

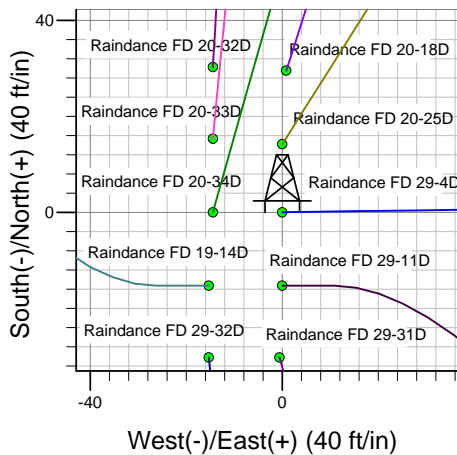
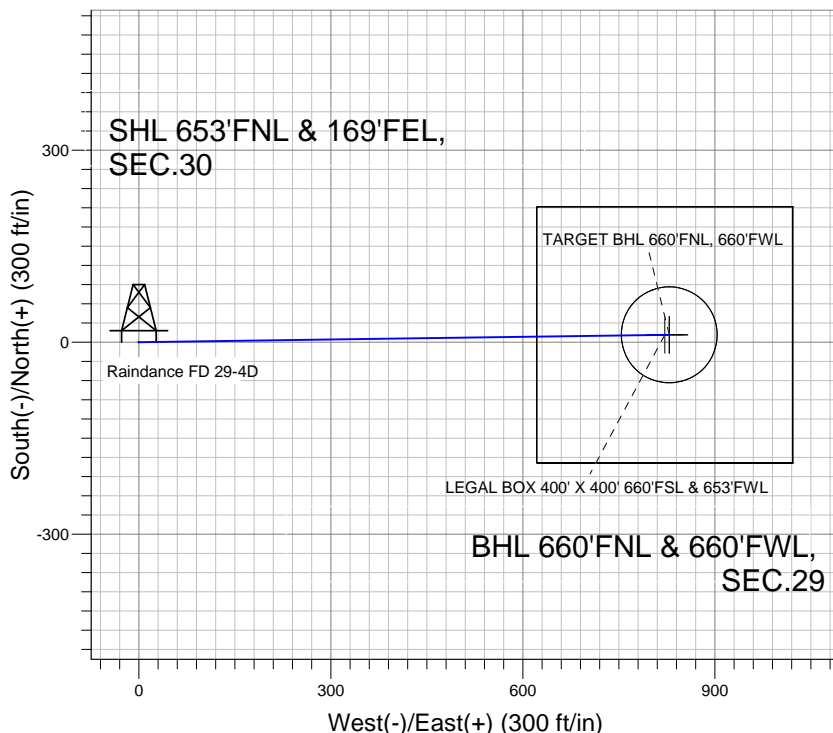
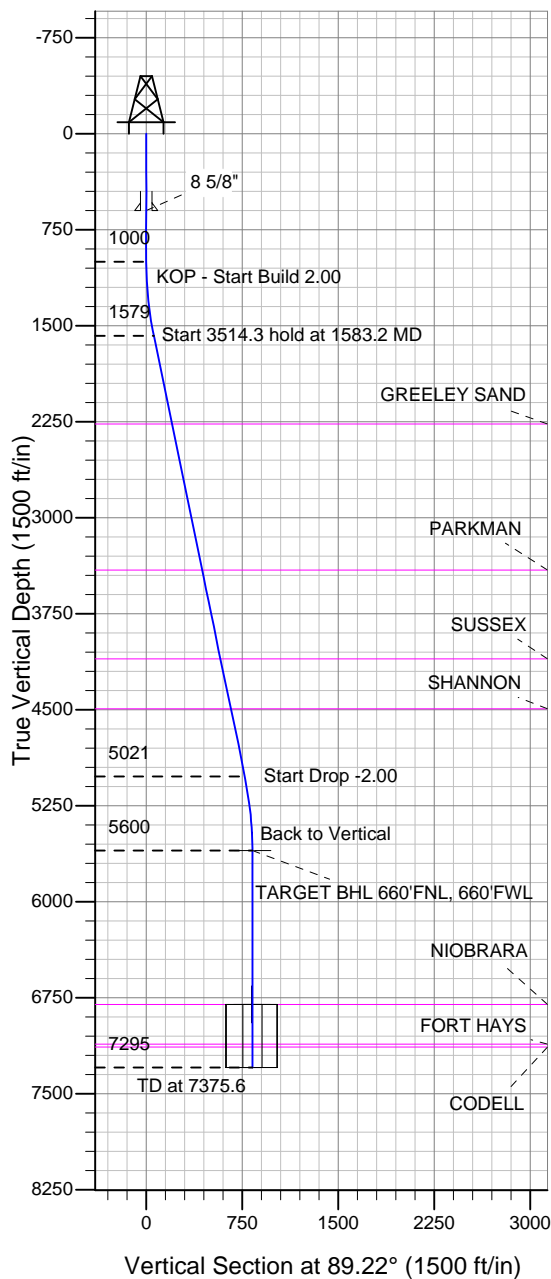
Well Name: Raindance FD 29-4D

Surface Location: Raindance FD East Row Pad Sec.30-T6N-R67W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4782.6

| +N/-S | +E/-W | Northing | Easting | Latitude | Longitude | Slot |
|---|-------|------------|------------|-----------|-------------|------|
| 0.0 | 0.0 | 1412099.12 | 3159417.91 | 40.463200 | -104.927067 | |
| Original Well Elev WELL @ 4796.6ft (Original Well Elev) | | | | | | |

Great Western



Raindance FD East Row Pad Sec.30-T6N-R67W
Raindance FD 29-4D
Plan #1 (10-18-12)
13:44, October 30 2012



Azimuths to True North
Magnetic North: 8.78°
Magnetic Field
Strength: 53005.9snT
Dip Angle: 67.03°
Date: 10/18/2012
Model: IGRF2010

WELLBORE TARGET DETAILS (LAT/LONG)

| Name | TVD | +N/-S | +E/-W | Latitude | Longitude | Shape |
|---|--------|-------|-------|-----------|-------------|----------------------------------|
| TARGET BHL 660'FNL, 660'FWL | 5600.0 | 11.3 | 828.7 | 40.463231 | -104.924089 | Point |
| LEGAL BOX 400' X 400' 660'FSL & 653'FWL | 6802.0 | 11.3 | 821.7 | 40.463231 | -104.924114 | Rectangle (Sides: L400.0 W400.0) |
| TARGET CIRCLE 660'FNL & 660'FWL | 6802.0 | 11.3 | 828.7 | 40.463231 | -104.924089 | Circle (Radius: 75.0) |

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 | 1000.0 | 0.00 | 0.00 | 1000.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1583.2 | 11.66 | 89.22 | 1579.1 | 0.8 | 59.1 | 2.00 | 89.22 | 59.1 | |
| 4 | 5097.4 | 11.66 | 89.22 | 5020.9 | 10.5 | 769.5 | 0.00 | 0.00 | 769.6 | |
| 5 | 5680.6 | 0.00 | 0.00 | 5600.0 | 11.3 | 828.7 | 2.00 | 180.00 | 828.7 | TARGET BHL 660'FNL, 660'FWL |
| 6 | 7375.6 | 0.00 | 0.00 | 7295.0 | 11.3 | 828.7 | 0.00 | 0.00 | 828.7 | |



Great Western

SEC.30-T6N-R67W

Raindance FD East Row Pad Sec.30-T6N-R67W

Raindance FD 29-4D

Wellbore #1

Plan: Plan #1 (10-18-12)

Standard Planning Report

30 October, 2012

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Company: | Great Western | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Project: | SEC.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | North Reference: | True |
| Well: | Raindance FD 29-4D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (10-18-12) | | |

| | | | |
|--------------------|--|----------------------|-----------------------------|
| Project | SEC.30-T6N-R67W, Weld County, Colorado | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | Using Well Reference Point |
| Map Zone: | Colorado Northern Zone | | Using geodetic scale factor |

| | | | |
|------------------------------|---|--------------------------|-----------------|
| Site | Raindance FD East Row Pad Sec.30-T6N-R67W | | |
| Site Position: | | Northing: | 1,412,128.64 ft |
| From: | Lat/Long | Easting: | 3,159,418.55 ft |
| Position Uncertainty: | 0.0 ft | Slot Radius: | " |
| | | Latitude: | 40.463281 |
| | | Longitude: | -104.927064 |
| | | Grid Convergence: | 0.37 ° |

| | | | |
|-----------------------------|--------------------|----------|----------------------------|
| Well | Raindance FD 29-4D | | |
| Well Position | +N/-S | -29.5 ft | Northing: |
| | +E/-W | -0.8 ft | Easting: |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: |
| | | | ft |
| | | | Latitude: |
| | | | 40.463200 |
| | | | Longitude: |
| | | | -104.927067 |
| | | | Ground Level: |
| | | | 4,782.6 ft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2010 | 10/18/2012 | 8.78 | 67.03 | 53,006 |

| | | | | |
|--------------------------|------------------------------|-------------------|----------------------|----------------------|
| Design | Plan #1 (10-18-12) | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PROTOTYPE | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 89.22 |

| | | | | | | | | | | |
|----------------------------|------------------------|--------------------|----------------------------|-------------------|-------------------|------------------------------|-----------------------------|----------------------------|----------------|------------------|
| 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 | |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,583.2 | 11.66 | 89.22 | 1,579.1 | 0.8 | 59.1 | 2.00 | 2.00 | 0.00 | 89.22 | |
| 5,097.4 | 11.66 | 89.22 | 5,020.9 | 10.5 | 769.5 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,680.6 | 0.00 | 0.00 | 5,600.0 | 11.3 | 828.7 | 2.00 | -2.00 | 0.00 | 180.00 | TARGET BHL 660'I |
| 7,375.6 | 0.00 | 0.00 | 7,295.0 | 11.3 | 828.7 | 0.00 | 0.00 | 0.00 | 0.00 | |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Company: | Great Western | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Project: | SEC.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | North Reference: | True |
| Well: | Raindance FD 29-4D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (10-18-12) | | |

| 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 | 0.00 | 0.00 | 240.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 280.0 | 0.00 | 0.00 | 280.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 320.0 | 0.00 | 0.00 | 320.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 360.0 | 0.00 | 0.00 | 360.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 440.0 | 0.00 | 0.00 | 440.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 480.0 | 0.00 | 0.00 | 480.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 520.0 | 0.00 | 0.00 | 520.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 560.0 | 0.00 | 0.00 | 560.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 8 5/8" | | | | | | | | | |
| 640.0 | 0.00 | 0.00 | 640.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 680.0 | 0.00 | 0.00 | 680.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 720.0 | 0.00 | 0.00 | 720.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 760.0 | 0.00 | 0.00 | 760.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 840.0 | 0.00 | 0.00 | 840.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 880.0 | 0.00 | 0.00 | 880.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 920.0 | 0.00 | 0.00 | 920.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 960.0 | 0.00 | 0.00 | 960.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| KOP - Start Build 2.00 | | | | | | | | | |
| 1,040.0 | 0.80 | 89.22 | 1,040.0 | 0.0 | 0.3 | 0.3 | 2.00 | 2.00 | 0.00 |
| 1,080.0 | 1.60 | 89.22 | 1,080.0 | 0.0 | 1.1 | 1.1 | 2.00 | 2.00 | 0.00 |
| 1,120.0 | 2.40 | 89.22 | 1,120.0 | 0.0 | 2.5 | 2.5 | 2.00 | 2.00 | 0.00 |
| 1,160.0 | 3.20 | 89.22 | 1,159.9 | 0.1 | 4.5 | 4.5 | 2.00 | 2.00 | 0.00 |
| 1,200.0 | 4.00 | 89.22 | 1,199.8 | 0.1 | 7.0 | 7.0 | 2.00 | 2.00 | 0.00 |
| 1,240.0 | 4.80 | 89.22 | 1,239.7 | 0.1 | 10.0 | 10.0 | 2.00 | 2.00 | 0.00 |
| 1,280.0 | 5.60 | 89.22 | 1,279.6 | 0.2 | 13.7 | 13.7 | 2.00 | 2.00 | 0.00 |
| 1,320.0 | 6.40 | 89.22 | 1,319.3 | 0.2 | 17.9 | 17.9 | 2.00 | 2.00 | 0.00 |
| 1,360.0 | 7.20 | 89.22 | 1,359.1 | 0.3 | 22.6 | 22.6 | 2.00 | 2.00 | 0.00 |
| 1,400.0 | 8.00 | 89.22 | 1,398.7 | 0.4 | 27.9 | 27.9 | 2.00 | 2.00 | 0.00 |
| 1,440.0 | 8.80 | 89.22 | 1,438.3 | 0.5 | 33.7 | 33.7 | 2.00 | 2.00 | 0.00 |
| 1,480.0 | 9.60 | 89.22 | 1,477.8 | 0.5 | 40.1 | 40.1 | 2.00 | 2.00 | 0.00 |
| 1,520.0 | 10.40 | 89.22 | 1,517.1 | 0.6 | 47.1 | 47.1 | 2.00 | 2.00 | 0.00 |
| 1,560.0 | 11.20 | 89.22 | 1,556.4 | 0.7 | 54.6 | 54.6 | 2.00 | 2.00 | 0.00 |
| 1,583.2 | 11.66 | 89.22 | 1,579.1 | 0.8 | 59.1 | 59.1 | 2.00 | 2.00 | 0.00 |
| Start 3514.3 hold at 1583.2 MD | | | | | | | | | |
| 1,600.0 | 11.66 | 89.22 | 1,595.6 | 0.9 | 62.5 | 62.6 | 0.00 | 0.00 | 0.00 |
| 1,640.0 | 11.66 | 89.22 | 1,634.8 | 1.0 | 70.6 | 70.6 | 0.00 | 0.00 | 0.00 |
| 1,680.0 | 11.66 | 89.22 | 1,674.0 | 1.1 | 78.7 | 78.7 | 0.00 | 0.00 | 0.00 |
| 1,720.0 | 11.66 | 89.22 | 1,713.2 | 1.2 | 86.8 | 86.8 | 0.00 | 0.00 | 0.00 |
| 1,760.0 | 11.66 | 89.22 | 1,752.3 | 1.3 | 94.9 | 94.9 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 11.66 | 89.22 | 1,791.5 | 1.4 | 103.0 | 103.0 | 0.00 | 0.00 | 0.00 |
| 1,840.0 | 11.66 | 89.22 | 1,830.7 | 1.5 | 111.1 | 111.1 | 0.00 | 0.00 | 0.00 |
| 1,880.0 | 11.66 | 89.22 | 1,869.9 | 1.6 | 119.1 | 119.2 | 0.00 | 0.00 | 0.00 |
| 1,920.0 | 11.66 | 89.22 | 1,909.0 | 1.7 | 127.2 | 127.2 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Company: | Great Western | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Project: | SEC.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | North Reference: | True |
| Well: | Raindance FD 29-4D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (10-18-12) | | |

