9 | 2,041.8 | -64.34 | -941.1 | -644.6 | 257.9 | -1,801.0 | 2,058.90 | 0.125 | Collision Risk | Procedures Req'd |
| 3,400.0 | 2,935.9 | 2,931.9 | 2,931.9 | 19.3 | 2,049.2 | -67.01 | -941.1 | -644.6 | 241.4 | -1,825.7 | 2,067.01 | 0.117 | Collision Risk | Procedures Req'd |
| 3,425.0 | 2,946.4 | 2,942.4 | 2,942.4 | 19.6 | 2,056.6 | -69.80 | -941.1 | -644.6 | 225.9 | -1,849.3 | 2,075.22 | 0.109 | Collision Risk | Procedures Req'd |
| 3,450.0 | 2,957.0 | 2,953.0 | 2,953.0 | 20.0 | 2,064.0 | -72.68 | -941.1 | -644.6 | 211.7 | -1,871.8 | 2,083.52 | 0.102 | Collision Risk | Procedures Req'd |
| 3,475.0 | 2,967.6 | 2,963.6 | 2,963.6 | 20.3 | 2,071.3 | -75.66 | -941.1 | -644.6 | 199.1 | -1,892.8 | 2,091.87 | 0.095 | Collision Risk | Procedures Req'd |
| 3,476.0 | 2,968.0 | 2,964.0 | 2,964.0 | 20.4 | 2,071.6 | -75.78 | -941.1 | -644.6 | 198.6 | -1,893.6 | 2,092.21 | 0.095 | Collision Risk | Procedures Req'd, CC, E |

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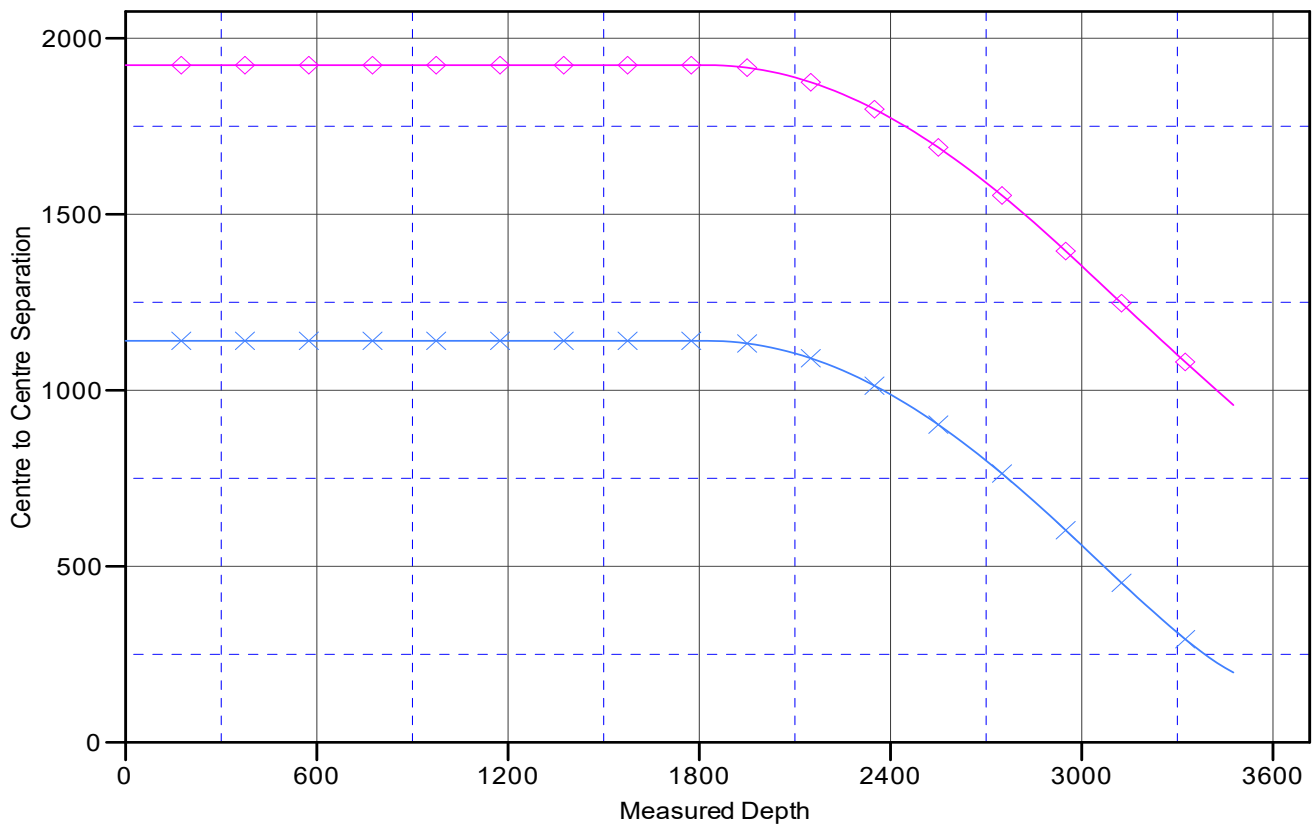
Anticollision Report

| | | | |
|---------------------------|------------------------|-------------------------------------|------------------------------|
| Company: | Hilcorp Energy Company | Local Co-ordinate Reference: | Well Southern Ute 703H |
| Project: | Farmington, NM | TVD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Site Error: | 5.0 usft | North Reference: | Grid |
| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to RKB-MSI= 6274ft @ 6274.0usft
Offset Depths are relative to Offset Datum
Central Meridian is -107.833

