

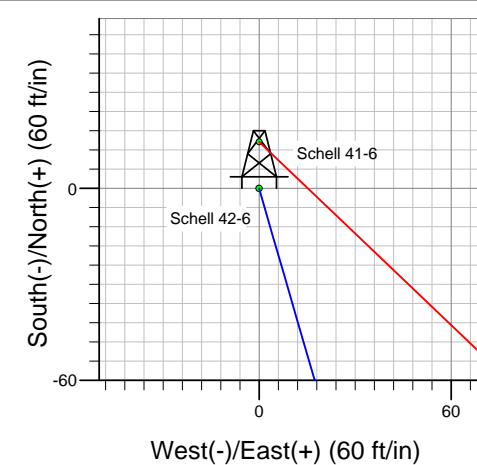
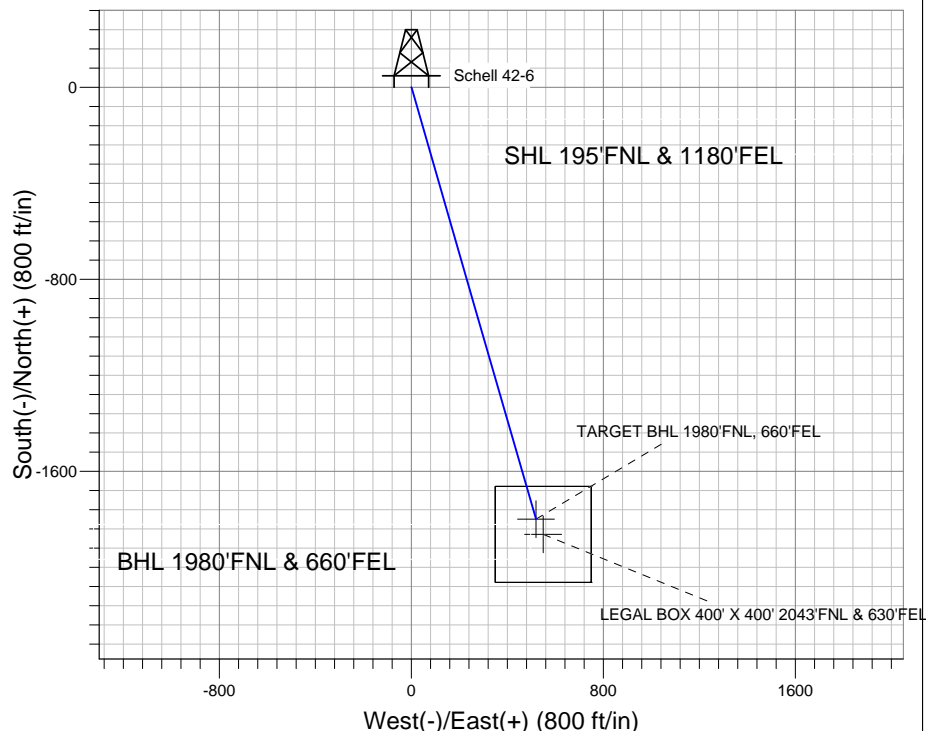
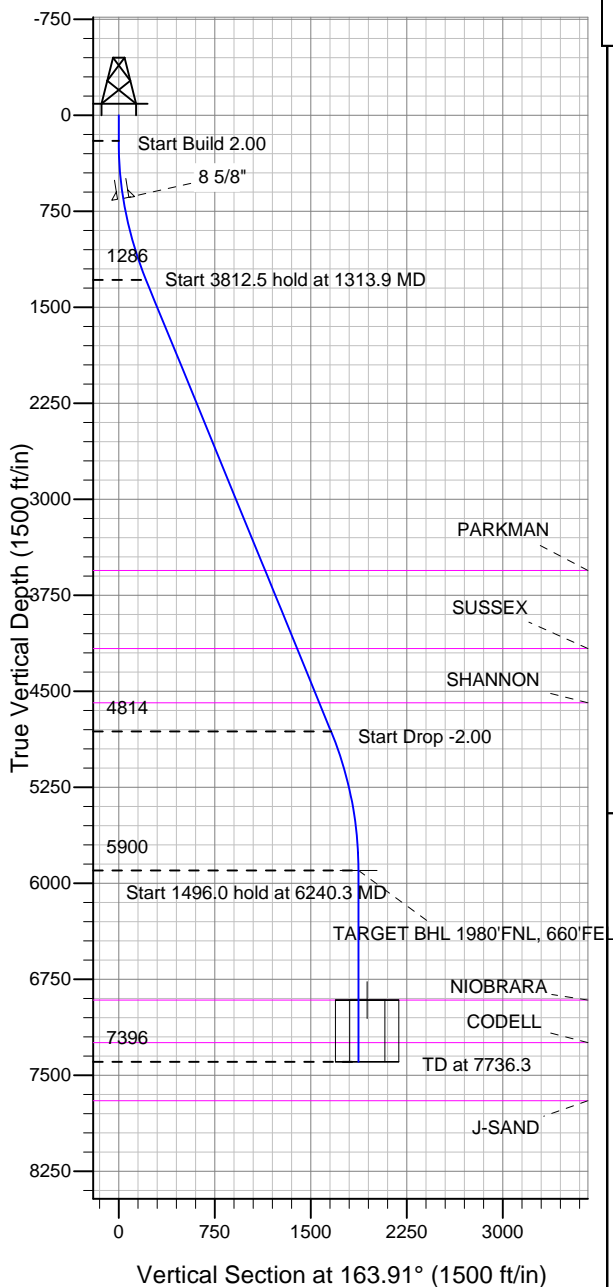
ENSIGN

Directional

Well Name: Schell 42-6

Surface Location: Schell 41-6 Pad Sec.6-T3N-R67W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4916.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1338847.50 3159756.40 40.262120 -104.927550
 Original Well Elev WELL @ 4929.0ft (Original Well Elev)

Sundance Energy, Weld County, CO



Schell 41-6 Pad Sec.6-T3N-R67W
 Schell 42-6
 Plan #3 (4-19-11)
 16:00, April 19 2011



Azimuths to True North
 Magnetic North: 8.96°

Magnetic Field
 Strength: 53056.9nT
 Dip Angle: 66.92°
 Date: 4/19/2011
 Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|--|--------|---------|-------|-----------|-------------|----------------------------------|
| TARGET BHL 1980'FNL, 660'FEL | 5900.0 | -1799.6 | 519.1 | 40.257180 | -104.925690 | Point |
| LEGAL BOX 400' X 400' 2043'FNL & 630'FEL | 6913.0 | -1862.6 | 549.1 | 40.257007 | -104.925583 | Rectangle (Sides: L400.0 W400.0) |

SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
|-----|--------|-------|--------|--------|---------|-------|------|--------|--------|------------------------------|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1313.9 | 22.28 | 163.91 | 1286.1 | -205.5 | 59.3 | 2.00 | 163.91 | 213.8 | |
| 4 | 5126.4 | 22.28 | 163.91 | 4813.9 | -1594.2 | 459.9 | 0.00 | 0.00 | 1659.2 | |
| 5 | 6240.3 | 0.00 | 0.00 | 5900.0 | -1799.6 | 519.1 | 2.00 | 180.00 | 1873.0 | TARGET BHL 1980'FNL, 660'FEL |
| 6 | 7736.3 | 0.00 | 0.00 | 7396.0 | -1799.6 | 519.1 | 0.00 | 0.00 | 1873.0 | |



Directional

Sundance Energy, Weld County, CO

SEC.6-T3N-R67W

Schell 41-6 Pad Sec.6-T3N-R67W

Schell 42-6

Wellbore #1

Plan: Plan #3 (4-19-11)