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) |
|---------------------|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 1,960.0 | 11.66 | 89.22 | 1,948.2 | 1.8 | 135.3 | 135.3 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 11.66 | 89.22 | 1,987.4 | 2.0 | 143.4 | 143.4 | 0.00 | 0.00 | 0.00 |
| 2,040.0 | 11.66 | 89.22 | 2,026.5 | 2.1 | 151.5 | 151.5 | 0.00 | 0.00 | 0.00 |
| 2,080.0 | 11.66 | 89.22 | 2,065.7 | 2.2 | 159.6 | 159.6 | 0.00 | 0.00 | 0.00 |
| 2,120.0 | 11.66 | 89.22 | 2,104.9 | 2.3 | 167.7 | 167.7 | 0.00 | 0.00 | 0.00 |
| 2,160.0 | 11.66 | 89.22 | 2,144.1 | 2.4 | 175.7 | 175.8 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 11.66 | 89.22 | 2,183.2 | 2.5 | 183.8 | 183.8 | 0.00 | 0.00 | 0.00 |
| 2,240.0 | 11.66 | 89.22 | 2,222.4 | 2.6 | 191.9 | 191.9 | 0.00 | 0.00 | 0.00 |
| 2,280.0 | 11.66 | 89.22 | 2,261.6 | 2.7 | 200.0 | 200.0 | 0.00 | 0.00 | 0.00 |
| 2,286.5 | 11.66 | 89.22 | 2,268.0 | 2.7 | 201.3 | 201.3 | 0.00 | 0.00 | 0.00 |
| GREELEY SAND | | | | | | | | | |
| 2,320.0 | 11.66 | 89.22 | 2,300.8 | 2.8 | 208.1 | 208.1 | 0.00 | 0.00 | 0.00 |
| 2,360.0 | 11.66 | 89.22 | 2,339.9 | 3.0 | 216.2 | 216.2 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 11.66 | 89.22 | 2,379.1 | 3.1 | 224.3 | 224.3 | 0.00 | 0.00 | 0.00 |
| 2,440.0 | 11.66 | 89.22 | 2,418.3 | 3.2 | 232.3 | 232.4 | 0.00 | 0.00 | 0.00 |
| 2,480.0 | 11.66 | 89.22 | 2,457.5 | 3.3 | 240.4 | 240.5 | 0.00 | 0.00 | 0.00 |
| 2,520.0 | 11.66 | 89.22 | 2,496.6 | 3.4 | 248.5 | 248.5 | 0.00 | 0.00 | 0.00 |
| 2,560.0 | 11.66 | 89.22 | 2,535.8 | 3.5 | 256.6 | 256.6 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 11.66 | 89.22 | 2,575.0 | 3.6 | 264.7 | 264.7 | 0.00 | 0.00 | 0.00 |
| 2,640.0 | 11.66 | 89.22 | 2,614.2 | 3.7 | 272.8 | 272.8 | 0.00 | 0.00 | 0.00 |
| 2,680.0 | 11.66 | 89.22 | 2,653.3 | 3.8 | 280.9 | 280.9 | 0.00 | 0.00 | 0.00 |
| 2,720.0 | 11.66 | 89.22 | 2,692.5 | 3.9 | 288.9 | 289.0 | 0.00 | 0.00 | 0.00 |
| 2,760.0 | 11.66 | 89.22 | 2,731.7 | 4.1 | 297.0 | 297.1 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 11.66 | 89.22 | 2,770.9 | 4.2 | 305.1 | 305.1 | 0.00 | 0.00 | 0.00 |
| 2,840.0 | 11.66 | 89.22 | 2,810.0 | 4.3 | 313.2 | 313.2 | 0.00 | 0.00 | 0.00 |
| 2,880.0 | 11.66 | 89.22 | 2,849.2 | 4.4 | 321.3 | 321.3 | 0.00 | 0.00 | 0.00 |
| 2,920.0 | 11.66 | 89.22 | 2,888.4 | 4.5 | 329.4 | 329.4 | 0.00 | 0.00 | 0.00 |
| 2,960.0 | 11.66 | 89.22 | 2,927.6 | 4.6 | 337.5 | 337.5 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 11.66 | 89.22 | 2,966.7 | 4.7 | 345.5 | 345.6 | 0.00 | 0.00 | 0.00 |
| 3,040.0 | 11.66 | 89.22 | 3,005.9 | 4.8 | 353.6 | 353.7 | 0.00 | 0.00 | 0.00 |
| 3,080.0 | 11.66 | 89.22 | 3,045.1 | 4.9 | 361.7 | 361.7 | 0.00 | 0.00 | 0.00 |
| 3,120.0 | 11.66 | 89.22 | 3,084.2 | 5.0 | 369.8 | 369.8 | 0.00 | 0.00 | 0.00 |
| 3,160.0 | 11.66 | 89.22 | 3,123.4 | 5.2 | 377.9 | 377.9 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 11.66 | 89.22 | 3,162.6 | 5.3 | 386.0 | 386.0 | 0.00 | 0.00 | 0.00 |
| 3,240.0 | 11.66 | 89.22 | 3,201.8 | 5.4 | 394.1 | 394.1 | 0.00 | 0.00 | 0.00 |
| 3,280.0 | 11.66 | 89.22 | 3,240.9 | 5.5 | 402.1 | 402.2 | 0.00 | 0.00 | 0.00 |
| 3,320.0 | 11.66 | 89.22 | 3,280.1 | 5.6 | 410.2 | 410.3 | 0.00 | 0.00 | 0.00 |
| 3,360.0 | 11.66 | 89.22 | 3,319.3 | 5.7 | 418.3 | 418.4 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 11.66 | 89.22 | 3,358.5 | 5.8 | 426.4 | 426.4 | 0.00 | 0.00 | 0.00 |
| 3,440.0 | 11.66 | 89.22 | 3,397.6 | 5.9 | 434.5 | 434.5 | 0.00 | 0.00 | 0.00 |
| 3,451.6 | 11.66 | 89.22 | 3,409.0 | 6.0 | 436.8 | 436.9 | 0.00 | 0.00 | 0.00 |
| PARKMAN | | | | | | | | | |
| 3,480.0 | 11.66 | 89.22 | 3,436.8 | 6.0 | 442.6 | 442.6 | 0.00 | 0.00 | 0.00 |
| 3,520.0 | 11.66 | 89.22 | 3,476.0 | 6.2 | 450.7 | 450.7 | 0.00 | 0.00 | 0.00 |
| 3,560.0 | 11.66 | 89.22 | 3,515.2 | 6.3 | 458.7 | 458.8 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 11.66 | 89.22 | 3,554.3 | 6.4 | 466.8 | 466.9 | 0.00 | 0.00 | 0.00 |
| 3,640.0 | 11.66 | 89.22 | 3,593.5 | 6.5 | 474.9 | 475.0 | 0.00 | 0.00 | 0.00 |
| 3,680.0 | 11.66 | 89.22 | 3,632.7 | 6.6 | 483.0 | 483.0 | 0.00 | 0.00 | 0.00 |
| 3,720.0 | 11.66 | 89.22 | 3,671.9 | 6.7 | 491.1 | 491.1 | 0.00 | 0.00 | 0.00 |
| 3,760.0 | 11.66 | 89.22 | 3,711.0 | 6.8 | 499.2 | 499.2 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 11.66 | 89.22 | 3,750.2 | 6.9 | 507.3 | 507.3 | 0.00 | 0.00 | 0.00 |
| 3,840.0 | 11.66 | 89.22 | 3,789.4 | 7.0 | 515.3 | 515.4 | 0.00 | 0.00 | 0.00 |
| 3,880.0 | 11.66 | 89.22 | 3,828.6 | 7.1 | 523.4 | 523.5 | 0.00 | 0.00 | 0.00 |

| | | | |
|------------------|---------------------------|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Company: | Great Western | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Project: | SEC.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site: | Raindance FD East Row Pad | North Reference: | True |
| Well: | Raindance FD 29-4D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (10-18-12) | | |

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) |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 3,920.0 | 11.66 | 89.22 | 3,867.7 | 7.3 | 531.5 | 531.6 | 0.00 | 0.00 | 0.00 |
| 3,960.0 | 11.66 | 89.22 | 3,906.9 | 7.4 | 539.6 | 539.6 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 11.66 | 89.22 | 3,946.1 | 7.5 | 547.7 | 547.7 | 0.00 | 0.00 | 0.00 |
| 4,040.0 | 11.66 | 89.22 | 3,985.3 | 7.6 | 555.8 | 555.8 | 0.00 | 0.00 | 0.00 |
| 4,080.0 | 11.66 | 89.22 | 4,024.4 | 7.7 | 563.9 | 563.9 | 0.00 | 0.00 | 0.00 |
| 4,120.0 | 11.66 | 89.22 | 4,063.6 | 7.8 | 571.9 | 572.0 | 0.00 | 0.00 | 0.00 |
| 4,159.2 | 11.66 | 89.22 | 4,102.0 | 7.9 | 579.9 | 579.9 | 0.00 | 0.00 | 0.00 |
| SUSSEX | | | | | | | | | |
| 4,160.0 | 11.66 | 89.22 | 4,102.8 | 7.9 | 580.0 | 580.1 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 11.66 | 89.22 | 4,142.0 | 8.0 | 588.1 | 588.2 | 0.00 | 0.00 | 0.00 |
| 4,240.0 | 11.66 | 89.22 | 4,181.1 | 8.1 | 596.2 | 596.3 | 0.00 | 0.00 | 0.00 |
| 4,280.0 | 11.66 | 89.22 | 4,220.3 | 8.2 | 604.3 | 604.3 | 0.00 | 0.00 | 0.00 |
| 4,320.0 | 11.66 | 89.22 | 4,259.5 | 8.4 | 612.4 | 612.4 | 0.00 | 0.00 | 0.00 |
| 4,360.0 | 11.66 | 89.22 | 4,298.6 | 8.5 | 620.5 | 620.5 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 11.66 | 89.22 | 4,337.8 | 8.6 | 628.5 | 628.6 | 0.00 | 0.00 | 0.00 |
| 4,440.0 | 11.66 | 89.22 | 4,377.0 | 8.7 | 636.6 | 636.7 | 0.00 | 0.00 | 0.00 |
| 4,480.0 | 11.66 | 89.22 | 4,416.2 | 8.8 | 644.7 | 644.8 | 0.00 | 0.00 | 0.00 |
| 4,520.0 | 11.66 | 89.22 | 4,455.3 | 8.9 | 652.8 | 652.9 | 0.00 | 0.00 | 0.00 |
| 4,557.4 | 11.66 | 89.22 | 4,492.0 | 9.0 | 660.4 | 660.4 | 0.00 | 0.00 | 0.00 |
| SHANNON | | | | | | | | | |
| 4,560.0 | 11.66 | 89.22 | 4,494.5 | 9.0 | 660.9 | 660.9 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 11.66 | 89.22 | 4,533.7 | 9.1 | 669.0 | 669.0 | 0.00 | 0.00 | 0.00 |
| 4,640.0 | 11.66 | 89.22 | 4,572.9 | 9.2 | 677.1 | 677.1 | 0.00 | 0.00 | 0.00 |
| 4,680.0 | 11.66 | 89.22 | 4,612.0 | 9.4 | 685.1 | 685.2 | 0.00 | 0.00 | 0.00 |
| 4,720.0 | 11.66 | 89.22 | 4,651.2 | 9.5 | 693.2 | 693.3 | 0.00 | 0.00 | 0.00 |
| 4,760.0 | 11.66 | 89.22 | 4,690.4 | 9.6 | 701.3 | 701.4 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 11.66 | 89.22 | 4,729.6 | 9.7 | 709.4 | 709.5 | 0.00 | 0.00 | 0.00 |
| 4,840.0 | 11.66 | 89.22 | 4,768.7 | 9.8 | 717.5 | 717.5 | 0.00 | 0.00 | 0.00 |
| 4,880.0 | 11.66 | 89.22 | 4,807.9 | 9.9 | 725.6 | 725.6 | 0.00 | 0.00 | 0.00 |
| 4,920.0 | 11.66 | 89.22 | 4,847.1 | 10.0 | 733.7 | 733.7 | 0.00 | 0.00 | 0.00 |
| 4,960.0 | 11.66 | 89.22 | 4,886.3 | 10.1 | 741.7 | 741.8 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 11.66 | 89.22 | 4,925.4 | 10.2 | 749.8 | 749.9 | 0.00 | 0.00 | 0.00 |
| 5,040.0 | 11.66 | 89.22 | 4,964.6 | 10.3 | 757.9 | 758.0 | 0.00 | 0.00 | 0.00 |
| 5,080.0 | 11.66 | 89.22 | 5,003.8 | 10.5 | 766.0 | 766.1 | 0.00 | 0.00 | 0.00 |
| 5,097.4 | 11.66 | 89.22 | 5,020.9 | 10.5 | 769.5 | 769.6 | 0.00 | 0.00 | 0.00 |
| Start Drop -2.00 | | | | | | | | | |
| 5,120.0 | 11.21 | 89.22 | 5,043.0 | 10.6 | 774.0 | 774.1 | 2.00 | -2.00 | 0.00 |
| 5,160.0 | 10.41 | 89.22 | 5,082.3 | 10.7 | 781.5 | 781.6 | 2.00 | -2.00 | 0.00 |
| 5,200.0 | 9.61 | 89.22 | 5,121.7 | 10.8 | 788.4 | 788.5 | 2.00 | -2.00 | 0.00 |
| 5,240.0 | 8.81 | 89.22 | 5,161.1 | 10.9 | 794.9 | 794.9 | 2.00 | -2.00 | 0.00 |
| 5,280.0 | 8.01 | 89.22 | 5,200.7 | 10.9 | 800.7 | 800.8 | 2.00 | -2.00 | 0.00 |
| 5,320.0 | 7.21 | 89.22 | 5,240.4 | 11.0 | 806.0 | 806.1 | 2.00 | -2.00 | 0.00 |
| 5,360.0 | 6.41 | 89.22 | 5,280.1 | 11.1 | 810.7 | 810.8 | 2.00 | -2.00 | 0.00 |
| 5,400.0 | 5.61 | 89.22 | 5,319.9 | 11.1 | 814.9 | 815.0 | 2.00 | -2.00 | 0.00 |
| 5,440.0 | 4.81 | 89.22 | 5,359.7 | 11.2 | 818.6 | 818.6 | 2.00 | -2.00 | 0.00 |
| 5,480.0 | 4.01 | 89.22 | 5,399.6 | 11.2 | 821.6 | 821.7 | 2.00 | -2.00 | 0.00 |
| 5,520.0 | 3.21 | 89.22 | 5,439.5 | 11.3 | 824.2 | 824.2 | 2.00 | -2.00 | 0.00 |
| 5,560.0 | 2.41 | 89.22 | 5,479.4 | 11.3 | 826.1 | 826.2 | 2.00 | -2.00 | 0.00 |
| 5,600.0 | 1.61 | 89.22 | 5,519.4 | 11.3 | 827.5 | 827.6 | 2.00 | -2.00 | 0.00 |
| 5,640.0 | 0.81 | 89.22 | 5,559.4 | 11.3 | 828.4 | 828.5 | 2.00 | -2.00 | 0.00 |
| 5,680.0 | 0.01 | 89.22 | 5,599.4 | 11.3 | 828.7 | 828.7 | 2.00 | -2.00 | 0.00 |
| 5,680.6 | 0.00 | 0.00 | 5,600.0 | 11.3 | 828.7 | 828.7 | 2.00 | -2.00 | 0.00 |
| Back to Vertical - TARGET BHL 660'FNL, 660'FWL | | | | | | | | | |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Company: | Great Western | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Project: | SEC.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | North Reference: | True |
| Well: | Raindance FD 29-4D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (10-18-12) | | |