Coordinates are relative to: Southern Ute 703H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico West 30
Grid Convergence at Surface is: 0.15°

Ladder Plot



LEGEND

◆ Southern Ute 004, ST00, ST00 V0
× Southern Ute 004E, ST00, ST00 V0

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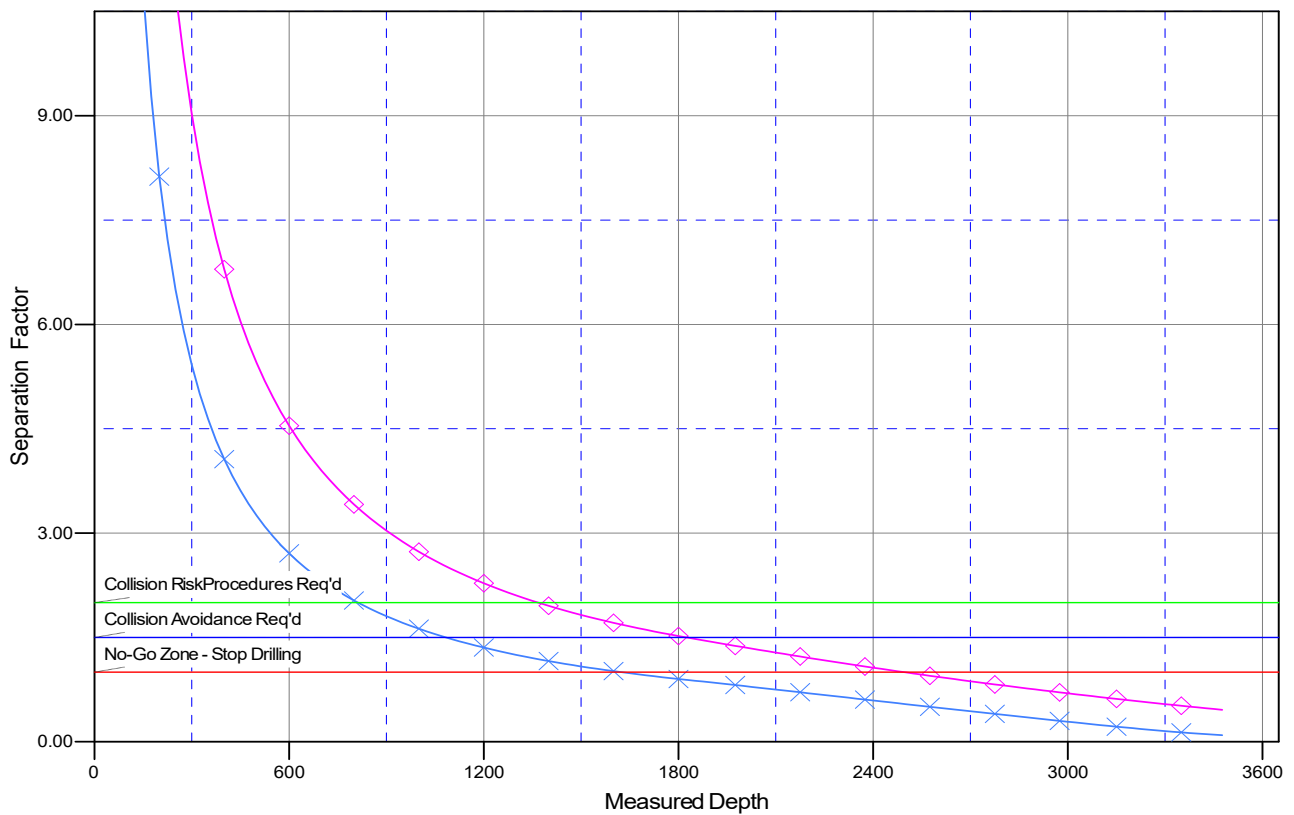
Anticollision Report

| | | | |
|---------------------------|------------------------|-------------------------------------|------------------------------|
| Company: | Hilcorp Energy Company | Local Co-ordinate Reference: | Well Southern Ute 703H |
| Project: | Farmington, NM | TVD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Reference Site: | San Juan Basin | MD Reference: | RKB-MSI= 6274ft @ 6274.0usft |
| Site Error: | 5.0 usft | North Reference: | Grid |
| Reference Well: | Southern Ute 703H | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 1.0 usft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Pilot Hole | Database: | EDM 5000.17 Single User Db |
| Reference Design: | WP3 | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to RKB-MSI= 6274ft @ 6274.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -107.833

Coordinates are relative to: Southern Ute 703H
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico West 30
 Grid Convergence at Surface is: 0.15°

Separation Factor Plot



LEGEND

◆ Southern Ute 004, ST00, ST00 V0
 ✕ Southern Ute 004E, ST00, ST00 V0