Standard Planning Report

19 April, 2011

| Plan Sections | | | | | | | | | | |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|----------------------------|---------------------------|------------|-----------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) | TFO (°) | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,313.9 | 22.28 | 163.91 | 1,286.1 | -205.5 | 59.3 | 2.00 | 2.00 | 0.00 | 163.91 | |
| 5,126.4 | 22.28 | 163.91 | 4,813.9 | -1,594.2 | 459.9 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,240.3 | 0.00 | 0.00 | 5,900.0 | -1,799.6 | 519.1 | 2.00 | -2.00 | 0.00 | 180.00 | TARGET BHL 1980 |
| 7,736.3 | 0.00 | 0.00 | 7,396.0 | -1,799.6 | 519.1 | 0.00 | 0.00 | 0.00 | 0.00 | |

| | | | |
|------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Schell 42-6 |
| Company: | Sundance Energy, Weld County, CO | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Project: | SEC.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site: | Schell 41-6 Pad Sec.6-T3N-R67W | North Reference: | True |
| Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #3 (4-19-11) | | |

| Planned Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 40.0 | 0.00 | 0.00 | 40.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 80.0 | 0.00 | 0.00 | 80.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 120.0 | 0.00 | 0.00 | 120.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 160.0 | 0.00 | 0.00 | 160.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 240.0 | 0.80 | 163.91 | 240.0 | -0.3 | 0.1 | 0.3 | 2.00 | 2.00 | 0.00 |
| 280.0 | 1.60 | 163.91 | 280.0 | -1.1 | 0.3 | 1.1 | 2.00 | 2.00 | 0.00 |
| 320.0 | 2.40 | 163.91 | 320.0 | -2.4 | 0.7 | 2.5 | 2.00 | 2.00 | 0.00 |
| 360.0 | 3.20 | 163.91 | 359.9 | -4.3 | 1.2 | 4.5 | 2.00 | 2.00 | 0.00 |
| 400.0 | 4.00 | 163.91 | 399.8 | -6.7 | 1.9 | 7.0 | 2.00 | 2.00 | 0.00 |
| 440.0 | 4.80 | 163.91 | 439.7 | -9.7 | 2.8 | 10.0 | 2.00 | 2.00 | 0.00 |
| 480.0 | 5.60 | 163.91 | 479.6 | -13.1 | 3.8 | 13.7 | 2.00 | 2.00 | 0.00 |
| 520.0 | 6.40 | 163.91 | 519.3 | -17.2 | 4.9 | 17.9 | 2.00 | 2.00 | 0.00 |
| 560.0 | 7.20 | 163.91 | 559.1 | -21.7 | 6.3 | 22.6 | 2.00 | 2.00 | 0.00 |
| 600.0 | 8.00 | 163.91 | 598.7 | -26.8 | 7.7 | 27.9 | 2.00 | 2.00 | 0.00 |
| 640.0 | 8.80 | 163.91 | 638.3 | -32.4 | 9.3 | 33.7 | 2.00 | 2.00 | 0.00 |
| 651.9 | 9.04 | 163.91 | 650.0 | -34.2 | 9.9 | 35.6 | 2.00 | 2.00 | 0.00 |
| 8 5/8" | | | | | | | | | |
| 680.0 | 9.60 | 163.91 | 677.8 | -38.5 | 11.1 | 40.1 | 2.00 | 2.00 | 0.00 |
| 720.0 | 10.40 | 163.91 | 717.1 | -45.2 | 13.0 | 47.1 | 2.00 | 2.00 | 0.00 |
| 760.0 | 11.20 | 163.91 | 756.4 | -52.4 | 15.1 | 54.6 | 2.00 | 2.00 | 0.00 |
| 800.0 | 12.00 | 163.91 | 795.6 | -60.1 | 17.4 | 62.6 | 2.00 | 2.00 | 0.00 |
| 840.0 | 12.80 | 163.91 | 834.7 | -68.4 | 19.7 | 71.2 | 2.00 | 2.00 | 0.00 |
| 880.0 | 13.60 | 163.91 | 873.6 | -77.2 | 22.3 | 80.3 | 2.00 | 2.00 | 0.00 |
| 920.0 | 14.40 | 163.91 | 912.4 | -86.5 | 24.9 | 90.0 | 2.00 | 2.00 | 0.00 |
| 960.0 | 15.20 | 163.91 | 951.1 | -96.3 | 27.8 | 100.2 | 2.00 | 2.00 | 0.00 |
| 1,000.0 | 16.00 | 163.91 | 989.6 | -106.6 | 30.8 | 111.0 | 2.00 | 2.00 | 0.00 |
| 1,040.0 | 16.80 | 163.91 | 1,028.0 | -117.5 | 33.9 | 122.3 | 2.00 | 2.00 | 0.00 |
| 1,080.0 | 17.60 | 163.91 | 1,066.2 | -128.8 | 37.2 | 134.1 | 2.00 | 2.00 | 0.00 |
| 1,120.0 | 18.40 | 163.91 | 1,104.3 | -140.7 | 40.6 | 146.5 | 2.00 | 2.00 | 0.00 |
| 1,160.0 | 19.20 | 163.91 | 1,142.1 | -153.1 | 44.2 | 159.3 | 2.00 | 2.00 | 0.00 |
| 1,200.0 | 20.00 | 163.91 | 1,179.8 | -166.0 | 47.9 | 172.8 | 2.00 | 2.00 | 0.00 |
| 1,240.0 | 20.80 | 163.91 | 1,217.3 | -179.4 | 51.8 | 186.7 | 2.00 | 2.00 | 0.00 |
| 1,280.0 | 21.60 | 163.91 | 1,254.6 | -193.3 | 55.8 | 201.2 | 2.00 | 2.00 | 0.00 |
| 1,313.9 | 22.28 | 163.91 | 1,286.1 | -205.5 | 59.3 | 213.8 | 2.00 | 2.00 | 0.00 |
| 1,320.0 | 22.28 | 163.91 | 1,291.7 | -207.7 | 59.9 | 216.2 | 0.00 | 0.00 | 0.00 |
| 1,360.0 | 22.28 | 163.91 | 1,328.7 | -222.3 | 64.1 | 231.3 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 22.28 | 163.91 | 1,365.7 | -236.8 | 68.3 | 246.5 | 0.00 | 0.00 | 0.00 |
| 1,440.0 | 22.28 | 163.91 | 1,402.7 | -251.4 | 72.5 | 261.6 | 0.00 | 0.00 | 0.00 |
| 1,480.0 | 22.28 | 163.91 | 1,439.7 | -266.0 | 76.7 | 276.8 | 0.00 | 0.00 | 0.00 |
| 1,520.0 | 22.28 | 163.91 | 1,476.8 | -280.5 | 80.9 | 292.0 | 0.00 | 0.00 | 0.00 |
| 1,560.0 | 22.28 | 163.91 | 1,513.8 | -295.1 | 85.1 | 307.1 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 22.28 | 163.91 | 1,550.8 | -309.7 | 89.3 | 322.3 | 0.00 | 0.00 | 0.00 |
| 1,640.0 | 22.28 | 163.91 | 1,587.8 | -324.2 | 93.5 | 337.5 | 0.00 | 0.00 | 0.00 |
| 1,680.0 | 22.28 | 163.91 | 1,624.8 | -338.8 | 97.7 | 352.6 | 0.00 | 0.00 | 0.00 |
| 1,720.0 | 22.28 | 163.91 | 1,661.8 | -353.4 | 101.9 | 367.8 | 0.00 | 0.00 | 0.00 |
| 1,760.0 | 22.28 | 163.91 | 1,698.8 | -368.0 | 106.1 | 383.0 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 22.28 | 163.91 | 1,735.9 | -382.5 | 110.3 | 398.1 | 0.00 | 0.00 | 0.00 |
| 1,840.0 | 22.28 | 163.91 | 1,772.9 | -397.1 | 114.6 | 413.3 | 0.00 | 0.00 | 0.00 |
| 1,880.0 | 22.28 | 163.91 | 1,809.9 | -411.7 | 118.8 | 428.5 | 0.00 | 0.00 | 0.00 |
| 1,920.0 | 22.28 | 163.91 | 1,846.9 | -426.2 | 123.0 | 443.6 | 0.00 | 0.00 | 0.00 |
| 1,960.0 | 22.28 | 163.91 | 1,883.9 | -440.8 | 127.2 | 458.8 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 22.28 | 163.91 | 1,920.9 | -455.4 | 131.4 | 473.9 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Schell 42-6 |
| Company: | Sundance Energy, Weld County, CO | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Project: | SEC.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site: | Schell 41-6 Pad Sec.6-T3N-R67W | North Reference: | True |
| Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #3 (4-19-11) | | |