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) |
|---|-----------------|-------------|---------------------|------------|------------|-----------------------|-----------------------|----------------------|---------------------|
| 5,720.0 | 0.00 | 0.00 | 5,639.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 5,760.0 | 0.00 | 0.00 | 5,679.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 0.00 | 0.00 | 5,719.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 5,840.0 | 0.00 | 0.00 | 5,759.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 5,880.0 | 0.00 | 0.00 | 5,799.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 5,920.0 | 0.00 | 0.00 | 5,839.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 5,960.0 | 0.00 | 0.00 | 5,879.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 0.00 | 0.00 | 5,919.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,040.0 | 0.00 | 0.00 | 5,959.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,080.0 | 0.00 | 0.00 | 5,999.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,120.0 | 0.00 | 0.00 | 6,039.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,160.0 | 0.00 | 0.00 | 6,079.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 0.00 | 0.00 | 6,119.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,240.0 | 0.00 | 0.00 | 6,159.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,280.0 | 0.00 | 0.00 | 6,199.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,320.0 | 0.00 | 0.00 | 6,239.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,360.0 | 0.00 | 0.00 | 6,279.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 0.00 | 0.00 | 6,319.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,440.0 | 0.00 | 0.00 | 6,359.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,480.0 | 0.00 | 0.00 | 6,399.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,520.0 | 0.00 | 0.00 | 6,439.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,560.0 | 0.00 | 0.00 | 6,479.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 0.00 | 0.00 | 6,519.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,640.0 | 0.00 | 0.00 | 6,559.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,680.0 | 0.00 | 0.00 | 6,599.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,720.0 | 0.00 | 0.00 | 6,639.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,760.0 | 0.00 | 0.00 | 6,679.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 0.00 | 0.00 | 6,719.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,840.0 | 0.00 | 0.00 | 6,759.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,880.0 | 0.00 | 0.00 | 6,799.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,882.6 | 0.00 | 0.00 | 6,802.0 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| NIOBRARA - LEGAL BOX 400' X 400' 660'FSL & 653'FWL - TARGET CIRCLE 660'FNL & 660'FWL | | | | | | | | | |
| 6,920.0 | 0.00 | 0.00 | 6,839.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 6,960.0 | 0.00 | 0.00 | 6,879.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 0.00 | 0.00 | 6,919.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,040.0 | 0.00 | 0.00 | 6,959.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,080.0 | 0.00 | 0.00 | 6,999.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,120.0 | 0.00 | 0.00 | 7,039.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,160.0 | 0.00 | 0.00 | 7,079.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,193.6 | 0.00 | 0.00 | 7,113.0 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| FORT HAYS | | | | | | | | | |
| 7,200.0 | 0.00 | 0.00 | 7,119.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,215.6 | 0.00 | 0.00 | 7,135.0 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| CODELL | | | | | | | | | |
| 7,240.0 | 0.00 | 0.00 | 7,159.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,280.0 | 0.00 | 0.00 | 7,199.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,320.0 | 0.00 | 0.00 | 7,239.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,360.0 | 0.00 | 0.00 | 7,279.4 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| 7,375.6 | 0.00 | 0.00 | 7,295.0 | 11.3 | 828.7 | 828.7 | 0.00 | 0.00 | 0.00 |
| TD at 7375.6 | | | | | | | | | |

| | | | |
|------------------|--|-------------------------------------|--------------------------------------|
| Database: | Landmark | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Company: | Great Western | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Project: | SEC.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | North Reference: | True |
| Well: | Raindance FD 29-4D | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Plan #1 (10-18-12) | | |

| Targets | | | | | | | | | |
|-----------------------|---|------------------|-----------------|-------------|---------------|---------------|------------------|-----------------|-----------------------|
| Target Name | - hit/miss target | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude Longitude |
| LEGAL BOX 400' X 400' | - plan misses target center by 7.0ft at 6882.6ft MD (6802.0 TVD, 11.3 N, 828.7 E) - Rectangle (sides W400.0 H400.0 D493.0) | 0.00 | 0.00 | 6,802.0 | 11.3 | 821.7 | 1,412,115.73 | 3,160,239.49 | 40.463231 -104.924114 |
| TARGET BHL 660'FN | - plan hits target center - Point | 0.00 | 0.00 | 5,600.0 | 11.3 | 828.7 | 1,412,115.79 | 3,160,246.45 | 40.463231 -104.924089 |
| TARGET CIRCLE 660' | - plan hits target center - Circle (radius 75.0) | 0.00 | 0.00 | 6,802.0 | 11.3 | 828.7 | 1,412,115.79 | 3,160,246.45 | 40.463231 -104.924089 |

| Casing Points | | | | | |
|------------------------|------------------------|--------|------------------------|----------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (") | Hole Diameter (") | |
| 600.0 | 600.0 | 8 5/8" | 8-5/8 | 12-1/4 | |

| Formations | | | | | | |
|------------------------|------------------------|--------------|-----------|------------|----------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) | |
| 2,286.5 | 2,268.0 | GREELEY SAND | | 0.00 | | |
| 3,451.6 | 3,409.0 | PARKMAN | | 0.00 | | |
| 4,159.2 | 4,102.0 | SUSSEX | | 0.00 | | |
| 4,557.4 | 4,492.0 | SHANNON | | 0.00 | | |
| 6,882.6 | 6,802.0 | NIOBRARA | | 0.00 | | |
| 7,193.6 | 7,113.0 | FORT HAYS | | 0.00 | | |
| 7,215.6 | 7,135.0 | CODELL | | 0.00 | | |

| Plan Annotations | | | | | |
|------------------------|------------------------|-------------------|---------------|--------------------------------|--|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment | |
| | | +N/-S (ft) | +E/-W (ft) | | |
| 1,000.0 | 1,000.0 | 0.0 | 0.0 | KOP - Start Build 2.00 | |
| 1,583.2 | 1,579.1 | 0.8 | 59.1 | Start 3514.3 hold at 1583.2 MD | |
| 5,097.4 | 5,020.9 | 10.5 | 769.5 | Start Drop -2.00 | |
| 5,680.6 | 5,600.0 | 11.3 | 828.7 | Back to Vertical | |
| 7,375.6 | 7,295.0 | 11.3 | 828.7 | TD at 7375.6 | |



Great Western

SEC.30-T6N-R67W

Raindance FD East Row Pad Sec.30-T6N-R67W

Raindance FD 29-4D

Wellbore #1

Plan #1 (10-18-12)

Anticollision Report

30 October, 2012

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| Offset Design Raindance FD East Row Pad Sec.30-T6N-R67W - Raindance FD 20-25D - Wellbore #1 - Plan #1 (10-1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------|--------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference | Offset | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning | |
| 1,500.0 | 1,497.5 | 1,486.9 | 1,480.3 | 3.3 | 3.5 | -87.01 | 83.5 | 43.8 | 84.7 | 78.0 | 6.65 | 12.728 | | |
| 1,583.2 | 1,579.1 | 1,565.9 | 1,556.8 | 3.5 | 3.8 | -89.34 | 100.3 | 54.4 | 102.0 | 94.9 | 7.16 | 14.253 | | |
| 1,600.0 | 1,595.6 | 1,581.8 | 1,572.1 | 3.6 | 3.9 | -89.82 | 103.8 | 56.6 | 105.8 | 98.5 | 7.27 | 14.560 | | |
| 1,700.0 | 1,693.6 | 1,675.7 | 1,662.1 | 3.9 | 4.4 | -91.63 | 126.5 | 70.9 | 129.8 | 121.8 | 7.94 | 16.350 | | |
| 1,800.0 | 1,791.5 | 1,768.4 | 1,750.0 | 4.3 | 4.8 | -92.17 | 151.3 | 86.6 | 156.4 | 147.7 | 8.64 | 18.087 | | |
| 1,900.0 | 1,889.4 | 1,861.5 | 1,837.4 | 4.7 | 5.4 | -92.01 | 178.4 | 103.7 | 185.2 | 175.8 | 9.38 | 19.737 | | |
| 2,000.0 | 1,987.4 | 1,957.1 | 1,927.0 | 5.1 | 6.0 | -91.79 | 206.7 | 121.6 | 214.6 | 204.4 | 10.15 | 21.132 | | |
| 2,100.0 | 2,085.3 | 2,052.7 | 2,016.5 | 5.5 | 6.6 | -91.63 | 235.0 | 139.5 | 243.9 | 233.0 | 10.94 | 22.293 | | |
| 2,200.0 | 2,183.2 | 2,148.3 | 2,106.0 | 5.9 | 7.2 | -91.50 | 263.3 | 157.4 | 273.3 | 261.6 | 11.75 | 23.266 | | |
| 2,300.0 | 2,281.2 | 2,243.9 | 2,195.6 | 6.3 | 7.8 | -91.39 | 291.7 | 175.3 | 302.7 | 290.1 | 12.56 | 24.090 | | |
| 2,400.0 | 2,379.1 | 2,339.4 | 2,285.1 | 6.7 | 8.4 | -91.31 | 320.0 | 193.1 | 332.0 | 318.6 | 13.39 | 24.793 | | |
| 2,500.0 | 2,477.1 | 2,435.0 | 2,374.6 | 7.1 | 9.1 | -91.24 | 348.3 | 211.0 | 361.4 | 347.1 | 14.23 | 25.399 | | |
| 2,600.0 | 2,575.0 | 2,530.6 | 2,464.2 | 7.6 | 9.7 | -91.17 | 376.6 | 228.9 | 390.7 | 375.7 | 15.07 | 25.926 | | |
| 2,700.0 | 2,672.9 | 2,626.2 | 2,553.7 | 8.0 | 10.3 | -91.12 | 404.9 | 246.8 | 420.1 | 404.2 | 15.92 | 26.386 | | |
| 2,800.0 | 2,770.9 | 2,721.8 | 2,643.3 | 8.4 | 11.0 | -91.08 | 433.2 | 264.7 | 449.5 | 432.7 | 16.78 | 26.792 | | |
| 2,900.0 | 2,868.8 | 2,817.4 | 2,732.8 | 8.9 | 11.6 | -91.04 | 461.5 | 282.6 | 478.8 | 461.2 | 17.64 | 27.151 | | |
| 3,000.0 | 2,966.7 | 2,913.0 | 2,822.3 | 9.3 | 12.3 | -91.00 | 489.8 | 300.4 | 508.2 | 489.7 | 18.50 | 27.471 | | |
| 3,100.0 | 3,064.7 | 3,008.6 | 2,911.9 | 9.7 | 12.9 | -90.97 | 518.2 | 318.3 | 537.5 | 518.2 | 19.37 | 27.758 | | |
| 3,200.0 | 3,162.6 | 3,104.2 | 3,001.4 | 10.2 | 13.6 | -90.94 | 546.5 | 336.2 | 566.9 | 546.7 | 20.23 | 28.016 | | |
| 3,300.0 | 3,260.5 | 3,199.8 | 3,090.9 | 10.6 | 14.3 | -90.92 | 574.8 | 354.1 | 596.3 | 575.2 | 21.11 | 28.250 | | |
| 3,400.0 | 3,358.5 | 3,295.4 | 3,180.5 | 11.0 | 14.9 | -90.89 | 603.1 | 372.0 | 625.6 | 603.6 | 21.98 | 28.462 | | |
| 3,500.0 | 3,456.4 | 3,391.0 | 3,270.0 | 11.5 | 15.6 | -90.87 | 631.4 | 389.9 | 655.0 | 632.1 | 22.86 | 28.656 | | |
| 3,600.0 | 3,554.3 | 3,486.6 | 3,359.5 | 11.9 | 16.2 | -90.85 | 659.7 | 407.8 | 684.3 | 660.6 | 23.74 | 28.833 | | |
| 3,700.0 | 3,652.3 | 3,582.1 | 3,449.1 | 12.4 | 16.9 | -90.83 | 688.0 | 425.6 | 713.7 | 689.1 | 24.61 | 28.995 | | |
| 3,800.0 | 3,750.2 | 3,677.7 | 3,538.6 | 12.8 | 17.6 | -90.82 | 716.4 | 443.5 | 743.1 | 717.6 | 25.50 | 29.145 | | |
| 3,900.0 | 3,848.1 | 3,773.3 | 3,628.1 | 13.2 | 18.2 | -90.80 | 744.7 | 461.4 | 772.4 | 746.0 | 26.38 | 29.283 | | |
| 4,000.0 | 3,946.1 | 3,868.9 | 3,717.7 | 13.7 | 18.9 | -90.79 | 773.0 | 479.3 | 801.8 | 774.5 | 27.26 | 29.411 | | |
| 4,100.0 | 4,044.0 | 3,964.5 | 3,807.2 | 14.1 | 19.5 | -90.78 | 801.3 | 497.2 | 831.2 | 803.0 | 28.15 | 29.530 | | |
| 4,200.0 | 4,142.0 | 4,060.1 | 3,896.7 | 14.6 | 20.2 | -90.76 | 829.6 | 515.1 | 860.5 | 831.5 | 29.03 | 29.641 | | |
| 4,300.0 | 4,239.9 | 4,155.7 | 3,986.3 | 15.0 | 20.9 | -90.75 | 857.9 | 532.9 | 889.9 | 860.0 | 29.92 | 29.744 | | |
| 4,400.0 | 4,337.8 | 4,251.3 | 4,075.8 | 15.5 | 21.5 | -90.74 | 886.2 | 550.8 | 919.2 | 888.4 | 30.81 | 29.840 | | |
| 4,500.0 | 4,435.8 | 4,346.9 | 4,165.3 | 15.9 | 22.2 | -90.73 | 914.6 | 568.7 | 948.6 | 916.9 | 31.69 | 29.931 | | |
| 4,600.0 | 4,533.7 | 4,442.5 | 4,254.9 | 16.4 | 22.9 | -90.72 | 942.9 | 586.6 | 978.0 | 945.4 | 32.58 | 30.015 | | |
| 4,700.0 | 4,631.6 | 4,538.1 | 4,344.4 | 16.8 | 23.5 | -90.71 | 971.2 | 604.5 | 1,007.3 | 973.9 | 33.47 | 30.095 | | |
| 4,800.0 | 4,729.6 | 4,633.7 | 4,433.9 | 17.3 | 24.2 | -90.71 | 999.5 | 622.4 | 1,036.7 | 1,002.3 | 34.36 | 30.170 | | |
| 4,900.0 | 4,827.5 | 4,729.3 | 4,523.5 | 17.7 | 24.8 | -90.70 | 1,027.8 | 640.3 | 1,066.0 | 1,030.8 | 35.25 | 30.241 | | |
| 5,000.0 | 4,925.4 | 4,824.8 | 4,613.0 | 18.1 | 25.5 | -90.69 | 1,056.1 | 658.1 | 1,095.4 | 1,059.3 | 36.14 | 30.308 | | |
| 5,097.4 | 5,020.9 | 4,918.0 | 4,700.2 | 18.6 | 26.2 | -90.68 | 1,083.7 | 675.6 | 1,124.0 | 1,087.0 | 37.01 | 30.370 | | |
| 5,100.0 | 5,023.4 | 4,920.4 | 4,702.5 | 18.6 | 26.2 | -90.70 | 1,084.4 | 676.0 | 1,124.8 | 1,087.7 | 37.04 | 30.370 | | |
| 5,200.0 | 5,121.7 | 5,016.0 | 4,792.0 | 18.9 | 26.8 | -91.21 | 1,112.8 | 693.9 | 1,154.1 | 1,116.2 | 37.91 | 30.442 | | |
| 5,300.0 | 5,220.5 | 5,111.5 | 4,881.5 | 19.2 | 27.5 | -91.55 | 1,141.0 | 711.8 | 1,183.4 | 1,144.7 | 38.72 | 30.563 | | |
| 5,400.0 | 5,319.9 | 5,206.7 | 4,970.7 | 19.4 | 28.2 | -91.73 | 1,169.2 | 729.6 | 1,212.6 | 1,173.2 | 39.46 | 30.733 | | |
| 5,500.0 | 5,419.5 | 5,339.3 | 5,095.5 | 19.6 | 29.0 | -91.57 | 1,207.0 | 753.4 | 1,240.8 | 1,200.7 | 40.16 | 30.894 | | |
| 5,600.0 | 5,519.4 | 5,490.5 | 5,240.1 | 19.8 | 29.7 | -91.21 | 1,244.1 | 776.9 | 1,265.1 | 1,224.3 | 40.74 | 31.049 | | |
| 5,680.6 | 5,600.0 | 5,614.9 | 5,360.8 | 19.9 | 30.2 | -1.62 | 1,269.8 | 793.1 | 1,281.5 | 1,240.4 | 41.12 | 31.162 | | |
| 5,700.0 | 5,619.4 | 5,645.2 | 5,390.4 | 19.9 | 30.3 | -1.45 | 1,275.4 | 796.6 | 1,285.1 | 1,243.9 | 41.19 | 31.199 | | |
| 5,800.0 | 5,719.4 | 5,803.4 | 5,545.8 | 20.0 | 30.8 | -0.73 | 1,300.2 | 812.3 | 1,300.7 | 1,259.1 | 41.53 | 31.315 | | |
| 5,900.0 | 5,819.4 | 5,964.5 | 5,705.5 | 20.2 | 31.2 | -0.22 | 1,318.0 | 823.6 | 1,311.7 | 1,269.8 | 41.87 | 31.329 | | |
| 6,000.0 | 5,919.4 | 6,127.5 | 5,868.0 | 20.3 | 31.5 | 0.06 | 1,328.3 | 830.1 | 1,318.0 | 1,275.8 | 42.19 | 31.236 | | |
| 6,100.0 | 6,019.4 | 6,278.9 | 6,019.4 | 20.5 | 31.7 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,277.1 | 42.50 | 31.049 | | |
| 6,200.0 | 6,119.4 | 6,378.9 | 6,119.4 | 20.6 | 31.7 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,276.8 | 42.76 | 30.857 | | |

