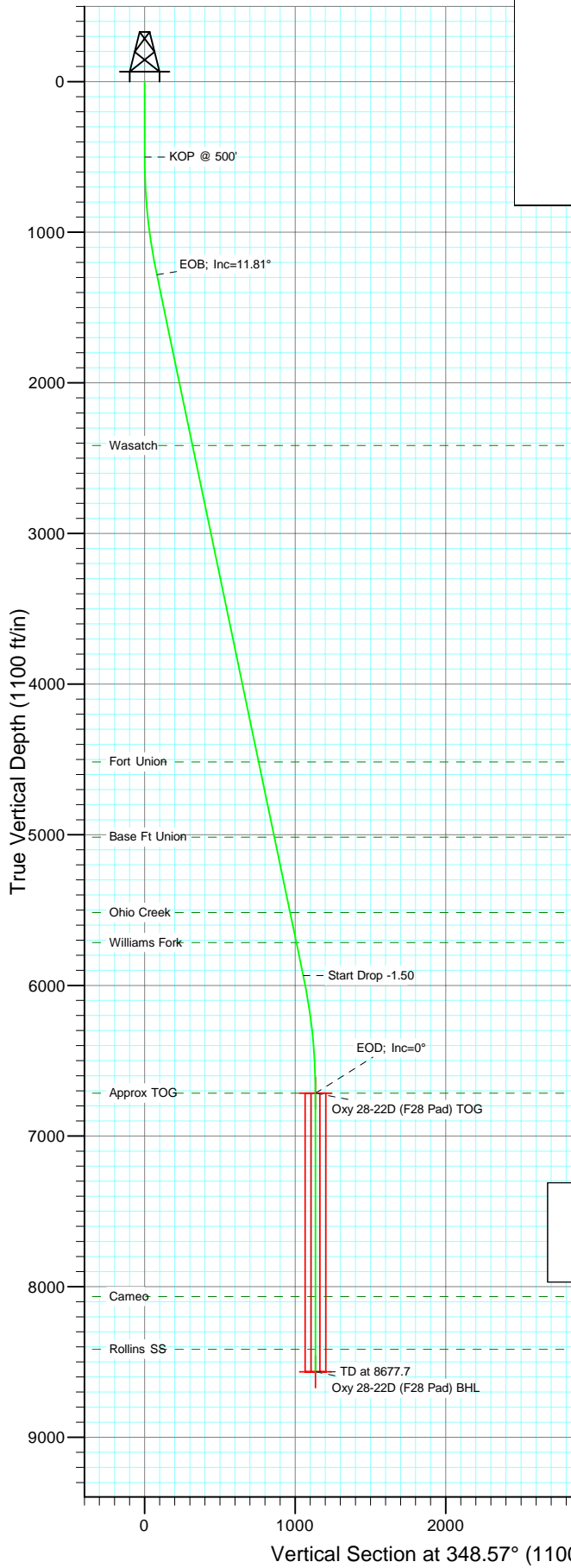


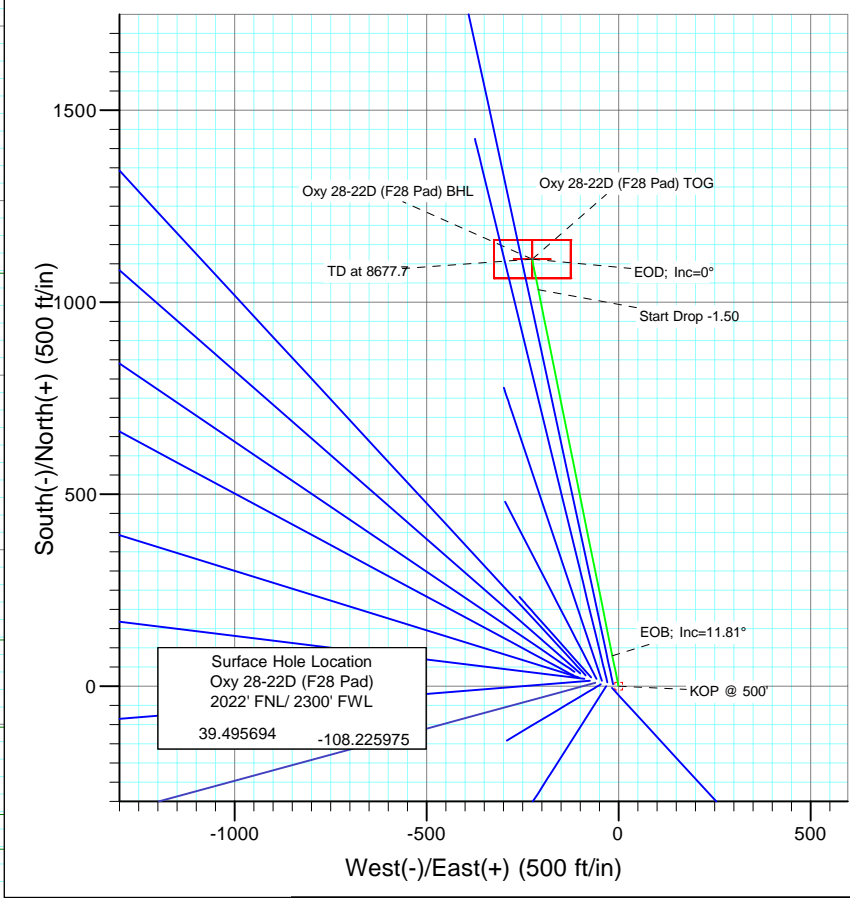


Berry Petroleum Company

Project: Garfield County
 Site: SENW S28-T6S-R97W (F28 Pad)
 Well: Oxy 28-22D (F28 Pad)
 Wellbore: DD
 Design: Plan #1

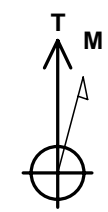


| SECTION DETAILS | | | | | | | | | | |
|-----------------|--------|-------|--------|--------|--------|--------|------|--------|--------|--------------------------|
| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | DLeg | TFace | VSec | Target |
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1287.4 | 11.81 | 348.57 | 1281.8 | 79.3 | -16.0 | 1.50 | 348.57 | 80.9 | |
| 4 | 6040.4 | 11.81 | 348.57 | 5934.2 | 1032.8 | -208.9 | 0.00 | 0.00 | 1053.7 | |
| 5 | 6827.7 | 0.00 | 0.00 | 6716.0 | 1112.0 | -224.9 | 1.50 | 180.00 | 1134.6 | Oxy 28-22D (F28 Pad) TOG |
| 6 | 8677.7 | 0.00 | 0.00 | 8566.0 | 1112.0 | -224.9 | 0.00 | 0.00 | 1134.6 | Oxy 28-22D (F28 Pad) BHL |