| Planned Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 2,040.0 | 22.28 | 163.91 | 1,957.9 | -469.9 | 135.6 | 489.1 | 0.00 | 0.00 | 0.00 |
| 2,080.0 | 22.28 | 163.91 | 1,995.0 | -484.5 | 139.8 | 504.3 | 0.00 | 0.00 | 0.00 |
| 2,120.0 | 22.28 | 163.91 | 2,032.0 | -499.1 | 144.0 | 519.4 | 0.00 | 0.00 | 0.00 |
| 2,160.0 | 22.28 | 163.91 | 2,069.0 | -513.7 | 148.2 | 534.6 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 22.28 | 163.91 | 2,106.0 | -528.2 | 152.4 | 549.8 | 0.00 | 0.00 | 0.00 |
| 2,240.0 | 22.28 | 163.91 | 2,143.0 | -542.8 | 156.6 | 564.9 | 0.00 | 0.00 | 0.00 |
| 2,280.0 | 22.28 | 163.91 | 2,180.0 | -557.4 | 160.8 | 580.1 | 0.00 | 0.00 | 0.00 |
| 2,320.0 | 22.28 | 163.91 | 2,217.0 | -571.9 | 165.0 | 595.3 | 0.00 | 0.00 | 0.00 |
| 2,360.0 | 22.28 | 163.91 | 2,254.1 | -586.5 | 169.2 | 610.4 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 22.28 | 163.91 | 2,291.1 | -601.1 | 173.4 | 625.6 | 0.00 | 0.00 | 0.00 |
| 2,440.0 | 22.28 | 163.91 | 2,328.1 | -615.6 | 177.6 | 640.8 | 0.00 | 0.00 | 0.00 |
| 2,480.0 | 22.28 | 163.91 | 2,365.1 | -630.2 | 181.8 | 655.9 | 0.00 | 0.00 | 0.00 |
| 2,520.0 | 22.28 | 163.91 | 2,402.1 | -644.8 | 186.0 | 671.1 | 0.00 | 0.00 | 0.00 |
| 2,560.0 | 22.28 | 163.91 | 2,439.1 | -659.4 | 190.2 | 686.2 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 22.28 | 163.91 | 2,476.1 | -673.9 | 194.4 | 701.4 | 0.00 | 0.00 | 0.00 |
| 2,640.0 | 22.28 | 163.91 | 2,513.2 | -688.5 | 198.6 | 716.6 | 0.00 | 0.00 | 0.00 |
| 2,680.0 | 22.28 | 163.91 | 2,550.2 | -703.1 | 202.8 | 731.7 | 0.00 | 0.00 | 0.00 |
| 2,720.0 | 22.28 | 163.91 | 2,587.2 | -717.6 | 207.0 | 746.9 | 0.00 | 0.00 | 0.00 |
| 2,760.0 | 22.28 | 163.91 | 2,624.2 | -732.2 | 211.2 | 762.1 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 22.28 | 163.91 | 2,661.2 | -746.8 | 215.4 | 777.2 | 0.00 | 0.00 | 0.00 |
| 2,840.0 | 22.28 | 163.91 | 2,698.2 | -761.4 | 219.6 | 792.4 | 0.00 | 0.00 | 0.00 |
| 2,880.0 | 22.28 | 163.91 | 2,735.2 | -775.9 | 223.8 | 807.6 | 0.00 | 0.00 | 0.00 |
| 2,920.0 | 22.28 | 163.91 | 2,772.3 | -790.5 | 228.0 | 822.7 | 0.00 | 0.00 | 0.00 |
| 2,960.0 | 22.28 | 163.91 | 2,809.3 | -805.1 | 232.2 | 837.9 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 22.28 | 163.91 | 2,846.3 | -819.6 | 236.4 | 853.1 | 0.00 | 0.00 | 0.00 |
| 3,040.0 | 22.28 | 163.91 | 2,883.3 | -834.2 | 240.6 | 868.2 | 0.00 | 0.00 | 0.00 |
| 3,080.0 | 22.28 | 163.91 | 2,920.3 | -848.8 | 244.8 | 883.4 | 0.00 | 0.00 | 0.00 |
| 3,120.0 | 22.28 | 163.91 | 2,957.3 | -863.3 | 249.0 | 898.5 | 0.00 | 0.00 | 0.00 |
| 3,160.0 | 22.28 | 163.91 | 2,994.3 | -877.9 | 253.3 | 913.7 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 22.28 | 163.91 | 3,031.4 | -892.5 | 257.5 | 928.9 | 0.00 | 0.00 | 0.00 |
| 3,240.0 | 22.28 | 163.91 | 3,068.4 | -907.1 | 261.7 | 944.0 | 0.00 | 0.00 | 0.00 |
| 3,280.0 | 22.28 | 163.91 | 3,105.4 | -921.6 | 265.9 | 959.2 | 0.00 | 0.00 | 0.00 |
| 3,320.0 | 22.28 | 163.91 | 3,142.4 | -936.2 | 270.1 | 974.4 | 0.00 | 0.00 | 0.00 |
| 3,360.0 | 22.28 | 163.91 | 3,179.4 | -950.8 | 274.3 | 989.5 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 22.28 | 163.91 | 3,216.4 | -965.3 | 278.5 | 1,004.7 | 0.00 | 0.00 | 0.00 |
| 3,440.0 | 22.28 | 163.91 | 3,253.4 | -979.9 | 282.7 | 1,019.9 | 0.00 | 0.00 | 0.00 |
| 3,480.0 | 22.28 | 163.91 | 3,290.5 | -994.5 | 286.9 | 1,035.0 | 0.00 | 0.00 | 0.00 |
| 3,520.0 | 22.28 | 163.91 | 3,327.5 | -1,009.0 | 291.1 | 1,050.2 | 0.00 | 0.00 | 0.00 |
| 3,560.0 | 22.28 | 163.91 | 3,364.5 | -1,023.6 | 295.3 | 1,065.4 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 22.28 | 163.91 | 3,401.5 | -1,038.2 | 299.5 | 1,080.5 | 0.00 | 0.00 | 0.00 |
| 3,640.0 | 22.28 | 163.91 | 3,438.5 | -1,052.8 | 303.7 | 1,095.7 | 0.00 | 0.00 | 0.00 |
| 3,680.0 | 22.28 | 163.91 | 3,475.5 | -1,067.3 | 307.9 | 1,110.8 | 0.00 | 0.00 | 0.00 |
| 3,720.0 | 22.28 | 163.91 | 3,512.5 | -1,081.9 | 312.1 | 1,126.0 | 0.00 | 0.00 | 0.00 |
| 3,760.0 | 22.28 | 163.91 | 3,549.6 | -1,096.5 | 316.3 | 1,141.2 | 0.00 | 0.00 | 0.00 |
| 3,768.1 | 22.28 | 163.91 | 3,557.0 | -1,099.4 | 317.1 | 1,144.2 | 0.00 | 0.00 | 0.00 |
| PARKMAN | | | | | | | | | |
| 3,800.0 | 22.28 | 163.91 | 3,586.6 | -1,111.0 | 320.5 | 1,156.3 | 0.00 | 0.00 | 0.00 |
| 3,840.0 | 22.28 | 163.91 | 3,623.6 | -1,125.6 | 324.7 | 1,171.5 | 0.00 | 0.00 | 0.00 |
| 3,880.0 | 22.28 | 163.91 | 3,660.6 | -1,140.2 | 328.9 | 1,186.7 | 0.00 | 0.00 | 0.00 |
| 3,920.0 | 22.28 | 163.91 | 3,697.6 | -1,154.7 | 333.1 | 1,201.8 | 0.00 | 0.00 | 0.00 |
| 3,960.0 | 22.28 | 163.91 | 3,734.6 | -1,169.3 | 337.3 | 1,217.0 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 22.28 | 163.91 | 3,771.6 | -1,183.9 | 341.5 | 1,232.2 | 0.00 | 0.00 | 0.00 |
| 4,040.0 | 22.28 | 163.91 | 3,808.6 | -1,198.5 | 345.7 | 1,247.3 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Schell 42-6 |
| Company: | Sundance Energy, Weld County, CO | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Project: | SEC.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site: | Schell 41-6 Pad Sec.6-T3N-R67W | North Reference: | True |
| Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #3 (4-19-11) | | |