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

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| | | | | | | | | | | | | | | |
|---|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|---------------------------|--------|
| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
| Raindance FD East Row Pad Sec.30-T6N-R67W - Raindance FD 20-25D - Wellbore #1 - Plan #1 (10-1 | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Survey Program: 0-MWD | | | | | | | | | | | | | | |
| 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) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning | |
| 6,300.0 | 6,219.4 | 6,478.9 | 6,219.4 | 20.7 | 31.8 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,276.5 | 43.03 | 30.664 | | |
| 6,400.0 | 6,319.4 | 6,578.9 | 6,319.4 | 20.9 | 31.9 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,276.3 | 43.30 | 30.471 | | |
| 6,500.0 | 6,419.4 | 6,678.9 | 6,419.4 | 21.0 | 32.0 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,276.0 | 43.58 | 30.279 | | |
| 6,600.0 | 6,519.4 | 6,778.9 | 6,519.4 | 21.2 | 32.1 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,275.7 | 43.86 | 30.087 | | |
| 6,700.0 | 6,619.4 | 6,878.9 | 6,619.4 | 21.3 | 32.2 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,275.4 | 44.14 | 29.895 | | |
| 6,800.0 | 6,719.4 | 6,978.9 | 6,719.4 | 21.5 | 32.3 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,275.1 | 44.42 | 29.704 | | |
| 6,900.0 | 6,819.4 | 7,078.9 | 6,819.4 | 21.6 | 32.4 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,274.8 | 44.71 | 29.514 | | |
| 7,000.0 | 6,919.4 | 7,178.9 | 6,919.4 | 21.8 | 32.5 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,274.6 | 45.00 | 29.324 | | |
| 7,100.0 | 7,019.4 | 7,278.9 | 7,019.4 | 21.9 | 32.6 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,274.3 | 45.29 | 29.135 | | |
| 7,200.0 | 7,119.4 | 7,378.9 | 7,119.4 | 22.1 | 32.7 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,274.0 | 45.59 | 28.947 | | |
| 7,300.0 | 7,219.4 | 7,478.9 | 7,219.4 | 22.2 | 32.8 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,273.7 | 45.88 | 28.760 | | |
| 7,348.6 | 7,268.0 | 7,527.6 | 7,268.0 | 22.3 | 32.8 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,273.5 | 46.03 | 28.669 | | |
| 7,375.6 | 7,295.0 | 7,549.5 | 7,290.0 | 22.3 | 32.9 | 0.13 | 1,330.9 | 831.7 | 1,319.6 | 1,273.5 | 46.10 | 28.623 | | |

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| Offset Design Raindance FD East Row Pad Sec.30-T6N-R67W - Raindance FD 29-11D - Wellbore #1 - Plan #1 (10-1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------|--------|-----------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference | Offset | Semi Major Axis | 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 | 0.6 | 0.6 | 0.0 | 0.0 | 180.00 | 180.00 | -15.3 | 0.0 | 15.3 | 15.3 | 0.00 | N/A | |
| 100.0 | 100.0 | 100.6 | 100.6 | 0.1 | 0.1 | 180.00 | 180.00 | -15.3 | 0.0 | 15.3 | 15.1 | 0.23 | 67.688 | |
| 200.0 | 200.0 | 200.6 | 200.6 | 0.3 | 0.3 | 180.00 | 180.00 | -15.3 | 0.0 | 15.3 | 14.6 | 0.68 | 22.653 | |
| 300.0 | 300.0 | 300.6 | 300.6 | 0.6 | 0.6 | 180.00 | 180.00 | -15.3 | 0.0 | 15.3 | 14.2 | 1.13 | 13.603 | |
| 366.6 | 366.6 | 367.2 | 367.2 | 0.7 | 0.7 | 180.00 | 180.00 | -15.3 | 0.0 | 15.3 | 13.9 | 1.42 | 10.745 CC | |
| 400.0 | 400.0 | 400.6 | 400.6 | 0.8 | 0.8 | 180.00 | 180.00 | -15.3 | 0.0 | 15.3 | 13.7 | 1.57 | 9.720 | |
| 427.1 | 427.1 | 427.7 | 427.7 | 0.8 | 0.8 | 179.50 | 179.50 | -15.3 | 0.1 | 15.3 | 13.6 | 1.69 | 9.038 | |
| 500.0 | 500.0 | 500.6 | 500.5 | 1.0 | 1.0 | 173.42 | 173.42 | -15.3 | 1.8 | 15.4 | 13.4 | 2.01 | 7.656 ES | |
| 600.0 | 600.0 | 600.3 | 600.1 | 1.2 | 1.2 | 155.43 | 155.43 | -15.3 | 7.0 | 16.8 | 14.4 | 2.45 | 6.870 SF | |
| 700.0 | 700.0 | 699.4 | 698.9 | 1.5 | 1.4 | 135.69 | 135.69 | -15.7 | 15.3 | 22.0 | 19.1 | 2.90 | 7.602 | |
| 800.0 | 800.0 | 798.1 | 797.1 | 1.7 | 1.7 | 127.23 | 127.23 | -19.0 | 24.9 | 31.5 | 28.2 | 3.34 | 9.428 | |
| 900.0 | 900.0 | 896.3 | 894.5 | 1.9 | 1.9 | 125.58 | 125.58 | -25.4 | 35.5 | 44.1 | 40.3 | 3.83 | 11.518 | |
| 1,000.0 | 1,000.0 | 993.7 | 990.7 | 2.1 | 2.2 | 126.68 | 126.68 | -35.0 | 46.9 | 59.3 | 55.0 | 4.34 | 13.660 | |
| 1,100.0 | 1,100.0 | 1,090.4 | 1,085.8 | 2.3 | 2.6 | 40.15 | 40.15 | -47.5 | 59.2 | 76.1 | 71.4 | 4.63 | 16.438 | |
| 1,200.0 | 1,199.8 | 1,186.2 | 1,179.5 | 2.6 | 2.9 | 44.23 | 44.23 | -63.0 | 72.3 | 93.2 | 88.2 | 5.06 | 18.439 | |
| 1,300.0 | 1,299.5 | 1,281.1 | 1,271.5 | 2.8 | 3.3 | 48.93 | 48.93 | -81.4 | 86.1 | 111.5 | 106.0 | 5.51 | 20.234 | |
| 1,400.0 | 1,398.7 | 1,374.8 | 1,361.6 | 3.0 | 3.8 | 53.80 | 53.80 | -102.3 | 100.6 | 131.4 | 125.4 | 6.00 | 21.899 | |
| 1,500.0 | 1,497.5 | 1,467.0 | 1,449.6 | 3.3 | 4.3 | 58.57 | 58.57 | -125.7 | 115.7 | 153.3 | 146.8 | 6.54 | 23.459 | |
| 1,583.2 | 1,579.1 | 1,543.2 | 1,521.5 | 3.5 | 4.8 | 62.36 | 62.36 | -147.0 | 128.7 | 173.5 | 166.4 | 7.04 | 24.642 | |
| 1,600.0 | 1,595.6 | 1,559.3 | 1,536.7 | 3.6 | 4.9 | 63.20 | 63.20 | -151.7 | 131.5 | 177.7 | 170.6 | 7.15 | 24.848 | |
| 1,700.0 | 1,693.6 | 1,654.9 | 1,626.7 | 3.9 | 5.5 | 67.48 | 67.48 | -179.4 | 148.1 | 203.5 | 195.6 | 7.84 | 25.952 | |
| 1,800.0 | 1,791.5 | 1,750.5 | 1,716.7 | 4.3 | 6.1 | 70.79 | 70.79 | -207.0 | 164.7 | 230.1 | 221.5 | 8.57 | 26.848 | |
| 1,900.0 | 1,889.4 | 1,846.1 | 1,806.7 | 4.7 | 6.7 | 73.43 | 73.43 | -234.7 | 181.3 | 257.3 | 247.9 | 9.33 | 27.573 | |
| 2,000.0 | 1,987.4 | 1,941.8 | 1,896.7 | 5.1 | 7.4 | 75.56 | 75.56 | -262.3 | 197.9 | 284.9 | 274.7 | 10.12 | 28.161 | |
| 2,100.0 | 2,085.3 | 2,037.4 | 1,986.8 | 5.5 | 8.0 | 77.31 | 77.31 | -290.0 | 214.5 | 312.7 | 301.8 | 10.92 | 28.642 | |
| 2,200.0 | 2,183.2 | 2,133.0 | 2,076.8 | 5.9 | 8.7 | 78.78 | 78.78 | -317.6 | 231.1 | 340.9 | 329.1 | 11.74 | 29.039 | |
| 2,300.0 | 2,281.2 | 2,228.6 | 2,166.8 | 6.3 | 9.3 | 80.03 | 80.03 | -345.3 | 247.7 | 369.2 | 356.6 | 12.57 | 29.370 | |
| 2,400.0 | 2,379.1 | 2,324.3 | 2,256.8 | 6.7 | 10.0 | 81.10 | 81.10 | -373.0 | 264.3 | 397.6 | 384.2 | 13.41 | 29.649 | |
| 2,500.0 | 2,477.1 | 2,419.9 | 2,346.8 | 7.1 | 10.7 | 82.02 | 82.02 | -400.6 | 280.8 | 426.2 | 411.9 | 14.26 | 29.887 | |
| 2,600.0 | 2,575.0 | 2,515.5 | 2,436.9 | 7.6 | 11.3 | 82.83 | 82.83 | -428.3 | 297.4 | 454.8 | 439.7 | 15.11 | 30.090 | |
| 2,700.0 | 2,672.9 | 2,611.1 | 2,526.9 | 8.0 | 12.0 | 83.55 | 83.55 | -455.9 | 314.0 | 483.5 | 467.5 | 15.97 | 30.267 | |
| 2,800.0 | 2,770.9 | 2,706.7 | 2,616.9 | 8.4 | 12.6 | 84.18 | 84.18 | -483.6 | 330.6 | 512.3 | 495.4 | 16.84 | 30.421 | |
| 2,900.0 | 2,868.8 | 2,802.4 | 2,706.9 | 8.9 | 13.3 | 84.75 | 84.75 | -511.2 | 347.2 | 541.1 | 523.4 | 17.71 | 30.556 | |
| 3,000.0 | 2,966.7 | 2,898.0 | 2,796.9 | 9.3 | 14.0 | 85.26 | 85.26 | -538.9 | 363.8 | 570.0 | 551.4 | 18.58 | 30.675 | |
| 3,100.0 | 3,064.7 | 2,993.6 | 2,887.0 | 9.7 | 14.6 | 85.72 | 85.72 | -566.6 | 380.4 | 598.9 | 579.4 | 19.46 | 30.781 | |
| 3,200.0 | 3,162.6 | 3,089.2 | 2,977.0 | 10.2 | 15.3 | 86.14 | 86.14 | -594.2 | 397.0 | 627.8 | 607.5 | 20.33 | 30.876 | |
| 3,300.0 | 3,260.5 | 3,184.9 | 3,067.0 | 10.6 | 16.0 | 86.52 | 86.52 | -621.9 | 413.6 | 656.8 | 635.6 | 21.21 | 30.961 | |
| 3,400.0 | 3,358.5 | 3,280.5 | 3,157.0 | 11.0 | 16.7 | 86.87 | 86.87 | -649.5 | 430.2 | 685.8 | 663.7 | 22.10 | 31.038 | |
| 3,500.0 | 3,456.4 | 3,376.1 | 3,247.0 | 11.5 | 17.3 | 87.19 | 87.19 | -677.2 | 446.8 | 714.8 | 691.8 | 22.98 | 31.107 | |
| 3,600.0 | 3,554.3 | 3,471.7 | 3,337.1 | 11.9 | 18.0 | 87.49 | 87.49 | -704.8 | 463.4 | 743.8 | 720.0 | 23.86 | 31.171 | |
| 3,700.0 | 3,652.3 | 3,567.4 | 3,427.1 | 12.4 | 18.7 | 87.76 | 87.76 | -732.5 | 480.0 | 772.9 | 748.1 | 24.75 | 31.228 | |
| 3,800.0 | 3,750.2 | 3,663.0 | 3,517.1 | 12.8 | 19.3 | 88.02 | 88.02 | -760.2 | 496.6 | 802.0 | 776.3 | 25.64 | 31.281 | |
| 3,900.0 | 3,848.1 | 3,758.6 | 3,607.1 | 13.2 | 20.0 | 88.26 | 88.26 | -787.8 | 513.2 | 831.0 | 804.5 | 26.53 | 31.330 | |
| 4,000.0 | 3,946.1 | 3,854.2 | 3,697.2 | 13.7 | 20.7 | 88.48 | 88.48 | -815.5 | 529.8 | 860.1 | 832.7 | 27.41 | 31.375 | |
| 4,100.0 | 4,044.0 | 3,949.9 | 3,787.2 | 14.1 | 21.4 | 88.68 | 88.68 | -843.1 | 546.4 | 889.2 | 860.9 | 28.30 | 31.416 | |
| 4,200.0 | 4,142.0 | 4,045.5 | 3,877.2 | 14.6 | 22.0 | 88.87 | 88.87 | -870.8 | 562.9 | 918.3 | 889.1 | 29.20 | 31.455 | |
| 4,300.0 | 4,239.9 | 4,141.1 | 3,967.2 | 15.0 | 22.7 | 89.06 | 89.06 | -898.4 | 579.5 | 947.5 | 917.4 | 30.09 | 31.490 | |
| 4,400.0 | 4,337.8 | 4,236.7 | 4,057.2 | 15.5 | 23.4 | 89.23 | 89.23 | -926.1 | 596.1 | 976.6 | 945.6 | 30.98 | 31.524 | |
| 4,500.0 | 4,435.8 | 4,332.4 | 4,147.3 | 15.9 | 24.0 | 89.39 | 89.39 | -953.8 | 612.7 | 1,005.7 | 973.9 | 31.87 | 31.555 | |
| 4,600.0 | 4,533.7 | 4,428.0 | 4,237.3 | 16.4 | 24.7 | 89.54 | 89.54 | -981.4 | 629.3 | 1,034.9 | 1,002.1 | 32.77 | 31.584 | |
| 4,700.0 | 4,631.6 | 4,523.6 | 4,327.3 | 16.8 | 25.4 | 89.68 | 89.68 | -1,009.1 | 645.9 | 1,064.0 | 1,030.4 | 33.66 | 31.611 | |