Bottom Hole Location
 Oxy 28-22D (F28 Pad)
 911' FNL/ 2076' FWL
 Lat : 39.498747
 Long. : -108.226772

| FORMATION TOP DETAILS | | |
|-----------------------|--------|---------------|
| TVDPath | MDPath | Formation |
| 2416.0 | 2446.1 | Wasatch |
| 4516.0 | 4591.5 | Fort Union |
| 5016.0 | 5102.3 | Base Ft Union |
| 5516.0 | 5613.1 | Ohio Creek |
| 5716.0 | 5817.5 | Williams Fork |
| 6716.0 | 6827.7 | Approx TOG |
| 8066.0 | 8177.7 | Cameo |
| 8416.0 | 8527.7 | Rollins SS |



Azimuths to True North
 Magnetic North: 10.64°
 Magnetic Field
 Strength: 52394.5snT
 Dip Angle: 65.75°
 Date: 10/22/2009
 Model: IGRF200510

| DESIGN DETAILS: Plan #1 | | | | | |
|-------------------------------------|---------|--------|-----|-----|----------|
| 95XXX; BH | | | | | |
| KBE @ 8308.0ft (Original Well Elev) | | | | | |
| Target | Azimuth | Origin | N/S | E/W | From TVD |
| Oxy 28-22D (F28 Pad) BH | 348.57 | Slot | 0.0 | 0.0 | 0.0 |