| Planned Survey | | | | | | | | | |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 4,080.0 | 22.28 | 163.91 | 3,845.7 | -1,213.0 | 349.9 | 1,262.5 | 0.00 | 0.00 | 0.00 |
| 4,120.0 | 22.28 | 163.91 | 3,882.7 | -1,227.6 | 354.1 | 1,277.7 | 0.00 | 0.00 | 0.00 |
| 4,160.0 | 22.28 | 163.91 | 3,919.7 | -1,242.2 | 358.3 | 1,292.8 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 22.28 | 163.91 | 3,956.7 | -1,256.7 | 362.5 | 1,308.0 | 0.00 | 0.00 | 0.00 |
| 4,240.0 | 22.28 | 163.91 | 3,993.7 | -1,271.3 | 366.7 | 1,323.1 | 0.00 | 0.00 | 0.00 |
| 4,280.0 | 22.28 | 163.91 | 4,030.7 | -1,285.9 | 370.9 | 1,338.3 | 0.00 | 0.00 | 0.00 |
| 4,320.0 | 22.28 | 163.91 | 4,067.7 | -1,300.4 | 375.1 | 1,353.5 | 0.00 | 0.00 | 0.00 |
| 4,360.0 | 22.28 | 163.91 | 4,104.8 | -1,315.0 | 379.3 | 1,368.6 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 22.28 | 163.91 | 4,141.8 | -1,329.6 | 383.5 | 1,383.8 | 0.00 | 0.00 | 0.00 |
| 4,426.2 | 22.28 | 163.91 | 4,166.0 | -1,339.1 | 386.3 | 1,393.7 | 0.00 | 0.00 | 0.00 |
| SUSSEX | | | | | | | | | |
| 4,440.0 | 22.28 | 163.91 | 4,178.8 | -1,344.2 | 387.7 | 1,399.0 | 0.00 | 0.00 | 0.00 |
| 4,480.0 | 22.28 | 163.91 | 4,215.8 | -1,358.7 | 392.0 | 1,414.1 | 0.00 | 0.00 | 0.00 |
| 4,520.0 | 22.28 | 163.91 | 4,252.8 | -1,373.3 | 396.2 | 1,429.3 | 0.00 | 0.00 | 0.00 |
| 4,560.0 | 22.28 | 163.91 | 4,289.8 | -1,387.9 | 400.4 | 1,444.5 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 22.28 | 163.91 | 4,326.8 | -1,402.4 | 404.6 | 1,459.6 | 0.00 | 0.00 | 0.00 |
| 4,640.0 | 22.28 | 163.91 | 4,363.9 | -1,417.0 | 408.8 | 1,474.8 | 0.00 | 0.00 | 0.00 |
| 4,680.0 | 22.28 | 163.91 | 4,400.9 | -1,431.6 | 413.0 | 1,490.0 | 0.00 | 0.00 | 0.00 |
| 4,720.0 | 22.28 | 163.91 | 4,437.9 | -1,446.1 | 417.2 | 1,505.1 | 0.00 | 0.00 | 0.00 |
| 4,760.0 | 22.28 | 163.91 | 4,474.9 | -1,460.7 | 421.4 | 1,520.3 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 22.28 | 163.91 | 4,511.9 | -1,475.3 | 425.6 | 1,535.4 | 0.00 | 0.00 | 0.00 |
| 4,840.0 | 22.28 | 163.91 | 4,548.9 | -1,489.9 | 429.8 | 1,550.6 | 0.00 | 0.00 | 0.00 |
| 4,880.0 | 22.28 | 163.91 | 4,585.9 | -1,504.4 | 434.0 | 1,565.8 | 0.00 | 0.00 | 0.00 |
| 4,884.4 | 22.28 | 163.91 | 4,590.0 | -1,506.0 | 434.4 | 1,567.4 | 0.00 | 0.00 | 0.00 |
| SHANNON | | | | | | | | | |
| 4,920.0 | 22.28 | 163.91 | 4,623.0 | -1,519.0 | 438.2 | 1,580.9 | 0.00 | 0.00 | 0.00 |
| 4,960.0 | 22.28 | 163.91 | 4,660.0 | -1,533.6 | 442.4 | 1,596.1 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 22.28 | 163.91 | 4,697.0 | -1,548.1 | 446.6 | 1,611.3 | 0.00 | 0.00 | 0.00 |
| 5,040.0 | 22.28 | 163.91 | 4,734.0 | -1,562.7 | 450.8 | 1,626.4 | 0.00 | 0.00 | 0.00 |
| 5,080.0 | 22.28 | 163.91 | 4,771.0 | -1,577.3 | 455.0 | 1,641.6 | 0.00 | 0.00 | 0.00 |
| 5,120.0 | 22.28 | 163.91 | 4,808.0 | -1,591.8 | 459.2 | 1,656.8 | 0.00 | 0.00 | 0.00 |
| 5,126.4 | 22.28 | 163.91 | 4,813.9 | -1,594.2 | 459.9 | 1,659.2 | 0.00 | 0.00 | 0.00 |
| 5,160.0 | 21.61 | 163.91 | 4,845.1 | -1,606.2 | 463.4 | 1,671.7 | 2.00 | -2.00 | 0.00 |
| 5,200.0 | 20.81 | 163.91 | 4,882.4 | -1,620.1 | 467.4 | 1,686.2 | 2.00 | -2.00 | 0.00 |
| 5,240.0 | 20.01 | 163.91 | 4,919.9 | -1,633.5 | 471.2 | 1,700.2 | 2.00 | -2.00 | 0.00 |
| 5,280.0 | 19.21 | 163.91 | 4,957.6 | -1,646.4 | 474.9 | 1,713.6 | 2.00 | -2.00 | 0.00 |
| 5,320.0 | 18.41 | 163.91 | 4,995.4 | -1,658.8 | 478.5 | 1,726.5 | 2.00 | -2.00 | 0.00 |
| 5,360.0 | 17.61 | 163.91 | 5,033.5 | -1,670.7 | 482.0 | 1,738.8 | 2.00 | -2.00 | 0.00 |
| 5,400.0 | 16.81 | 163.91 | 5,071.7 | -1,682.1 | 485.2 | 1,750.7 | 2.00 | -2.00 | 0.00 |
| 5,440.0 | 16.01 | 163.91 | 5,110.1 | -1,692.9 | 488.4 | 1,762.0 | 2.00 | -2.00 | 0.00 |
| 5,480.0 | 15.21 | 163.91 | 5,148.6 | -1,703.3 | 491.3 | 1,772.7 | 2.00 | -2.00 | 0.00 |
| 5,520.0 | 14.41 | 163.91 | 5,187.3 | -1,713.1 | 494.2 | 1,782.9 | 2.00 | -2.00 | 0.00 |
| 5,560.0 | 13.61 | 163.91 | 5,226.1 | -1,722.4 | 496.9 | 1,792.6 | 2.00 | -2.00 | 0.00 |
| 5,600.0 | 12.81 | 163.91 | 5,265.0 | -1,731.2 | 499.4 | 1,801.8 | 2.00 | -2.00 | 0.00 |
| 5,640.0 | 12.01 | 163.91 | 5,304.1 | -1,739.4 | 501.8 | 1,810.4 | 2.00 | -2.00 | 0.00 |
| 5,680.0 | 11.21 | 163.91 | 5,343.3 | -1,747.2 | 504.0 | 1,818.4 | 2.00 | -2.00 | 0.00 |
| 5,720.0 | 10.41 | 163.91 | 5,382.6 | -1,754.4 | 506.1 | 1,825.9 | 2.00 | -2.00 | 0.00 |
| 5,760.0 | 9.61 | 163.91 | 5,421.9 | -1,761.0 | 508.0 | 1,832.9 | 2.00 | -2.00 | 0.00 |
| 5,800.0 | 8.81 | 163.91 | 5,461.4 | -1,767.2 | 509.8 | 1,839.3 | 2.00 | -2.00 | 0.00 |
| 5,840.0 | 8.01 | 163.91 | 5,501.0 | -1,772.8 | 511.4 | 1,845.1 | 2.00 | -2.00 | 0.00 |
| 5,880.0 | 7.21 | 163.91 | 5,540.6 | -1,777.9 | 512.9 | 1,850.4 | 2.00 | -2.00 | 0.00 |
| 5,920.0 | 6.41 | 163.91 | 5,580.4 | -1,782.5 | 514.2 | 1,855.1 | 2.00 | -2.00 | 0.00 |
| 5,960.0 | 5.61 | 163.91 | 5,620.1 | -1,786.5 | 515.3 | 1,859.3 | 2.00 | -2.00 | 0.00 |
| 6,000.0 | 4.81 | 163.91 | 5,660.0 | -1,790.0 | 516.4 | 1,863.0 | 2.00 | -2.00 | 0.00 |