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

| Raindance FD East Row Pad Sec.30-T6N-R67W - Raindance FD 29-11D - Wellbore #1 - Plan #1 (10-1) | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|--|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | | |
| 4,800.0 | 4,729.6 | 4,619.2 | 4,417.3 | 17.3 | 26.1 | 89.82 | -1,036.7 | 662.5 | 1,093.2 | 1,058.6 | 34.55 | 31.636 | | |
| 4,900.0 | 4,827.5 | 4,714.9 | 4,507.3 | 17.7 | 26.7 | 89.95 | -1,064.4 | 679.1 | 1,122.3 | 1,086.9 | 35.45 | 31.660 | | |
| 5,000.0 | 4,925.4 | 4,810.5 | 4,597.4 | 18.1 | 27.4 | 90.07 | -1,092.0 | 695.7 | 1,151.5 | 1,115.2 | 36.34 | 31.683 | | |
| 5,097.4 | 5,020.9 | 4,903.7 | 4,685.1 | 18.6 | 28.1 | 90.18 | -1,119.0 | 711.9 | 1,179.9 | 1,142.7 | 37.22 | 31.703 | | |
| 5,100.0 | 5,023.4 | 4,906.1 | 4,687.4 | 18.6 | 28.1 | 90.20 | -1,119.7 | 712.3 | 1,180.7 | 1,143.4 | 37.24 | 31.702 | | |
| 5,200.0 | 5,121.7 | 5,001.8 | 4,777.4 | 18.9 | 28.8 | 90.83 | -1,147.4 | 728.9 | 1,209.8 | 1,171.7 | 38.14 | 31.717 | | |
| 5,300.0 | 5,220.5 | 5,118.0 | 4,887.1 | 19.2 | 29.5 | 91.25 | -1,180.5 | 748.8 | 1,238.6 | 1,199.6 | 39.02 | 31.746 | | |
| 5,400.0 | 5,319.9 | 5,271.5 | 5,033.8 | 19.4 | 30.2 | 91.47 | -1,219.1 | 771.9 | 1,263.9 | 1,224.1 | 39.82 | 31.738 | | |
| 5,500.0 | 5,419.5 | 5,428.5 | 5,186.1 | 19.6 | 30.8 | 91.54 | -1,251.5 | 791.4 | 1,284.7 | 1,244.2 | 40.51 | 31.715 | | |
| 5,600.0 | 5,519.4 | 5,588.5 | 5,343.3 | 19.8 | 31.3 | 91.48 | -1,277.2 | 806.8 | 1,300.7 | 1,259.7 | 41.06 | 31.682 | | |
| 5,680.6 | 5,600.0 | 5,719.3 | 5,472.8 | 19.9 | 31.7 | -179.44 | -1,292.5 | 816.0 | 1,310.2 | 1,268.8 | 41.39 | 31.651 | | |
| 5,700.0 | 5,619.4 | 5,750.9 | 5,504.3 | 19.9 | 31.7 | -179.52 | -1,295.5 | 817.8 | 1,312.0 | 1,270.5 | 41.45 | 31.648 | | |
| 5,800.0 | 5,719.4 | 5,915.1 | 5,668.0 | 20.0 | 32.0 | -179.80 | -1,306.0 | 824.1 | 1,318.3 | 1,276.6 | 41.77 | 31.558 | | |
| 5,900.0 | 5,819.4 | 6,067.2 | 5,820.0 | 20.2 | 32.1 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,277.8 | 42.08 | 31.369 | | |
| 6,000.0 | 5,919.4 | 6,167.2 | 5,920.0 | 20.3 | 32.2 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,277.6 | 42.32 | 31.187 | | |
| 6,100.0 | 6,019.4 | 6,267.2 | 6,020.0 | 20.5 | 32.3 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,277.4 | 42.57 | 31.006 | | |
| 6,200.0 | 6,119.4 | 6,367.2 | 6,120.0 | 20.6 | 32.4 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,277.1 | 42.82 | 30.824 | | |
| 6,300.0 | 6,219.4 | 6,467.2 | 6,220.0 | 20.7 | 32.4 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,276.8 | 43.07 | 30.643 | | |
| 6,400.0 | 6,319.4 | 6,567.2 | 6,320.0 | 20.9 | 32.5 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,276.6 | 43.33 | 30.461 | | |
| 6,500.0 | 6,419.4 | 6,667.2 | 6,420.0 | 21.0 | 32.6 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,276.3 | 43.59 | 30.279 | | |
| 6,600.0 | 6,519.4 | 6,767.2 | 6,520.0 | 21.2 | 32.7 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,276.1 | 43.85 | 30.097 | | |
| 6,700.0 | 6,619.4 | 6,867.2 | 6,620.0 | 21.3 | 32.8 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,275.8 | 44.12 | 29.916 | | |
| 6,800.0 | 6,719.4 | 6,967.2 | 6,720.0 | 21.5 | 32.8 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,275.5 | 44.39 | 29.734 | | |
| 6,900.0 | 6,819.4 | 7,067.2 | 6,820.0 | 21.6 | 32.9 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,275.3 | 44.66 | 29.553 | | |
| 7,000.0 | 6,919.4 | 7,167.2 | 6,920.0 | 21.8 | 33.0 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,275.0 | 44.94 | 29.373 | | |
| 7,100.0 | 7,019.4 | 7,267.2 | 7,020.0 | 21.9 | 33.1 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,274.7 | 45.21 | 29.192 | | |
| 7,200.0 | 7,119.4 | 7,367.2 | 7,120.0 | 22.1 | 33.2 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,274.4 | 45.50 | 29.012 | | |
| 7,300.0 | 7,219.4 | 7,467.2 | 7,220.0 | 22.2 | 33.3 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,274.1 | 45.78 | 28.833 | | |
| 7,375.6 | 7,295.0 | 7,542.8 | 7,295.6 | 22.3 | 33.3 | -179.87 | -1,308.6 | 825.6 | 1,319.9 | 1,273.9 | 45.99 | 28.698 | | |

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| Offset Design Raindance FD West Row Pad Sec.30-T6N-R67W - Raindance FD 19-14D - Wellbore #1 - Plan #1 (10-1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------|--------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference | Offset | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +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 | -135.00 | -15.3 | -15.3 | 21.7 | | | | | |
| 100.0 | 100.0 | 99.5 | 99.5 | 0.1 | 0.1 | -135.00 | -15.3 | -15.3 | 21.6 | 21.4 | 0.22 | 96.538 | | |
| 200.0 | 200.0 | 199.5 | 199.5 | 0.3 | 0.3 | -135.00 | -15.3 | -15.3 | 21.6 | 21.0 | 0.67 | 32.153 CC, ES | | |
| 300.0 | 300.0 | 298.9 | 298.9 | 0.6 | 0.6 | -131.98 | -15.3 | -17.0 | 22.9 | 21.8 | 1.11 | 20.586 | | |
| 400.0 | 400.0 | 398.1 | 398.0 | 0.8 | 0.8 | -124.64 | -15.3 | -22.2 | 27.0 | 25.4 | 1.56 | 17.302 | | |
| 500.0 | 500.0 | 497.5 | 497.0 | 1.0 | 1.0 | -116.13 | -14.9 | -30.4 | 34.0 | 31.9 | 2.03 | 16.740 | | |
| 600.0 | 600.0 | 597.3 | 596.3 | 1.2 | 1.3 | -106.27 | -11.6 | -39.7 | 41.4 | 38.9 | 2.51 | 16.486 SF | | |
| 700.0 | 700.0 | 696.6 | 694.9 | 1.5 | 1.6 | -95.60 | -4.8 | -49.4 | 49.9 | 46.8 | 3.02 | 16.522 | | |
| 800.0 | 800.0 | 795.2 | 792.5 | 1.7 | 1.9 | -85.03 | 5.2 | -59.6 | 60.3 | 56.7 | 3.55 | 16.999 | | |
| 900.0 | 900.0 | 892.9 | 888.7 | 1.9 | 2.2 | -75.33 | 18.4 | -70.3 | 73.4 | 69.3 | 4.10 | 17.897 | | |
| 1,000.0 | 1,000.0 | 989.5 | 983.2 | 2.1 | 2.6 | -66.91 | 34.7 | -81.3 | 89.8 | 85.1 | 4.70 | 19.125 | | |
| 1,100.0 | 1,100.0 | 1,084.6 | 1,075.7 | 2.3 | 3.0 | -149.32 | 53.7 | -92.6 | 111.1 | 106.3 | 4.79 | 23.179 | | |
| 1,200.0 | 1,199.8 | 1,177.6 | 1,165.4 | 2.6 | 3.4 | -144.44 | 75.3 | -104.1 | 138.4 | 133.1 | 5.25 | 26.356 | | |
| 1,300.0 | 1,299.5 | 1,268.3 | 1,252.1 | 2.8 | 3.9 | -141.00 | 99.2 | -115.7 | 171.0 | 165.3 | 5.71 | 29.942 | | |
| 1,400.0 | 1,398.7 | 1,356.4 | 1,335.6 | 3.0 | 4.4 | -138.52 | 124.9 | -127.3 | 208.6 | 202.4 | 6.18 | 33.760 | | |
| 1,500.0 | 1,497.5 | 1,441.7 | 1,415.5 | 3.3 | 5.0 | -136.67 | 152.3 | -138.9 | 250.8 | 244.2 | 6.66 | 37.669 | | |
| 1,583.2 | 1,579.1 | 1,510.4 | 1,479.3 | 3.5 | 5.4 | -135.45 | 176.1 | -148.5 | 289.3 | 282.2 | 7.07 | 40.904 | | |
| 1,600.0 | 1,595.6 | 1,524.1 | 1,491.9 | 3.6 | 5.5 | -135.35 | 181.0 | -150.4 | 297.4 | 290.2 | 7.16 | 41.510 | | |
| 1,700.0 | 1,693.6 | 1,600.0 | 1,561.5 | 3.9 | 6.1 | -134.74 | 209.3 | -161.2 | 346.7 | 339.0 | 7.70 | 45.042 | | |
| 1,800.0 | 1,791.5 | 1,681.9 | 1,635.7 | 4.3 | 6.7 | -134.00 | 241.9 | -173.2 | 397.8 | 389.5 | 8.28 | 48.039 | | |
| 1,900.0 | 1,889.4 | 1,757.7 | 1,703.4 | 4.7 | 7.4 | -133.26 | 274.0 | -184.5 | 450.8 | 442.0 | 8.87 | 50.849 | | |
| 2,000.0 | 1,987.4 | 1,831.3 | 1,768.3 | 5.1 | 8.0 | -132.53 | 306.8 | -195.7 | 505.7 | 496.2 | 9.46 | 53.447 | | |
| 2,100.0 | 2,085.3 | 1,900.0 | 1,828.1 | 5.5 | 8.7 | -131.83 | 338.9 | -206.4 | 562.3 | 552.2 | 10.05 | 55.935 | | |
| 2,200.0 | 2,183.2 | 1,972.0 | 1,889.9 | 5.9 | 9.4 | -131.10 | 374.2 | -217.7 | 620.6 | 609.9 | 10.68 | 58.123 | | |
| 2,300.0 | 2,281.2 | 2,039.3 | 1,946.7 | 6.3 | 10.0 | -130.43 | 408.4 | -228.4 | 680.5 | 669.2 | 11.29 | 60.261 | | |
| 2,400.0 | 2,379.1 | 2,100.0 | 1,997.4 | 6.7 | 10.7 | -129.82 | 440.5 | -238.2 | 742.0 | 730.2 | 11.89 | 62.412 | | |
| 2,500.0 | 2,477.1 | 2,167.4 | 2,052.7 | 7.1 | 11.4 | -129.16 | 477.4 | -249.3 | 805.1 | 792.6 | 12.53 | 64.260 | | |
| 2,600.0 | 2,575.0 | 2,240.1 | 2,111.7 | 7.6 | 12.2 | -128.48 | 518.1 | -261.3 | 869.2 | 856.0 | 13.19 | 65.878 | | |
| 2,700.0 | 2,672.9 | 2,316.4 | 2,173.6 | 8.0 | 13.1 | -127.86 | 560.9 | -273.9 | 933.5 | 919.6 | 13.87 | 67.287 | | |
| 2,800.0 | 2,770.9 | 2,392.7 | 2,235.5 | 8.4 | 13.9 | -127.32 | 603.7 | -286.5 | 997.7 | 983.2 | 14.56 | 68.537 | | |
| 2,900.0 | 2,868.8 | 2,468.9 | 2,297.4 | 8.9 | 14.8 | -126.85 | 646.4 | -299.1 | 1,062.1 | 1,046.8 | 15.25 | 69.651 | | |
| 3,000.0 | 2,966.7 | 2,545.2 | 2,359.2 | 9.3 | 15.7 | -126.43 | 689.2 | -311.7 | 1,126.5 | 1,110.5 | 15.94 | 70.653 | | |
| 3,100.0 | 3,064.7 | 2,621.5 | 2,421.1 | 9.7 | 16.5 | -126.05 | 732.0 | -324.3 | 1,190.9 | 1,174.2 | 16.64 | 71.558 | | |
| 3,200.0 | 3,162.6 | 2,697.7 | 2,483.0 | 10.2 | 17.4 | -125.72 | 774.7 | -336.9 | 1,255.3 | 1,238.0 | 17.34 | 72.377 | | |
| 3,300.0 | 3,260.5 | 2,774.0 | 2,544.9 | 10.6 | 18.3 | -125.41 | 817.5 | -349.5 | 1,319.8 | 1,301.7 | 18.05 | 73.117 | | |
| 3,400.0 | 3,358.5 | 2,850.3 | 2,606.8 | 11.0 | 19.2 | -125.14 | 860.3 | -362.1 | 1,384.3 | 1,365.5 | 18.76 | 73.793 | | |
| 3,500.0 | 3,456.4 | 2,926.5 | 2,668.6 | 11.5 | 20.0 | -124.89 | 903.1 | -374.7 | 1,448.8 | 1,429.3 | 19.47 | 74.412 | | |
| 3,600.0 | 3,554.3 | 3,002.8 | 2,730.5 | 11.9 | 20.9 | -124.66 | 945.8 | -387.3 | 1,513.3 | 1,493.1 | 20.18 | 74.981 | | |
| 3,700.0 | 3,652.3 | 3,079.1 | 2,792.4 | 12.4 | 21.8 | -124.45 | 988.6 | -399.9 | 1,577.8 | 1,556.9 | 20.90 | 75.502 | | |
| 3,800.0 | 3,750.2 | 3,155.4 | 2,854.3 | 12.8 | 22.7 | -124.25 | 1,031.4 | -412.5 | 1,642.4 | 1,620.7 | 21.61 | 75.983 | | |
| 3,900.0 | 3,848.1 | 3,231.6 | 2,916.2 | 13.2 | 23.6 | -124.07 | 1,074.1 | -425.2 | 1,706.9 | 1,684.6 | 22.33 | 76.428 | | |
| 4,000.0 | 3,946.1 | 3,307.9 | 2,978.0 | 13.7 | 24.4 | -123.90 | 1,116.9 | -437.8 | 1,771.5 | 1,748.4 | 23.05 | 76.842 | | |
| 4,100.0 | 4,044.0 | 3,384.2 | 3,039.9 | 14.1 | 25.3 | -123.75 | 1,159.7 | -450.4 | 1,836.0 | 1,812.3 | 23.78 | 77.225 | | |
| 4,200.0 | 4,142.0 | 3,460.4 | 3,101.8 | 14.6 | 26.2 | -123.60 | 1,202.4 | -463.0 | 1,900.6 | 1,876.1 | 24.50 | 77.582 | | |
| 4,300.0 | 4,239.9 | 3,536.7 | 3,163.7 | 15.0 | 27.1 | -123.47 | 1,245.2 | -475.6 | 1,965.2 | 1,940.0 | 25.22 | 77.915 | | |
| 4,400.0 | 4,337.8 | 3,613.0 | 3,225.5 | 15.5 | 28.0 | -123.34 | 1,288.0 | -488.2 | 2,029.8 | 2,003.8 | 25.95 | 78.227 | | |
| 4,500.0 | 4,435.8 | 3,689.3 | 3,287.4 | 15.9 | 28.9 | -123.22 | 1,330.8 | -500.8 | 2,094.4 | 2,067.7 | 26.67 | 78.519 | | |
| 4,600.0 | 4,533.7 | 3,765.5 | 3,349.3 | 16.4 | 29.7 | -123.11 | 1,373.5 | -513.4 | 2,159.0 | 2,131.6 | 27.40 | 78.792 | | |
| 4,700.0 | 4,631.6 | 3,841.8 | 3,411.2 | 16.8 | 30.6 | -123.01 | 1,416.3 | -526.0 | 2,223.6 | 2,195.4 | 28.13 | 79.049 | | |
| 4,800.0 | 4,729.6 | 3,918.1 | 3,473.1 | 17.3 | 31.5 | -122.91 | 1,459.1 | -538.6 | 2,288.2 | 2,259.3 | 28.86 | 79.292 | | |
| 4,900.0 | 4,827.5 | 3,994.3 | 3,534.9 | 17.7 | 32.4 | -122.81 | 1,501.8 | -551.2 | 2,352.8 | 2,323.2 | 29.59 | 79.520 | | |