| | | | |
|------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Schell 42-6 |
| Company: | Sundance Energy, Weld County, CO | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Project: | SEC.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site: | Schell 41-6 Pad Sec.6-T3N-R67W | North Reference: | True |
| Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #3 (4-19-11) | | |

| Planned Survey | | | | | | | | | |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100ft) | Build Rate (°/100ft) | Turn Rate (°/100ft) |
| 6,040.0 | 4.01 | 163.91 | 5,699.9 | -1,792.9 | 517.2 | 1,866.0 | 2.00 | -2.00 | 0.00 |
| 6,080.0 | 3.21 | 163.91 | 5,739.8 | -1,795.3 | 517.9 | 1,868.5 | 2.00 | -2.00 | 0.00 |
| 6,120.0 | 2.41 | 163.91 | 5,779.7 | -1,797.2 | 518.4 | 1,870.5 | 2.00 | -2.00 | 0.00 |
| 6,160.0 | 1.61 | 163.91 | 5,819.7 | -1,798.6 | 518.8 | 1,871.9 | 2.00 | -2.00 | 0.00 |
| 6,200.0 | 0.81 | 163.91 | 5,859.7 | -1,799.4 | 519.1 | 1,872.7 | 2.00 | -2.00 | 0.00 |
| 6,240.0 | 0.01 | 163.91 | 5,899.7 | -1,799.6 | 519.1 | 1,873.0 | 2.00 | -2.00 | 0.00 |
| 6,240.3 | 0.00 | 0.00 | 5,900.0 | -1,799.6 | 519.1 | 1,873.0 | 2.00 | -2.00 | 0.00 |
| TARGET BHL 1980'FNL, 660'FEL | | | | | | | | | |
| 6,280.0 | 0.00 | 0.00 | 5,939.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,320.0 | 0.00 | 0.00 | 5,979.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,360.0 | 0.00 | 0.00 | 6,019.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 0.00 | 0.00 | 6,059.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,440.0 | 0.00 | 0.00 | 6,099.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,480.0 | 0.00 | 0.00 | 6,139.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,520.0 | 0.00 | 0.00 | 6,179.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,560.0 | 0.00 | 0.00 | 6,219.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 0.00 | 0.00 | 6,259.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,640.0 | 0.00 | 0.00 | 6,299.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,680.0 | 0.00 | 0.00 | 6,339.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,720.0 | 0.00 | 0.00 | 6,379.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,760.0 | 0.00 | 0.00 | 6,419.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 0.00 | 0.00 | 6,459.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,840.0 | 0.00 | 0.00 | 6,499.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,880.0 | 0.00 | 0.00 | 6,539.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,920.0 | 0.00 | 0.00 | 6,579.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 6,960.0 | 0.00 | 0.00 | 6,619.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 0.00 | 0.00 | 6,659.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,040.0 | 0.00 | 0.00 | 6,699.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,080.0 | 0.00 | 0.00 | 6,739.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,120.0 | 0.00 | 0.00 | 6,779.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,160.0 | 0.00 | 0.00 | 6,819.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 0.00 | 0.00 | 6,859.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,240.0 | 0.00 | 0.00 | 6,899.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,253.3 | 0.00 | 0.00 | 6,913.0 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| NOBRARA - LEGAL BOX 400' X 400' 2043'FNL & 630'FEL | | | | | | | | | |
| 7,280.0 | 0.00 | 0.00 | 6,939.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,320.0 | 0.00 | 0.00 | 6,979.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,360.0 | 0.00 | 0.00 | 7,019.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 0.00 | 0.00 | 7,059.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,440.0 | 0.00 | 0.00 | 7,099.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,480.0 | 0.00 | 0.00 | 7,139.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,520.0 | 0.00 | 0.00 | 7,179.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,560.0 | 0.00 | 0.00 | 7,219.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,586.3 | 0.00 | 0.00 | 7,246.0 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| CODELL | | | | | | | | | |
| 7,600.0 | 0.00 | 0.00 | 7,259.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,640.0 | 0.00 | 0.00 | 7,299.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,680.0 | 0.00 | 0.00 | 7,339.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,720.0 | 0.00 | 0.00 | 7,379.7 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |
| 7,736.3 | 0.00 | 0.00 | 7,396.0 | -1,799.6 | 519.1 | 1,873.0 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Schell 42-6 |
| Company: | Sundance Energy, Weld County, CO | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Project: | SEC.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site: | Schell 41-6 Pad Sec.6-T3N-R67W | North Reference: | True |
| Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #3 (4-19-11) | | |

| Targets | | | | | | | | | |
|---|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| Target Name | | | | | | | | | |
| - hit/miss target | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| - Shape | | | | | | | | | |
| TARGET BHL 1980'F | 0.00 | 0.00 | 5,900.0 | -1,799.6 | 519.1 | 1,337,051.33 | 3,160,287.13 | 40.257180 | -104.925690 |
| - plan hits target center | | | | | | | | | |
| - Point | | | | | | | | | |
| LEGAL BOX 400' X 400' | 0.00 | 0.00 | 6,913.0 | -1,862.6 | 549.1 | 1,336,988.57 | 3,160,317.49 | 40.257007 | -104.925583 |
| - plan misses target center by 69.7ft at 7253.3ft MD (6913.0 TVD, -1799.6 N, 519.1 E) | | | | | | | | | |
| - Rectangle (sides W400.0 H400.0 D483.0) | | | | | | | | | |

| Casing Points | | | | | |
|---------------------|---------------------|--------|---------------------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") | |
| 651.9 | 650.0 | 8 5/8" | 8-5/8 | 12-1/4 | |

| Formations | | | | | | |
|---------------------|---------------------|----------|-----------|---------|-------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 3,768.1 | 3,557.0 | PARKMAN | | 0.00 | | |
| 4,426.2 | 4,166.0 | SUSSEX | | 0.00 | | |
| 4,884.4 | 4,590.0 | SHANNON | | 0.00 | | |
| 7,253.3 | 6,913.0 | NIOBRARA | | 0.00 | | |
| 7,586.3 | 7,246.0 | CODELL | | 0.00 | | |
| | 7,698.0 | J-SAND | | 0.00 | | |



Directional

Sundance Energy, Weld County, CO

SEC.6-T3N-R67W

Schell 41-6 Pad Sec.6-T3N-R67W

Schell 42-6

Wellbore #1

Plan #3 (4-19-11)

Anticollision Report

19 April, 2011

| | | | |
|---------------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Company: | Sundance Energy, Weld County, CO | Local Co-ordinate Reference: | Well Schell 42-6 |
| Project: | SEC.6-T3N-R67W | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Reference Site: | Schell 41-6 Pad Sec.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #3 (4-19-11) | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---|-----------------------|---------------------|
| Reference | Plan #3 (4-19-11) | | |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| Interpolation Method: | Stations | Error Model: | ISCWSA |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum center-center distance of 10,000.0ft | Error Surface: | Elliptical Conic |
| Warning Levels Evaluated at: | 2.00 Sigma | | |

| | | | | |
|----------------------------|-----------------------|---------------------------------|------------------|--------------------|
| Survey Tool Program | Date 4/19/2011 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description |
| 0.0 | 7,736.3 | Plan #3 (4-19-11) (Wellbore #1) | MWD | MWD - Standard |

| | | | | | | |
|---|--------------------------------------|-----------------------------------|--------------------------------------|---------------------------------------|--------------------------|----------------|
| Summary | | | | | | |
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| Schell 41-6 Pad Sec.6-T3N-R67W | | | | | | |
| Schell 41-6 - Wellbore #1 - Plan #3 (4-19-11) | 200.0 | 200.0 | 14.6 | 13.9 | 21.611 | CC, ES |
| Schell 41-6 - Wellbore #1 - Plan #3 (4-19-11) | 400.0 | 399.8 | 21.4 | 19.8 | 13.849 | SF |

| | | | | | | | | | | | | | | |
|---|----------------------------|----------------------------|----------------------------|-----------------------|--------------------|------------------------------|--|-------------------|-----------------------------|------------------------------|--------------------------------|--------------------------|---------------------------|--------|
| Offset Design Schell 41-6 Pad Sec.6-T3N-R67W - Schell 41-6 - Wellbore #1 - Plan #3 (4-19-11) | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | Offset | Semi Major Axis | | Distance | | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 14.6 | 0.0 | 14.6 | 14.6 | 0.00 | N/A | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 0.00 | 14.6 | 0.0 | 14.6 | 14.3 | 0.22 | 64.832 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 0.00 | 14.6 | 0.0 | 14.6 | 13.9 | 0.67 | 21.611 | CC, ES | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.6 | -165.61 | 14.6 | 0.0 | 16.3 | 15.1 | 1.11 | 14.673 | | |
| 400.0 | 399.8 | 399.8 | 399.8 | 0.8 | 0.8 | -169.08 | 14.6 | 0.0 | 21.4 | 19.8 | 1.54 | 13.849 | SF | |
| 500.0 | 499.5 | 499.5 | 499.5 | 1.0 | 1.0 | -172.21 | 14.6 | 0.0 | 30.0 | 28.0 | 1.99 | 15.059 | | |
| 600.0 | 598.7 | 598.7 | 598.7 | 1.3 | 1.2 | -174.44 | 14.6 | 0.0 | 42.1 | 39.6 | 2.44 | 17.220 | | |
| 700.0 | 697.5 | 697.5 | 697.5 | 1.6 | 1.5 | -175.92 | 14.6 | 0.0 | 57.7 | 54.8 | 2.90 | 19.879 | | |
| 800.0 | 795.6 | 795.6 | 795.6 | 2.0 | 1.7 | -176.91 | 14.6 | 0.0 | 76.7 | 73.3 | 3.36 | 22.819 | | |
| 900.0 | 893.1 | 894.3 | 894.3 | 2.5 | 1.9 | -177.49 | 14.3 | 0.2 | 98.9 | 95.1 | 3.81 | 25.924 | | |
| 1,000.0 | 989.6 | 994.9 | 994.8 | 3.0 | 2.1 | -177.16 | 12.0 | 2.6 | 122.1 | 117.8 | 4.24 | 28.779 | | |
| 1,100.0 | 1,085.3 | 1,096.0 | 1,095.7 | 3.5 | 2.3 | -176.21 | 7.3 | 7.6 | 145.8 | 141.1 | 4.68 | 31.123 | | |
| 1,200.0 | 1,179.8 | 1,197.5 | 1,196.7 | 4.2 | 2.5 | -174.90 | 0.0 | 15.2 | 170.1 | 164.9 | 5.15 | 33.009 | | |
| 1,300.0 | 1,273.2 | 1,299.5 | 1,297.7 | 4.9 | 2.8 | -173.37 | -9.7 | 25.5 | 195.0 | 189.3 | 5.65 | 34.483 | | |
| 1,313.9 | 1,286.1 | 1,313.8 | 1,311.8 | 5.0 | 2.8 | -173.15 | -11.3 | 27.1 | 198.5 | 192.8 | 5.73 | 34.647 | | |
| 1,400.0 | 1,365.7 | 1,402.3 | 1,398.9 | 5.6 | 3.1 | -171.71 | -22.1 | 38.4 | 219.4 | 213.1 | 6.23 | 35.204 | | |
| 1,500.0 | 1,458.3 | 1,500.3 | 1,495.0 | 6.3 | 3.4 | -170.12 | -35.3 | 52.3 | 242.2 | 235.3 | 6.85 | 35.338 | | |
| 1,600.0 | 1,550.8 | 1,597.5 | 1,590.3 | 7.1 | 3.7 | -168.81 | -48.5 | 66.1 | 265.1 | 257.6 | 7.51 | 35.305 | | |
| 1,700.0 | 1,643.3 | 1,694.7 | 1,685.6 | 7.8 | 4.1 | -167.71 | -61.7 | 79.9 | 288.2 | 280.0 | 8.19 | 35.188 | | |
| 1,800.0 | 1,735.9 | 1,791.8 | 1,780.8 | 8.6 | 4.5 | -166.77 | -74.9 | 93.7 | 311.4 | 302.5 | 8.89 | 35.018 | | |
| 1,900.0 | 1,828.4 | 1,889.0 | 1,876.1 | 9.4 | 4.9 | -165.97 | -88.1 | 107.5 | 334.6 | 325.0 | 9.61 | 34.833 | | |
| 2,000.0 | 1,920.9 | 1,986.2 | 1,971.4 | 10.1 | 5.3 | -165.26 | -101.2 | 121.3 | 357.9 | 347.5 | 10.34 | 34.624 | | |
| 2,100.0 | 2,013.5 | 2,083.3 | 2,066.6 | 10.9 | 5.7 | -164.65 | -114.4 | 135.2 | 381.2 | 370.1 | 11.08 | 34.415 | | |
| 2,200.0 | 2,106.0 | 2,180.5 | 2,161.9 | 11.7 | 6.1 | -164.10 | -127.6 | 149.0 | 404.5 | 392.7 | 11.83 | 34.208 | | |
| 2,300.0 | 2,198.5 | 2,277.7 | 2,257.2 | 12.4 | 6.5 | -163.61 | -140.8 | 162.8 | 427.9 | 415.3 | 12.58 | 34.008 | | |