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

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| Offset Design Raindance FD West Row Pad Sec.30-T6N-R67W - Raindance FD 19-14D - Wellbore #1 - Plan #1 (10-1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------|--------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference | Offset | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning | |
| 5,000.0 | 4,925.4 | 4,070.6 | 3,596.8 | 18.1 | 33.3 | -122.72 | 1,544.6 | -563.8 | 2,417.4 | 2,387.1 | 30.32 | 79.735 | | |
| 5,097.4 | 5,020.9 | 4,144.9 | 3,657.1 | 18.6 | 34.1 | -122.64 | 1,586.3 | -576.1 | 2,480.3 | 2,449.3 | 31.03 | 79.934 | | |
| 5,100.0 | 5,023.4 | 4,146.9 | 3,658.7 | 18.6 | 34.2 | -122.68 | 1,587.4 | -576.4 | 2,482.0 | 2,450.9 | 31.06 | 79.914 | | |
| 5,200.0 | 5,121.7 | 4,223.7 | 3,721.0 | 18.9 | 35.1 | -123.94 | 1,630.5 | -589.1 | 2,545.9 | 2,513.7 | 32.12 | 79.255 | | |
| 5,300.0 | 5,220.5 | 4,301.6 | 3,784.2 | 19.2 | 36.0 | -125.05 | 1,674.1 | -602.0 | 2,608.2 | 2,575.0 | 33.17 | 78.631 | | |
| 5,400.0 | 5,319.9 | 4,380.3 | 3,848.1 | 19.4 | 36.9 | -126.03 | 1,718.3 | -615.0 | 2,669.0 | 2,634.8 | 34.19 | 78.069 | | |
| 5,500.0 | 5,419.5 | 4,459.9 | 3,912.7 | 19.6 | 37.8 | -126.89 | 1,762.9 | -628.1 | 2,728.2 | 2,693.1 | 35.17 | 77.581 | | |
| 5,600.0 | 5,519.4 | 4,540.3 | 3,977.9 | 19.8 | 38.7 | -127.63 | 1,808.0 | -641.4 | 2,785.8 | 2,749.7 | 36.10 | 77.177 | | |
| 5,680.6 | 5,600.0 | 4,605.5 | 4,030.8 | 19.9 | 39.5 | -38.93 | 1,844.5 | -652.2 | 2,831.0 | 2,794.2 | 36.81 | 76.913 | | |
| 5,700.0 | 5,619.4 | 4,621.2 | 4,043.5 | 19.9 | 39.7 | -38.85 | 1,853.4 | -654.8 | 2,841.8 | 2,804.9 | 36.90 | 77.016 | | |
| 5,800.0 | 5,719.4 | 4,702.3 | 4,109.4 | 20.0 | 40.6 | -38.42 | 1,898.9 | -668.2 | 2,897.3 | 2,859.9 | 37.37 | 77.527 | | |
| 5,900.0 | 5,819.4 | 4,783.5 | 4,175.2 | 20.2 | 41.6 | -38.00 | 1,944.4 | -681.6 | 2,952.9 | 2,915.0 | 37.84 | 78.032 | | |
| 6,000.0 | 5,919.4 | 4,864.6 | 4,241.0 | 20.3 | 42.5 | -37.60 | 1,989.8 | -695.0 | 3,008.6 | 2,970.3 | 38.31 | 78.531 | | |
| 6,100.0 | 6,019.4 | 4,945.7 | 4,306.8 | 20.5 | 43.5 | -37.21 | 2,035.3 | -708.4 | 3,064.4 | 3,025.6 | 38.78 | 79.022 | | |
| 6,200.0 | 6,119.4 | 5,026.9 | 4,372.6 | 20.6 | 44.4 | -36.84 | 2,080.8 | -721.8 | 3,120.3 | 3,081.1 | 39.25 | 79.506 | | |
| 6,300.0 | 6,219.4 | 5,108.0 | 4,438.5 | 20.7 | 45.3 | -36.48 | 2,126.3 | -735.2 | 3,176.3 | 3,136.6 | 39.71 | 79.983 | | |
| 6,400.0 | 6,319.4 | 5,189.1 | 4,504.3 | 20.9 | 46.3 | -36.13 | 2,171.8 | -748.6 | 3,232.4 | 3,192.2 | 40.18 | 80.452 | | |
| 6,500.0 | 6,419.4 | 5,270.3 | 4,570.1 | 21.0 | 47.2 | -35.79 | 2,217.3 | -762.1 | 3,288.6 | 3,248.0 | 40.64 | 80.914 | | |
| 6,600.0 | 6,519.4 | 5,351.4 | 4,635.9 | 21.2 | 48.2 | -35.47 | 2,262.8 | -775.5 | 3,344.9 | 3,303.8 | 41.11 | 81.368 | | |
| 6,700.0 | 6,619.4 | 5,432.5 | 4,701.8 | 21.3 | 49.1 | -35.15 | 2,308.3 | -788.9 | 3,401.2 | 3,359.6 | 41.57 | 81.814 | | |
| 6,800.0 | 6,719.4 | 5,513.6 | 4,767.6 | 21.5 | 50.1 | -34.85 | 2,353.8 | -802.3 | 3,457.6 | 3,415.6 | 42.04 | 82.252 | | |
| 6,900.0 | 6,819.4 | 5,594.8 | 4,833.4 | 21.6 | 51.0 | -34.55 | 2,399.3 | -815.7 | 3,514.1 | 3,471.6 | 42.50 | 82.682 | | |
| 7,000.0 | 6,919.4 | 5,675.9 | 4,899.2 | 21.8 | 52.0 | -34.26 | 2,444.8 | -829.1 | 3,570.6 | 3,527.6 | 42.97 | 83.104 | | |
| 7,100.0 | 7,019.4 | 5,757.0 | 4,965.0 | 21.9 | 52.9 | -33.99 | 2,490.3 | -842.5 | 3,627.2 | 3,583.8 | 43.43 | 83.518 | | |
| 7,200.0 | 7,119.4 | 5,838.2 | 5,030.9 | 22.1 | 53.8 | -33.71 | 2,535.8 | -855.9 | 3,683.8 | 3,639.9 | 43.89 | 83.925 | | |
| 7,300.0 | 7,219.4 | 5,919.3 | 5,096.7 | 22.2 | 54.8 | -33.45 | 2,581.3 | -869.3 | 3,740.5 | 3,696.2 | 44.36 | 84.323 | | |
| 7,375.6 | 7,295.0 | 8,238.7 | 7,249.0 | 22.3 | 67.1 | -30.30 | 3,257.7 | -1,068.7 | 3,760.5 | 3,710.6 | 49.87 | 75.399 | | |

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| Offset Design Raindance FD West Row Pad Sec.30-T6N-R67W - Raindance FD 20-33D - Wellbore #1 - Plan #1 (10-1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| 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 | -43.41 | 15.3 | -14.5 | 21.1 | | | | | |
| 100.0 | 100.0 | 99.3 | 99.3 | 0.1 | 0.1 | -43.41 | 15.3 | -14.5 | 21.1 | 20.8 | 0.22 | 94.010 | | |
| 200.0 | 200.0 | 199.3 | 199.3 | 0.3 | 0.3 | -43.41 | 15.3 | -14.5 | 21.1 | 20.4 | 0.67 | 31.300 | | |
| 300.0 | 300.0 | 299.3 | 299.3 | 0.6 | 0.6 | -43.41 | 15.3 | -14.5 | 21.1 | 19.9 | 1.12 | 18.763 | | |
| 400.0 | 400.0 | 399.3 | 399.3 | 0.8 | 0.8 | -43.41 | 15.3 | -14.5 | 21.1 | 19.5 | 1.57 | 13.396 CC, ES | | |
| 500.0 | 500.0 | 498.8 | 498.8 | 1.0 | 1.0 | -40.09 | 17.0 | -14.3 | 22.2 | 20.2 | 2.02 | 10.997 | | |
| 600.0 | 600.0 | 598.0 | 597.9 | 1.2 | 1.2 | -32.00 | 22.1 | -13.8 | 26.1 | 23.6 | 2.47 | 10.560 SF | | |
| 700.0 | 700.0 | 696.8 | 696.3 | 1.5 | 1.5 | -23.02 | 30.6 | -13.0 | 33.4 | 30.4 | 2.93 | 11.380 | | |
| 800.0 | 800.0 | 794.9 | 793.6 | 1.7 | 1.7 | -15.65 | 42.3 | -11.9 | 44.3 | 40.9 | 3.41 | 12.986 | | |
| 900.0 | 900.0 | 892.0 | 889.6 | 1.9 | 2.0 | -10.32 | 57.2 | -10.4 | 59.0 | 55.1 | 3.93 | 15.016 | | |
| 1,000.0 | 1,000.0 | 988.0 | 983.9 | 2.1 | 2.4 | -6.61 | 75.2 | -8.7 | 77.2 | 72.7 | 4.48 | 17.223 | | |
| 1,100.0 | 1,100.0 | 1,082.7 | 1,076.3 | 2.3 | 2.7 | -93.78 | 95.9 | -6.7 | 98.9 | 94.2 | 4.79 | 20.670 | | |
| 1,200.0 | 1,199.8 | 1,176.0 | 1,166.5 | 2.6 | 3.1 | -93.60 | 119.3 | -4.5 | 124.1 | 118.8 | 5.24 | 23.659 | | |
| 1,300.0 | 1,299.5 | 1,267.4 | 1,254.3 | 2.8 | 3.6 | -94.32 | 145.0 | -2.0 | 152.5 | 146.8 | 5.72 | 26.649 | | |
| 1,400.0 | 1,398.7 | 1,357.0 | 1,339.3 | 3.0 | 4.1 | -95.42 | 172.9 | 0.7 | 184.3 | 178.0 | 6.23 | 29.572 | | |
| 1,500.0 | 1,497.5 | 1,444.4 | 1,421.4 | 3.3 | 4.6 | -96.62 | 202.7 | 3.6 | 219.4 | 212.6 | 6.78 | 32.367 | | |
| 1,583.2 | 1,579.1 | 1,515.4 | 1,487.4 | 3.5 | 5.1 | -97.60 | 228.7 | 6.1 | 251.1 | 243.8 | 7.27 | 34.553 | | |
| 1,600.0 | 1,595.6 | 1,529.6 | 1,500.6 | 3.6 | 5.2 | -97.93 | 234.1 | 6.6 | 257.8 | 250.4 | 7.37 | 34.966 | | |
| 1,700.0 | 1,693.6 | 1,613.4 | 1,577.4 | 3.9 | 5.8 | -99.47 | 267.3 | 9.8 | 299.1 | 291.1 | 8.01 | 37.330 | | |
| 1,800.0 | 1,791.5 | 1,703.7 | 1,659.8 | 4.3 | 6.5 | -100.67 | 304.0 | 13.3 | 341.7 | 333.0 | 8.70 | 39.258 | | |
| 1,900.0 | 1,889.4 | 1,794.0 | 1,742.2 | 4.7 | 7.2 | -101.61 | 340.7 | 16.9 | 384.3 | 374.9 | 9.41 | 40.839 | | |
| 2,000.0 | 1,987.4 | 1,884.3 | 1,824.7 | 5.1 | 7.8 | -102.36 | 377.4 | 20.4 | 427.0 | 416.9 | 10.14 | 42.123 | | |
| 2,100.0 | 2,085.3 | 1,974.5 | 1,907.1 | 5.5 | 8.5 | -102.98 | 414.1 | 23.9 | 469.8 | 458.9 | 10.88 | 43.178 | | |
| 2,200.0 | 2,183.2 | 2,064.8 | 1,989.5 | 5.9 | 9.2 | -103.49 | 450.9 | 27.5 | 512.6 | 500.9 | 11.64 | 44.053 | | |
| 2,300.0 | 2,281.2 | 2,155.1 | 2,071.9 | 6.3 | 9.9 | -103.93 | 487.6 | 31.0 | 555.4 | 543.0 | 12.40 | 44.787 | | |
| 2,400.0 | 2,379.1 | 2,245.4 | 2,154.3 | 6.7 | 10.6 | -104.30 | 524.3 | 34.6 | 598.2 | 585.1 | 13.17 | 45.408 | | |
| 2,500.0 | 2,477.1 | 2,335.7 | 2,236.7 | 7.1 | 11.3 | -104.62 | 561.0 | 38.1 | 641.1 | 627.2 | 13.96 | 45.939 | | |
| 2,600.0 | 2,575.0 | 2,426.0 | 2,319.1 | 7.6 | 12.0 | -104.90 | 597.7 | 41.6 | 684.0 | 669.2 | 14.74 | 46.395 | | |
| 2,700.0 | 2,672.9 | 2,516.3 | 2,401.6 | 8.0 | 12.7 | -105.15 | 634.5 | 45.2 | 726.9 | 711.3 | 15.53 | 46.790 | | |
| 2,800.0 | 2,770.9 | 2,606.6 | 2,484.0 | 8.4 | 13.5 | -105.37 | 671.2 | 48.7 | 769.8 | 753.4 | 16.33 | 47.136 | | |
| 2,900.0 | 2,868.8 | 2,696.9 | 2,566.4 | 8.9 | 14.2 | -105.57 | 707.9 | 52.2 | 812.7 | 795.6 | 17.13 | 47.439 | | |
| 3,000.0 | 2,966.7 | 2,787.2 | 2,648.8 | 9.3 | 14.9 | -105.75 | 744.6 | 55.8 | 855.6 | 837.7 | 17.93 | 47.707 | | |
| 3,100.0 | 3,064.7 | 2,877.5 | 2,731.2 | 9.7 | 15.6 | -105.91 | 781.3 | 59.3 | 898.5 | 879.8 | 18.74 | 47.945 | | |
| 3,200.0 | 3,162.6 | 2,967.8 | 2,813.6 | 10.2 | 16.3 | -106.05 | 818.1 | 62.9 | 941.5 | 921.9 | 19.55 | 48.158 | | |
| 3,300.0 | 3,260.5 | 3,058.1 | 2,896.0 | 10.6 | 17.0 | -106.19 | 854.8 | 66.4 | 984.4 | 964.0 | 20.36 | 48.349 | | |
| 3,400.0 | 3,358.5 | 3,148.4 | 2,978.4 | 11.0 | 17.7 | -106.31 | 891.5 | 69.9 | 1,027.3 | 1,006.1 | 21.17 | 48.521 | | |
| 3,500.0 | 3,456.4 | 3,238.6 | 3,060.9 | 11.5 | 18.4 | -106.42 | 928.2 | 73.5 | 1,070.3 | 1,048.3 | 21.99 | 48.676 | | |
| 3,600.0 | 3,554.3 | 3,328.9 | 3,143.3 | 11.9 | 19.1 | -106.53 | 964.9 | 77.0 | 1,113.2 | 1,090.4 | 22.80 | 48.818 | | |
| 3,700.0 | 3,652.3 | 3,419.2 | 3,225.7 | 12.4 | 19.8 | -106.62 | 1,001.7 | 80.5 | 1,156.1 | 1,132.5 | 23.62 | 48.947 | | |
| 3,800.0 | 3,750.2 | 3,509.5 | 3,308.1 | 12.8 | 20.6 | -106.71 | 1,038.4 | 84.1 | 1,199.1 | 1,174.7 | 24.44 | 49.064 | | |
| 3,900.0 | 3,848.1 | 3,599.8 | 3,390.5 | 13.2 | 21.3 | -106.79 | 1,075.1 | 87.6 | 1,242.0 | 1,216.8 | 25.26 | 49.172 | | |
| 4,000.0 | 3,946.1 | 3,690.1 | 3,472.9 | 13.7 | 22.0 | -106.87 | 1,111.8 | 91.1 | 1,285.0 | 1,258.9 | 26.08 | 49.272 | | |
| 4,100.0 | 4,044.0 | 3,780.4 | 3,555.3 | 14.1 | 22.7 | -106.94 | 1,148.5 | 94.7 | 1,327.9 | 1,301.0 | 26.90 | 49.363 | | |
| 4,200.0 | 4,142.0 | 3,870.7 | 3,637.8 | 14.6 | 23.4 | -107.01 | 1,185.3 | 98.2 | 1,370.9 | 1,343.2 | 27.72 | 49.448 | | |
| 4,300.0 | 4,239.9 | 3,961.0 | 3,720.2 | 15.0 | 24.1 | -107.08 | 1,222.0 | 101.8 | 1,413.9 | 1,385.3 | 28.55 | 49.526 | | |
| 4,400.0 | 4,337.8 | 4,051.3 | 3,802.6 | 15.5 | 24.8 | -107.14 | 1,258.7 | 105.3 | 1,456.8 | 1,427.4 | 29.37 | 49.599 | | |
| 4,500.0 | 4,435.8 | 4,141.6 | 3,885.0 | 15.9 | 25.6 | -107.19 | 1,295.4 | 108.8 | 1,499.8 | 1,469.6 | 30.20 | 49.666 | | |
| 4,600.0 | 4,533.7 | 4,231.9 | 3,967.4 | 16.4 | 26.3 | -107.25 | 1,332.1 | 112.4 | 1,542.7 | 1,511.7 | 31.02 | 49.730 | | |
| 4,700.0 | 4,631.6 | 4,322.2 | 4,049.8 | 16.8 | 27.0 | -107.30 | 1,368.9 | 115.9 | 1,585.7 | 1,553.8 | 31.85 | 49.789 | | |
| 4,800.0 | 4,729.6 | 4,412.4 | 4,132.2 | 17.3 | 27.7 | -107.34 | 1,405.6 | 119.4 | 1,628.7 | 1,596.0 | 32.68 | 49.844 | | |
| 4,900.0 | 4,827.5 | 4,502.7 | 4,214.6 | 17.7 | 28.4 | -107.39 | 1,442.3 | 123.0 | 1,671.6 | 1,638.1 | 33.50 | 49.895 | | |

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

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| Offset Design Raindance FD West Row Pad Sec.30-T6N-R67W - Raindance FD 20-33D - Wellbore #1 - Plan #1 (10-1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------------|---------------------------|---------------------------|-----------|--------|-----------------------------|---|---|----------------------------|-----------------------------|-------------------------------|----------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference | Offset | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning | |
| 5,000.0 | 4,925.4 | 4,593.0 | 4,297.1 | 18.1 | 29.1 | -107.43 | 1,479.0 | 126.5 | 1,714.6 | 1,680.3 | 34.33 | 49.944 | | |
| 5,097.4 | 5,020.9 | 4,681.0 | 4,377.4 | 18.6 | 29.8 | -107.47 | 1,514.8 | 130.0 | 1,756.4 | 1,721.3 | 35.14 | 49.988 | | |
| 5,100.0 | 5,023.4 | 4,683.3 | 4,379.5 | 18.6 | 29.8 | -107.50 | 1,515.7 | 130.1 | 1,757.5 | 1,722.4 | 35.16 | 49.982 | | |
| 5,200.0 | 5,121.7 | 4,773.9 | 4,462.1 | 18.9 | 30.6 | -108.37 | 1,552.6 | 133.6 | 1,800.0 | 1,763.9 | 36.11 | 49.841 | | |
| 5,300.0 | 5,220.5 | 4,864.8 | 4,545.1 | 19.2 | 31.3 | -109.10 | 1,589.5 | 137.2 | 1,841.5 | 1,804.5 | 37.02 | 49.748 | | |
| 5,400.0 | 5,319.9 | 4,955.9 | 4,628.3 | 19.4 | 32.0 | -109.69 | 1,626.6 | 140.7 | 1,881.9 | 1,844.0 | 37.86 | 49.706 | | |
| 5,500.0 | 5,419.5 | 5,047.3 | 4,711.7 | 19.6 | 32.7 | -110.16 | 1,663.7 | 144.3 | 1,921.3 | 1,882.7 | 38.65 | 49.716 | | |
| 5,600.0 | 5,519.4 | 5,138.7 | 4,795.1 | 19.8 | 33.5 | -110.52 | 1,700.9 | 147.9 | 1,959.7 | 1,920.3 | 39.37 | 49.777 | | |
| 5,680.6 | 5,600.0 | 5,273.1 | 4,918.4 | 19.9 | 34.3 | -21.19 | 1,754.1 | 153.0 | 1,989.3 | 1,949.3 | 40.03 | 49.696 | | |
| 5,700.0 | 5,619.4 | 5,321.9 | 4,963.8 | 19.9 | 34.6 | -20.94 | 1,772.1 | 154.7 | 1,995.8 | 1,955.6 | 40.17 | 49.685 | | |
| 5,800.0 | 5,719.4 | 5,583.6 | 5,211.7 | 20.0 | 35.9 | -19.86 | 1,855.0 | 162.7 | 2,024.8 | 1,983.9 | 40.89 | 49.523 | | |
| 5,900.0 | 5,819.4 | 5,859.6 | 5,480.3 | 20.2 | 37.0 | -19.09 | 1,917.8 | 168.8 | 2,045.7 | 2,004.1 | 41.55 | 49.228 | | |
| 6,000.0 | 5,919.4 | 6,145.7 | 5,763.8 | 20.3 | 37.7 | -18.65 | 1,955.4 | 172.4 | 2,057.7 | 2,015.6 | 42.14 | 48.830 | | |
| 6,100.0 | 6,019.4 | 6,400.9 | 6,018.7 | 20.5 | 38.0 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,018.2 | 42.59 | 48.392 | | |
| 6,200.0 | 6,119.4 | 6,500.9 | 6,118.7 | 20.6 | 38.1 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,017.9 | 42.85 | 48.098 | | |
| 6,300.0 | 6,219.4 | 6,600.9 | 6,218.7 | 20.7 | 38.1 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,017.7 | 43.11 | 47.804 | | |
| 6,400.0 | 6,319.4 | 6,700.9 | 6,318.7 | 20.9 | 38.2 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,017.4 | 43.38 | 47.510 | | |
| 6,500.0 | 6,419.4 | 6,800.9 | 6,418.7 | 21.0 | 38.3 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,017.1 | 43.65 | 47.216 | | |
| 6,600.0 | 6,519.4 | 6,900.9 | 6,518.7 | 21.2 | 38.4 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,016.9 | 43.92 | 46.923 | | |
| 6,700.0 | 6,619.4 | 7,000.9 | 6,618.7 | 21.3 | 38.4 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,016.6 | 44.19 | 46.631 | | |
| 6,800.0 | 6,719.4 | 7,100.9 | 6,718.7 | 21.5 | 38.5 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,016.3 | 44.47 | 46.339 | | |
| 6,900.0 | 6,819.4 | 7,200.9 | 6,818.7 | 21.6 | 38.6 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,016.0 | 44.75 | 46.048 | | |
| 7,000.0 | 6,919.4 | 7,300.9 | 6,918.7 | 21.8 | 38.7 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,015.7 | 45.04 | 45.758 | | |
| 7,100.0 | 7,019.4 | 7,400.9 | 7,018.7 | 21.9 | 38.8 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,015.5 | 45.32 | 45.469 | | |
| 7,200.0 | 7,119.4 | 7,500.9 | 7,118.7 | 22.1 | 38.8 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,015.2 | 45.61 | 45.181 | | |
| 7,300.0 | 7,219.4 | 7,600.9 | 7,218.7 | 22.2 | 38.9 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,014.9 | 45.90 | 44.894 | | |
| 7,346.4 | 7,265.8 | 7,647.3 | 7,265.1 | 22.3 | 39.0 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,014.7 | 46.04 | 44.761 | | |
| 7,375.6 | 7,295.0 | 7,666.2 | 7,284.0 | 22.3 | 39.0 | -18.54 | 1,965.1 | 173.3 | 2,060.8 | 2,014.7 | 46.11 | 44.692 | | |

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|-----------------------|---------------------|---------------------|---------------------|-----------|--------|-----------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|-------------------------|--------------------|------------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference | Offset | Semi Major Axis | 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 | 0.1 | 0.1 | 0.0 | 0.0 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 14.5 | 0.00 | N/A | |
| 100.0 | 100.0 | 100.1 | 100.1 | 0.1 | 0.1 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 14.2 | 0.22 | 64.312 | |
| 200.0 | 200.0 | 200.1 | 200.1 | 0.3 | 0.3 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 13.8 | 0.67 | 21.452 | |
| 300.0 | 300.0 | 300.1 | 300.1 | 0.6 | 0.6 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 13.3 | 1.12 | 12.873 | |
| 400.0 | 400.0 | 400.1 | 400.1 | 0.8 | 0.8 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 12.9 | 1.57 | 9.195 | |
| 500.0 | 500.0 | 500.1 | 500.1 | 1.0 | 1.0 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 12.4 | 2.02 | 7.152 | |
| 600.0 | 600.0 | 600.1 | 600.1 | 1.2 | 1.2 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 12.0 | 2.47 | 5.852 | |
| 700.0 | 700.0 | 700.1 | 700.1 | 1.5 | 1.5 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 11.5 | 2.92 | 4.952 | |
| 800.0 | 800.0 | 800.1 | 800.1 | 1.7 | 1.7 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 11.1 | 3.37 | 4.291 | |
| 900.0 | 900.0 | 900.1 | 900.1 | 1.9 | 1.9 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 10.6 | 3.82 | 3.787 | |
| 1,000.0 | 1,000.0 | 1,000.1 | 1,000.1 | 2.1 | 2.1 | -90.03 | -90.03 | 0.0 | -14.5 | 14.5 | 10.2 | 4.27 | 3.388 | CC, ES, SF |
| 1,100.0 | 1,100.0 | 1,100.1 | 1,100.1 | 2.3 | 2.4 | -179.33 | -179.33 | 0.0 | -14.5 | 16.2 | 11.5 | 4.71 | 3.446 | |
| 1,200.0 | 1,199.8 | 1,199.9 | 1,199.9 | 2.6 | 2.6 | -179.49 | -179.49 | 0.0 | -14.5 | 21.4 | 16.3 | 5.13 | 4.183 | |
| 1,300.0 | 1,299.5 | 1,299.6 | 1,299.6 | 2.8 | 2.8 | -179.64 | -179.64 | 0.0 | -14.5 | 30.2 | 24.6 | 5.55 | 5.438 | |
| 1,400.0 | 1,398.7 | 1,398.8 | 1,398.8 | 3.0 | 3.0 | -179.74 | -179.74 | 0.0 | -14.5 | 42.3 | 36.4 | 5.96 | 7.100 | |
| 1,500.0 | 1,497.5 | 1,497.6 | 1,497.6 | 3.3 | 3.3 | -179.81 | -179.81 | 0.0 | -14.5 | 58.0 | 51.6 | 6.38 | 9.091 | |
| 1,583.2 | 1,579.1 | 1,579.8 | 1,579.8 | 3.5 | 3.4 | -179.00 | -179.00 | 1.1 | -14.2 | 73.3 | 66.6 | 6.72 | 10.909 | |
| 1,600.0 | 1,595.6 | 1,596.4 | 1,596.4 | 3.6 | 3.5 | -178.67 | -178.67 | 1.6 | -14.0 | 76.6 | 69.8 | 6.79 | 11.272 | |
| 1,700.0 | 1,693.6 | 1,695.2 | 1,695.1 | 3.9 | 3.7 | -175.99 | -175.99 | 6.4 | -12.7 | 95.6 | 88.3 | 7.24 | 13.209 | |
| 1,800.0 | 1,791.5 | 1,794.0 | 1,793.5 | 4.3 | 3.9 | -172.50 | -172.50 | 14.5 | -10.4 | 114.1 | 106.4 | 7.69 | 14.837 | |
| 1,900.0 | 1,889.4 | 1,892.5 | 1,891.2 | 4.7 | 4.2 | -168.53 | -168.53 | 25.8 | -7.2 | 132.6 | 124.4 | 8.17 | 16.227 | |
| 2,000.0 | 1,987.4 | 1,990.4 | 1,988.0 | 5.1 | 4.4 | -164.26 | -164.26 | 40.3 | -3.1 | 151.4 | 142.7 | 8.69 | 17.429 | |
| 2,100.0 | 2,085.3 | 2,087.7 | 2,083.7 | 5.5 | 4.7 | -159.96 | -159.96 | 57.4 | 1.8 | 171.0 | 161.7 | 9.25 | 18.488 | |
| 2,200.0 | 2,183.2 | 2,185.0 | 2,179.2 | 5.9 | 5.0 | -156.41 | -156.41 | 75.0 | 6.8 | 191.4 | 181.5 | 9.85 | 19.439 | |
| 2,300.0 | 2,281.2 | 2,282.3 | 2,274.8 | 6.3 | 5.3 | -153.55 | -153.55 | 92.6 | 11.7 | 212.3 | 201.9 | 10.47 | 20.289 | |
| 2,400.0 | 2,379.1 | 2,379.5 | 2,370.3 | 6.7 | 5.6 | -151.20 | -151.20 | 110.2 | 16.7 | 233.7 | 222.6 | 11.10 | 21.049 | |
| 2,500.0 | 2,477.1 | 2,476.8 | 2,465.9 | 7.1 | 5.9 | -149.24 | -149.24 | 127.8 | 21.7 | 255.4 | 243.7 | 11.76 | 21.725 | |
| 2,600.0 | 2,575.0 | 2,574.1 | 2,561.4 | 7.6 | 6.2 | -147.59 | -147.59 | 145.4 | 26.7 | 277.4 | 264.9 | 12.42 | 22.329 | |
| 2,700.0 | 2,672.9 | 2,671.4 | 2,656.9 | 8.0 | 6.6 | -146.18 | -146.18 | 163.0 | 31.7 | 299.5 | 286.4 | 13.10 | 22.870 | |
| 2,800.0 | 2,770.9 | 2,768.6 | 2,752.5 | 8.4 | 6.9 | -144.97 | -144.97 | 180.5 | 36.6 | 321.8 | 308.0 | 13.78 | 23.355 | |
| 2,900.0 | 2,868.8 | 2,865.9 | 2,848.0 | 8.9 | 7.3 | -143.91 | -143.91 | 198.1 | 41.6 | 344.2 | 329.7 | 14.46 | 23.793 | |
| 3,000.0 | 2,966.7 | 2,963.2 | 2,943.6 | 9.3 | 7.6 | -142.98 | -142.98 | 215.7 | 46.6 | 366.7 | 351.5 | 15.16 | 24.189 | |
| 3,100.0 | 3,064.7 | 3,060.5 | 3,039.1 | 9.7 | 8.0 | -142.16 | -142.16 | 233.3 | 51.6 | 389.2 | 373.4 | 15.86 | 24.549 | |
| 3,200.0 | 3,162.6 | 3,157.8 | 3,134.7 | 10.2 | 8.4 | -141.43 | -141.43 | 250.9 | 56.5 | 411.9 | 395.3 | 16.56 | 24.876 | |
| 3,300.0 | 3,260.5 | 3,255.0 | 3,230.2 | 10.6 | 8.7 | -140.78 | -140.78 | 268.5 | 61.5 | 434.6 | 417.3 | 17.26 | 25.175 | |
| 3,400.0 | 3,358.5 | 3,352.3 | 3,325.7 | 11.0 | 9.1 | -140.19 | -140.19 | 286.1 | 66.5 | 457.3 | 439.3 | 17.97 | 25.449 | |
| 3,500.0 | 3,456.4 | 3,449.6 | 3,421.3 | 11.5 | 9.5 | -139.65 | -139.65 | 303.6 | 71.5 | 480.1 | 461.4 | 18.68 | 25.702 | |
| 3,600.0 | 3,554.3 | 3,546.9 | 3,516.8 | 11.9 | 9.9 | -139.17 | -139.17 | 321.2 | 76.5 | 502.9 | 483.5 | 19.39 | 25.934 | |
| 3,700.0 | 3,652.3 | 3,644.1 | 3,612.4 | 12.4 | 10.2 | -138.72 | -138.72 | 338.8 | 81.4 | 525.8 | 505.7 | 20.11 | 26.149 | |
| 3,800.0 | 3,750.2 | 3,741.4 | 3,707.9 | 12.8 | 10.6 | -138.32 | -138.32 | 356.4 | 86.4 | 548.7 | 527.8 | 20.82 | 26.349 | |
| 3,900.0 | 3,848.1 | 3,838.7 | 3,803.5 | 13.2 | 11.0 | -137.94 | -137.94 | 374.0 | 91.4 | 571.6 | 550.0 | 21.54 | 26.534 | |
| 4,000.0 | 3,946.1 | 3,936.0 | 3,899.0 | 13.7 | 11.4 | -137.60 | -137.60 | 391.6 | 96.4 | 594.5 | 572.2 | 22.26 | 26.707 | |
| 4,100.0 | 4,044.0 | 4,033.2 | 3,994.5 | 14.1 | 11.8 | -137.28 | -137.28 | 409.2 | 101.3 | 617.5 | 594.5 | 22.98 | 26.868 | |
| 4,200.0 | 4,142.0 | 4,130.5 | 4,090.1 | 14.6 | 12.1 | -136.98 | -136.98 | 426.7 | 106.3 | 640.4 | 616.7 | 23.70 | 27.019 | |
| 4,300.0 | 4,239.9 | 4,227.8 | 4,185.6 | 15.0 | 12.5 | -136.70 | -136.70 | 444.3 | 111.3 | 663.4 | 639.0 | 24.43 | 27.160 | |
| 4,400.0 | 4,337.8 | 4,325.1 | 4,281.2 | 15.5 | 12.9 | -136.44 | -136.44 | 461.9 | 116.3 | 686.4 | 661.2 | 25.15 | 27.293 | |
| 4,500.0 | 4,435.8 | 4,422.3 | 4,376.7 | 15.9 | 13.3 | -136.20 | -136.20 | 479.5 | 121.3 | 709.4 | 683.5 | 25.87 | 27.417 | |
| 4,600.0 | 4,533.7 | 4,519.6 | 4,472.3 | 16.4 | 13.7 | -135.98 | -135.98 | 497.1 | 126.2 | 732.4 | 705.8 | 26.60 | 27.535 | |
| 4,700.0 | 4,631.6 | 4,616.9 | 4,567.8 | 16.8 | 14.1 | -135.76 | -135.76 | 514.7 | 131.2 | 755.4 | 728.1 | 27.33 | 27.646 | |
| 4,800.0 | 4,729.6 | 4,714.2 | 4,663.3 | 17.3 | 14.5 | -135.57 | -135.57 | 532.3 | 136.2 | 778.5 | 750.4 | 28.05 | 27.751 | |
| 4,900.0 | 4,827.5 | 4,811.4 | 4,758.9 | 17.7 | 14.9 | -135.38 | -135.38 | 549.8 | 141.2 | 801.5 | 772.8 | 28.78 | 27.850 | |