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

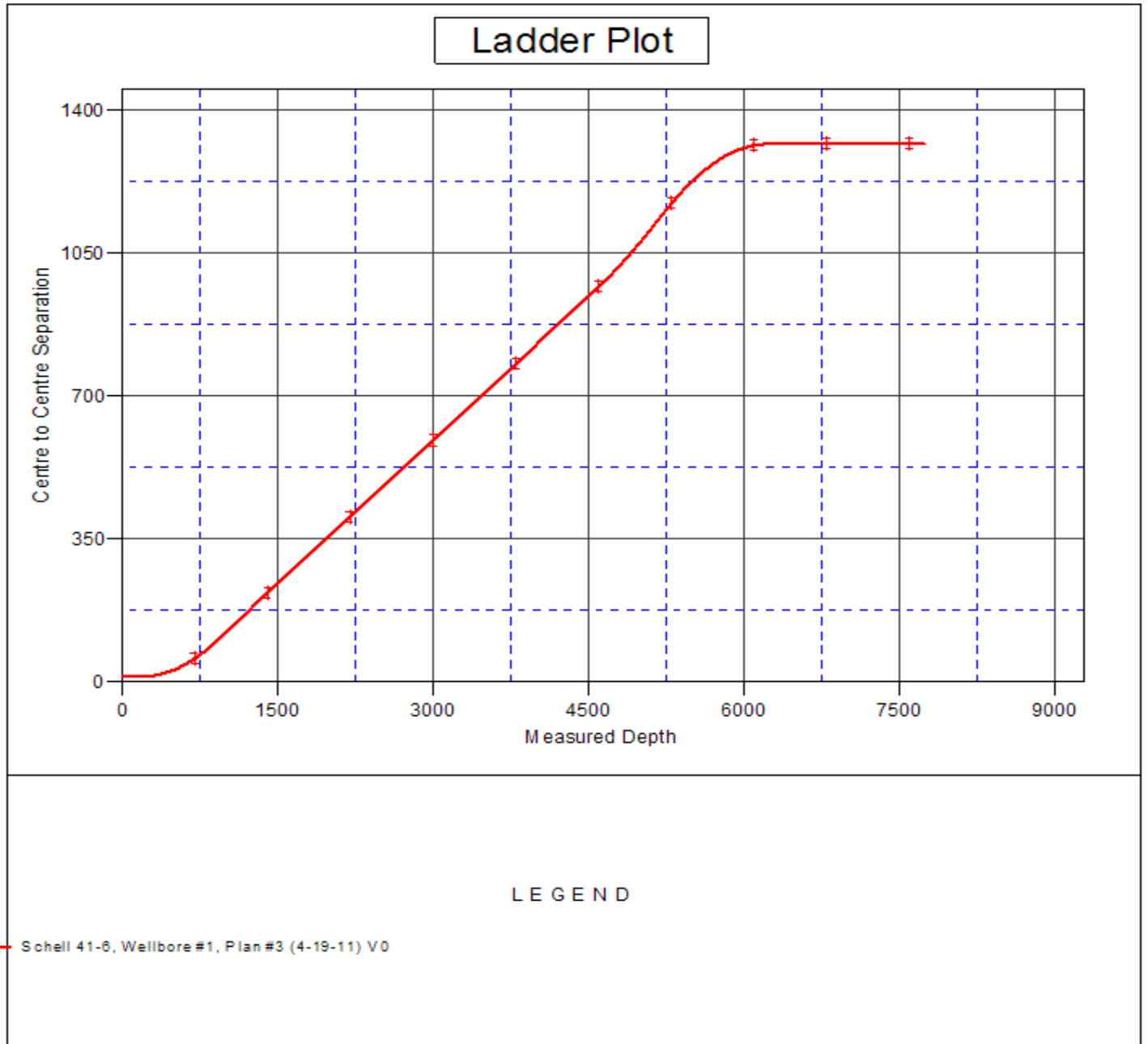
| Schell 41-6 Pad Sec.6-T3N-R67W - Schell 41-6 - Wellbore #1 - Plan #3 (4-19-11) | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | |
| 2,400.0 | 2,291.1 | 2,374.8 | 2,352.5 | 13.2 | 6.9 | -163.18 | -154.0 | 176.6 | 451.3 | 438.0 | 13.35 | 33.816 | | |
| 2,500.0 | 2,383.6 | 2,472.0 | 2,447.7 | 13.9 | 7.3 | -162.78 | -167.1 | 190.4 | 474.8 | 460.7 | 14.12 | 33.633 | | |
| 2,600.0 | 2,476.1 | 2,569.1 | 2,543.0 | 14.7 | 7.7 | -162.43 | -180.3 | 204.2 | 498.2 | 483.3 | 14.89 | 33.460 | | |
| 2,700.0 | 2,568.7 | 2,666.3 | 2,638.3 | 15.5 | 8.1 | -162.10 | -193.5 | 218.0 | 521.7 | 506.0 | 15.67 | 33.296 | | |
| 2,800.0 | 2,661.2 | 2,763.5 | 2,733.5 | 16.2 | 8.5 | -161.81 | -206.7 | 231.8 | 545.2 | 528.7 | 16.45 | 33.141 | | |
| 2,900.0 | 2,753.7 | 2,860.6 | 2,828.8 | 17.0 | 9.0 | -161.54 | -219.8 | 245.6 | 568.7 | 551.4 | 17.24 | 32.994 | | |
| 3,000.0 | 2,846.3 | 2,957.8 | 2,924.1 | 17.8 | 9.4 | -161.29 | -233.0 | 259.4 | 592.2 | 574.2 | 18.02 | 32.856 | | |
| 3,100.0 | 2,938.8 | 3,055.0 | 3,019.4 | 18.6 | 9.8 | -161.05 | -246.2 | 273.2 | 615.7 | 596.9 | 18.81 | 32.726 | | |
| 3,200.0 | 3,031.4 | 3,152.1 | 3,114.6 | 19.3 | 10.2 | -160.84 | -259.4 | 287.0 | 639.2 | 619.6 | 19.61 | 32.603 | | |
| 3,300.0 | 3,123.9 | 3,249.3 | 3,209.9 | 20.1 | 10.7 | -160.64 | -272.6 | 300.9 | 662.8 | 642.4 | 20.40 | 32.487 | | |
| 3,400.0 | 3,216.4 | 3,346.5 | 3,305.2 | 20.9 | 11.1 | -160.46 | -285.7 | 314.7 | 686.3 | 665.1 | 21.20 | 32.377 | | |
| 3,500.0 | 3,309.0 | 3,443.6 | 3,400.5 | 21.6 | 11.5 | -160.28 | -298.9 | 328.5 | 709.9 | 687.9 | 22.00 | 32.273 | | |
| 3,600.0 | 3,401.5 | 3,540.8 | 3,495.7 | 22.4 | 11.9 | -160.12 | -312.1 | 342.3 | 733.4 | 710.6 | 22.79 | 32.175 | | |
| 3,700.0 | 3,494.0 | 3,638.0 | 3,591.0 | 23.2 | 12.4 | -159.97 | -325.3 | 356.1 | 757.0 | 733.4 | 23.60 | 32.082 | | |
| 3,800.0 | 3,586.6 | 3,735.1 | 3,686.3 | 23.9 | 12.8 | -159.83 | -338.5 | 369.9 | 780.6 | 756.2 | 24.40 | 31.994 | | |
| 3,900.0 | 3,679.1 | 3,832.3 | 3,781.5 | 24.7 | 13.2 | -159.69 | -351.6 | 383.7 | 804.1 | 778.9 | 25.20 | 31.910 | | |
| 4,000.0 | 3,771.6 | 3,929.5 | 3,876.8 | 25.5 | 13.6 | -159.57 | -364.8 | 397.5 | 827.7 | 801.7 | 26.00 | 31.830 | | |
| 4,100.0 | 3,864.2 | 4,026.6 | 3,972.1 | 26.2 | 14.1 | -159.45 | -378.0 | 411.3 | 851.3 | 824.5 | 26.81 | 31.754 | | |
| 4,200.0 | 3,956.7 | 4,123.8 | 4,067.4 | 27.0 | 14.5 | -159.33 | -391.2 | 425.1 | 874.9 | 847.2 | 27.61 | 31.682 | | |
| 4,300.0 | 4,049.2 | 4,221.0 | 4,162.6 | 27.8 | 14.9 | -159.23 | -404.3 | 438.9 | 898.4 | 870.0 | 28.42 | 31.613 | | |
| 4,400.0 | 4,141.8 | 4,318.1 | 4,257.9 | 28.6 | 15.4 | -159.12 | -417.5 | 452.7 | 922.0 | 892.8 | 29.23 | 31.547 | | |
| 4,500.0 | 4,234.3 | 4,415.3 | 4,353.2 | 29.3 | 15.8 | -159.03 | -430.7 | 466.6 | 945.6 | 915.6 | 30.03 | 31.484 | | |
| 4,600.0 | 4,326.8 | 4,510.4 | 4,446.5 | 30.1 | 16.2 | -158.94 | -443.6 | 480.1 | 969.2 | 938.4 | 30.83 | 31.438 | | |
| 4,700.0 | 4,419.4 | 4,589.9 | 4,524.7 | 30.9 | 16.5 | -158.93 | -453.5 | 490.4 | 993.9 | 962.4 | 31.51 | 31.546 | | |
| 4,800.0 | 4,511.9 | 4,668.7 | 4,602.5 | 31.6 | 16.7 | -159.02 | -461.7 | 499.1 | 1,020.2 | 988.1 | 32.10 | 31.782 | | |
| 4,900.0 | 4,604.5 | 4,746.6 | 4,679.8 | 32.4 | 16.9 | -159.20 | -468.5 | 506.1 | 1,048.3 | 1,015.7 | 32.64 | 32.115 | | |
| 5,000.0 | 4,697.0 | 4,823.5 | 4,756.3 | 33.2 | 17.1 | -159.45 | -473.7 | 511.6 | 1,078.0 | 1,044.9 | 33.14 | 32.534 | | |
| 5,100.0 | 4,789.5 | 4,900.0 | 4,832.6 | 33.9 | 17.2 | -159.78 | -477.5 | 515.6 | 1,109.5 | 1,075.9 | 33.58 | 33.034 | | |
| 5,126.4 | 4,813.9 | 4,919.2 | 4,851.7 | 34.1 | 17.2 | -159.87 | -478.2 | 516.3 | 1,118.0 | 1,084.3 | 33.69 | 33.182 | | |
| 5,200.0 | 4,882.4 | 4,974.3 | 4,906.8 | 34.6 | 17.3 | -160.32 | -479.8 | 518.0 | 1,141.7 | 1,107.7 | 33.99 | 33.591 | | |
| 5,300.0 | 4,976.5 | 5,049.0 | 4,981.5 | 35.1 | 17.4 | -160.92 | -480.8 | 519.1 | 1,172.6 | 1,138.3 | 34.31 | 34.174 | | |
| 5,400.0 | 5,071.7 | 5,139.2 | 5,071.7 | 35.6 | 17.5 | -161.56 | -480.9 | 519.1 | 1,201.7 | 1,167.1 | 34.59 | 34.739 | | |
| 5,500.0 | 5,167.9 | 5,235.4 | 5,167.9 | 36.0 | 17.7 | -162.12 | -480.9 | 519.1 | 1,227.7 | 1,192.8 | 34.85 | 35.222 | | |
| 5,600.0 | 5,265.0 | 5,332.5 | 5,265.0 | 36.4 | 17.8 | -162.60 | -480.9 | 519.1 | 1,250.5 | 1,215.4 | 35.10 | 35.621 | | |
| 5,700.0 | 5,362.9 | 5,430.4 | 5,362.9 | 36.7 | 17.9 | -162.99 | -480.9 | 519.1 | 1,270.0 | 1,234.7 | 35.34 | 35.940 | | |
| 5,800.0 | 5,461.4 | 5,528.9 | 5,461.4 | 37.0 | 18.0 | -163.31 | -480.9 | 519.1 | 1,286.4 | 1,250.8 | 35.55 | 36.185 | | |
| 5,900.0 | 5,560.5 | 5,628.0 | 5,560.5 | 37.2 | 18.2 | -163.55 | -480.9 | 519.1 | 1,299.4 | 1,263.7 | 35.74 | 36.358 | | |
| 6,000.0 | 5,660.0 | 5,727.5 | 5,660.0 | 37.4 | 18.3 | -163.73 | -480.9 | 519.1 | 1,309.1 | 1,273.2 | 35.90 | 36.464 | | |
| 6,100.0 | 5,759.8 | 5,827.2 | 5,759.8 | 37.6 | 18.4 | -163.85 | -480.9 | 519.1 | 1,315.5 | 1,279.4 | 36.04 | 36.504 | | |
| 6,200.0 | 5,859.7 | 5,927.2 | 5,859.7 | 37.7 | 18.6 | -163.90 | -480.9 | 519.1 | 1,318.5 | 1,282.4 | 36.15 | 36.478 | | |
| 6,240.3 | 5,900.0 | 5,967.5 | 5,900.0 | 37.7 | 18.6 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,282.6 | 36.19 | 36.445 | | |
| 6,300.0 | 5,959.7 | 6,027.2 | 5,959.7 | 37.7 | 18.7 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,282.4 | 36.35 | 36.277 | | |
| 6,400.0 | 6,059.7 | 6,127.2 | 6,059.7 | 37.8 | 18.8 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,282.1 | 36.63 | 36.004 | | |
| 6,500.0 | 6,159.7 | 6,227.2 | 6,159.7 | 37.9 | 19.0 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,281.9 | 36.91 | 35.732 | | |
| 6,600.0 | 6,259.7 | 6,327.2 | 6,259.7 | 37.9 | 19.1 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,281.6 | 37.19 | 35.461 | | |
| 6,700.0 | 6,359.7 | 6,427.2 | 6,359.7 | 38.0 | 19.3 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,281.3 | 37.48 | 35.190 | | |
| 6,800.0 | 6,459.7 | 6,527.2 | 6,459.7 | 38.0 | 19.4 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,281.0 | 37.76 | 34.922 | | |
| 6,900.0 | 6,559.7 | 6,627.2 | 6,559.7 | 38.1 | 19.6 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,280.7 | 38.06 | 34.654 | | |
| 7,000.0 | 6,659.7 | 6,727.2 | 6,659.7 | 38.2 | 19.7 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,280.4 | 38.35 | 34.388 | | |
| 7,100.0 | 6,759.7 | 6,827.2 | 6,759.7 | 38.2 | 19.9 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,280.1 | 38.65 | 34.123 | | |
| 7,200.0 | 6,859.7 | 6,927.2 | 6,859.7 | 38.3 | 20.0 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,279.8 | 38.95 | 33.860 | | |
| 7,300.0 | 6,959.7 | 7,027.2 | 6,959.7 | 38.4 | 20.2 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,279.5 | 39.25 | 33.599 | | |