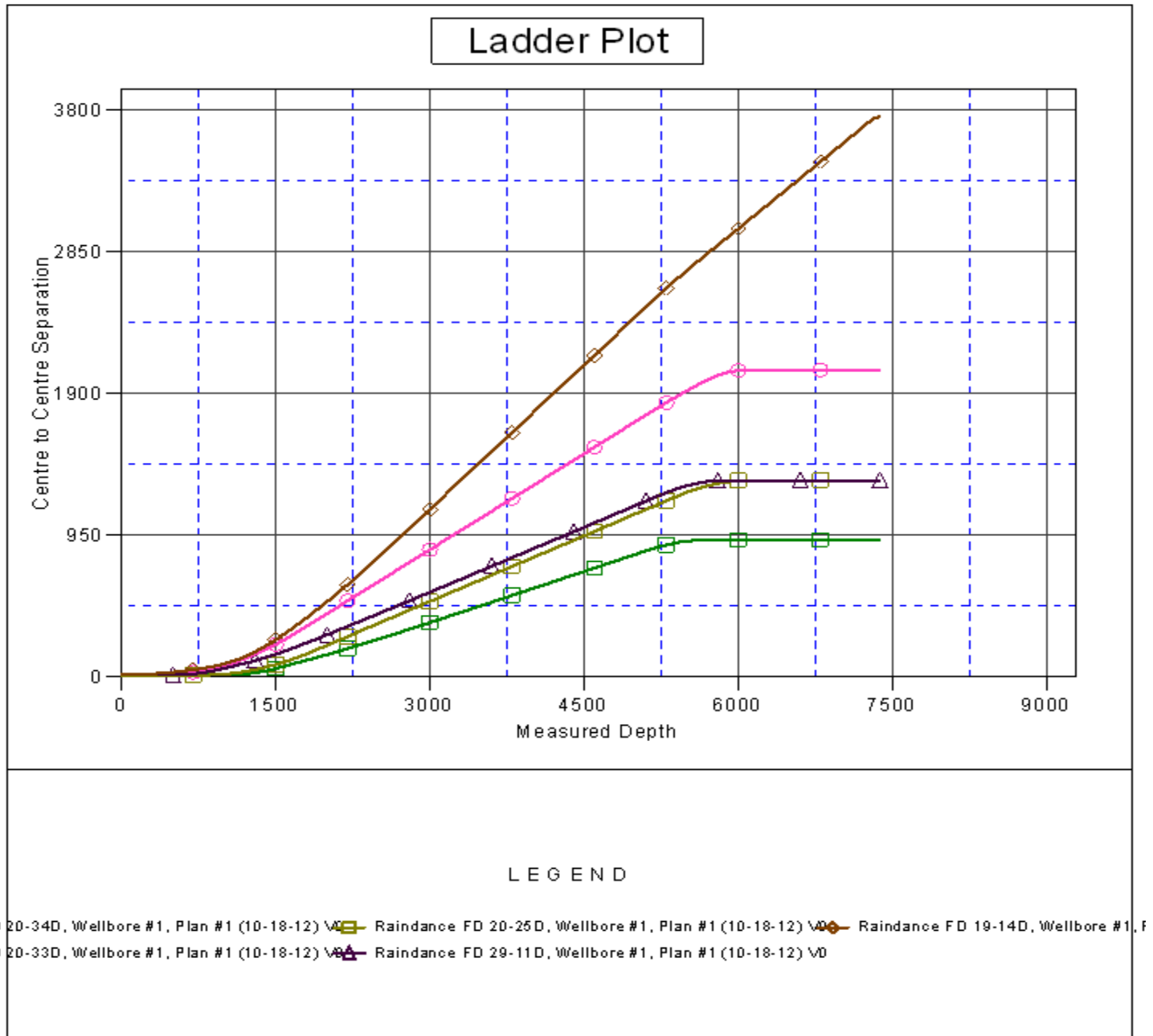
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

| Offset Design Raindance FD West Row Pad Sec.30-T6N-R67W - Raindance FD 20-34D - Wellbore #1 - Plan #1 (10-1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|---------------------|---------------------|---------------------|-----------|--------|-----------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|-------------------------|--------------------|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference | Offset | Semi Major Axis | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Minimum Separation (ft) | Separation Factor | Warning |
| 5,000.0 | 4,925.4 | 4,908.7 | 4,854.4 | 18.1 | 15.3 | -135.20 | | 567.4 | 146.2 | 824.6 | 795.1 | 29.51 | 27.944 | |
| 5,097.4 | 5,020.9 | 5,003.5 | 4,947.5 | 18.6 | 15.6 | -135.04 | | 584.6 | 151.0 | 847.1 | 816.8 | 30.22 | 28.031 | |
| 5,100.0 | 5,023.4 | 5,006.0 | 4,950.0 | 18.6 | 15.6 | -135.04 | | 585.0 | 151.1 | 847.6 | 817.4 | 30.24 | 28.033 | |
| 5,200.0 | 5,121.7 | 5,103.5 | 5,045.8 | 18.9 | 16.0 | -135.11 | | 602.6 | 156.1 | 869.4 | 838.5 | 30.94 | 28.097 | |
| 5,300.0 | 5,220.5 | 5,215.4 | 5,155.9 | 19.2 | 16.4 | -135.02 | | 621.4 | 161.4 | 888.2 | 856.6 | 31.62 | 28.094 | |
| 5,400.0 | 5,319.9 | 5,331.3 | 5,270.8 | 19.4 | 16.7 | -134.94 | | 636.4 | 165.7 | 902.7 | 870.6 | 32.18 | 28.057 | |
| 5,500.0 | 5,419.5 | 5,448.4 | 5,387.3 | 19.6 | 17.0 | -134.89 | | 647.1 | 168.7 | 912.9 | 880.3 | 32.65 | 27.957 | |
| 5,600.0 | 5,519.4 | 5,566.2 | 5,505.0 | 19.8 | 17.2 | -134.86 | | 653.2 | 170.4 | 918.7 | 885.6 | 33.05 | 27.799 | |
| 5,680.6 | 5,600.0 | 5,661.4 | 5,600.1 | 19.9 | 17.4 | -45.64 | | 654.7 | 170.8 | 920.1 | 886.8 | 33.31 | 27.625 | |
| 5,700.0 | 5,619.4 | 5,680.8 | 5,619.5 | 19.9 | 17.4 | -45.64 | | 654.7 | 170.8 | 920.1 | 886.8 | 33.36 | 27.579 | |
| 5,800.0 | 5,719.4 | 5,780.8 | 5,719.5 | 20.0 | 17.5 | -45.64 | | 654.7 | 170.8 | 920.1 | 886.5 | 33.68 | 27.323 | |
| 5,900.0 | 5,819.4 | 5,880.8 | 5,819.5 | 20.2 | 17.7 | -45.64 | | 654.7 | 170.8 | 920.1 | 886.1 | 33.99 | 27.068 | |
| 6,000.0 | 5,919.4 | 5,980.8 | 5,919.5 | 20.3 | 17.9 | -45.64 | | 654.7 | 170.8 | 920.1 | 885.8 | 34.31 | 26.815 | |
| 6,100.0 | 6,019.4 | 6,080.8 | 6,019.5 | 20.5 | 18.0 | -45.64 | | 654.7 | 170.8 | 920.1 | 885.5 | 34.64 | 26.565 | |
| 6,200.0 | 6,119.4 | 6,180.8 | 6,119.5 | 20.6 | 18.2 | -45.64 | | 654.7 | 170.8 | 920.1 | 885.2 | 34.96 | 26.317 | |
| 6,300.0 | 6,219.4 | 6,280.8 | 6,219.5 | 20.7 | 18.3 | -45.64 | | 654.7 | 170.8 | 920.1 | 884.8 | 35.29 | 26.072 | |
| 6,400.0 | 6,319.4 | 6,380.8 | 6,319.5 | 20.9 | 18.5 | -45.64 | | 654.7 | 170.8 | 920.1 | 884.5 | 35.62 | 25.830 | |
| 6,500.0 | 6,419.4 | 6,480.8 | 6,419.5 | 21.0 | 18.7 | -45.64 | | 654.7 | 170.8 | 920.1 | 884.2 | 35.96 | 25.590 | |
| 6,600.0 | 6,519.4 | 6,580.8 | 6,519.5 | 21.2 | 18.8 | -45.64 | | 654.7 | 170.8 | 920.1 | 883.8 | 36.29 | 25.353 | |
| 6,700.0 | 6,619.4 | 6,680.8 | 6,619.5 | 21.3 | 19.0 | -45.64 | | 654.7 | 170.8 | 920.1 | 883.5 | 36.63 | 25.118 | |
| 6,800.0 | 6,719.4 | 6,780.8 | 6,719.5 | 21.5 | 19.2 | -45.64 | | 654.7 | 170.8 | 920.1 | 883.2 | 36.97 | 24.886 | |
| 6,900.0 | 6,819.4 | 6,880.8 | 6,819.5 | 21.6 | 19.3 | -45.64 | | 654.7 | 170.8 | 920.1 | 882.8 | 37.32 | 24.657 | |
| 7,000.0 | 6,919.4 | 6,980.8 | 6,919.5 | 21.8 | 19.5 | -45.64 | | 654.7 | 170.8 | 920.1 | 882.5 | 37.66 | 24.431 | |
| 7,100.0 | 7,019.4 | 7,080.8 | 7,019.5 | 21.9 | 19.7 | -45.64 | | 654.7 | 170.8 | 920.1 | 882.1 | 38.01 | 24.207 | |
| 7,200.0 | 7,119.4 | 7,180.8 | 7,119.5 | 22.1 | 19.8 | -45.64 | | 654.7 | 170.8 | 920.1 | 881.8 | 38.36 | 23.986 | |
| 7,300.0 | 7,219.4 | 7,280.8 | 7,219.5 | 22.2 | 20.0 | -45.64 | | 654.7 | 170.8 | 920.1 | 881.4 | 38.71 | 23.768 | |
| 7,350.4 | 7,269.8 | 7,331.1 | 7,269.9 | 22.3 | 20.1 | -45.64 | | 654.7 | 170.8 | 920.1 | 881.2 | 38.89 | 23.659 | |
| 7,375.6 | 7,295.0 | 7,356.3 | 7,295.0 | 22.3 | 20.1 | -45.64 | | 654.7 | 170.8 | 920.1 | 881.2 | 38.98 | 23.605 | |

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4796.6ft (Original Well Elev) Coordinates are relative to: Raindance FD 29-4D
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.37°



| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | Great Western | Local Co-ordinate Reference: | Well Raindance FD 29-4D |
| Project: | SEC.30-T6N-R67W | TVD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Reference Site: | Raindance FD East Row Pad Sec.30-T6N-R67W | MD Reference: | WELL @ 4796.6ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Raindance FD 29-4D | 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 #1 (10-18-12) | Offset TVD Reference: | Offset Datum |

Reference Depths are relative to WELL @ 4796.6ft (Original Well Elev) Coordinates are relative to: Raindance FD 29-4D
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.37°