| | | | |
|---------------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Company: | Sundance Energy, Weld County, CO | Local Co-ordinate Reference: | Well Schell 42-6 |
| Project: | SEC.6-T3N-R67W | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Reference Site: | Schell 41-6 Pad Sec.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #3 (4-19-11) | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | Schell 41-6 Pad Sec.6-T3N-R67W - Schell 41-6 - Wellbore #1 - Plan #3 (4-19-11) | | Offset Site Error: | | 0.0 ft | |
|-----------------------|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|--------------------|--|---------|--------------------|--|--------|--|
| Survey Program: 0-MWD | | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft | |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | | | | |
| Measured Depth | Vertical Depth | Measured Depth | Vertical Depth | Reference | Offset | Highside Toolface | Offset Wellbore Centre | | Between Centres | Between Ellipses | Minimum Separation | Separation Factor | Warning | | | | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | +N/-S (ft) | +E/-W (ft) | (ft) | (ft) | (ft) | | | | | | |
| 7,400.0 | 7,059.7 | 7,127.2 | 7,059.7 | 38.5 | 20.3 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,279.2 | 39.56 | 33.339 | | | | | |
| 7,500.0 | 7,159.7 | 7,227.2 | 7,159.7 | 38.5 | 20.5 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,278.9 | 39.86 | 33.081 | | | | | |
| 7,600.0 | 7,259.7 | 7,327.2 | 7,259.7 | 38.6 | 20.6 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,278.6 | 40.18 | 32.825 | | | | | |
| 7,700.0 | 7,359.7 | 7,427.2 | 7,359.7 | 38.7 | 20.8 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,278.3 | 40.49 | 32.571 | | | | | |
| 7,736.3 | 7,396.0 | 7,463.5 | 7,396.0 | 38.7 | 20.8 | 0.00 | -480.9 | 519.1 | 1,318.8 | 1,278.2 | 40.60 | 32.479 | | | | | |

| | | | |
|---------------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Company: | Sundance Energy, Weld County, CO | Local Co-ordinate Reference: | Well Schell 42-6 |
| Project: | SEC.6-T3N-R67W | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Reference Site: | Schell 41-6 Pad Sec.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #3 (4-19-11) | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4929.0ft (Original Well Elev) Coordinates are relative to: Schell 42-6
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.37°



| | | | |
|---------------------------|----------------------------------|-------------------------------------|--------------------------------------|
| Company: | Sundance Energy, Weld County, CO | Local Co-ordinate Reference: | Well Schell 42-6 |
| Project: | SEC.6-T3N-R67W | TVD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Reference Site: | Schell 41-6 Pad Sec.6-T3N-R67W | MD Reference: | WELL @ 4929.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Schell 42-6 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | Wellbore #1 | Database: | Landmark |
| Reference Design: | Plan #3 (4-19-11) | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4929.0ft (Original Well Elev) Coordinates are relative to: Schell 42-6
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Northern Zone
Central Meridian is -105.500000 ° Grid Convergence at Surface is: 0.37°