Directional Plus

Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 2003.21 US Multi User Db | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Company: | Berry Petroleum Company (NAD 83) | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Project: | Garfield County | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site: | SENW S28-T6S-R97W (F28 Pad) | North Reference: | True |
| Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | Garfield County | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | Colorado Central Zone | | |

| | | | | | |
|------------------------------|-----------------------------|---------------------|-----------------|--------------------------|-------------|
| Site | SENW S28-T6S-R97W (F28 Pad) | | | | |
| Site Position: | | Northing: | 1,616,975.87 ft | Latitude: | 39.495683 |
| From: | Lat/Long | Easting: | 2,230,827.80 ft | Longitude: | -108.226036 |
| Position Uncertainty: | 0.0 ft | Slot Radius: | in | Grid Convergence: | -1.72 ° |

| | | | | | | |
|-----------------------------|----------------------|--------|----------------------------|-----------------|----------------------|-------------|
| Well | Oxy 28-22D (F28 Pad) | | | | | |
| Well Position | +N/-S | 0.0 ft | Northing: | 1,616,979.35 ft | Latitude: | 39.495694 |
| | +E/-W | 0.0 ft | Easting: | 2,230,845.12 ft | Longitude: | -108.225975 |
| Position Uncertainty | | 0.0 ft | Wellhead Elevation: | ft | Ground Level: | 8,293.0 ft |

| | | | | | |
|------------------|-------------------|--------------------|--------------------|------------------|-----------------------|
| Wellbore | DD | | | | |
| Magnetics | Model Name | Sample Date | Declination | Dip Angle | Field Strength |
| | IGRF200510 | 10/22/2009 | (°) | (°) | (nT) |
| | | | 10.64 | 65.75 | 52,395 |

| | | | | |
|--------------------------|-------------------------|--------------|----------------------|------------------|
| Design | Plan #1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) | +N/-S | +E/-W | Direction |
| | (ft) | (ft) | (ft) | (°) |
| | 0.0 | 0.0 | 0.0 | 348.57 |

| 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 | |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,287.4 | 11.81 | 348.57 | 1,281.8 | 79.3 | -16.0 | 1.50 | 1.50 | 0.00 | 348.57 | |
| 6,040.4 | 11.81 | 348.57 | 5,934.2 | 1,032.8 | -208.9 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,827.7 | 0.00 | 0.00 | 6,716.0 | 1,112.0 | -224.9 | 1.50 | -1.50 | 0.00 | 180.00 | Oxy 28-22D (F28 Pad) |
| 8,677.7 | 0.00 | 0.00 | 8,566.0 | 1,112.0 | -224.9 | 0.00 | 0.00 | 0.00 | 0.00 | Oxy 28-22D (F28 Pad) |

Directional Plus

Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 2003.21 US Multi User Db | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Company: | Berry Petroleum Company (NAD 83) | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Project: | Garfield County | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site: | SENW S28-T6S-R97W (F28 Pad) | North Reference: | True |
| Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| 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) | Comments / Formations |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 30.0 | 0.00 | 0.00 | 30.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 60.0 | 0.00 | 0.00 | 60.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 90.0 | 0.00 | 0.00 | 90.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 120.0 | 0.00 | 0.00 | 120.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 150.0 | 0.00 | 0.00 | 150.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 180.0 | 0.00 | 0.00 | 180.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 210.0 | 0.00 | 0.00 | 210.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 240.0 | 0.00 | 0.00 | 240.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 270.0 | 0.00 | 0.00 | 270.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 330.0 | 0.00 | 0.00 | 330.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 360.0 | 0.00 | 0.00 | 360.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 390.0 | 0.00 | 0.00 | 390.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 420.0 | 0.00 | 0.00 | 420.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 450.0 | 0.00 | 0.00 | 450.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 480.0 | 0.00 | 0.00 | 480.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | KOP @ 500' |
| 510.0 | 0.15 | 348.57 | 510.0 | 0.0 | 0.0 | 0.0 | 1.50 | 1.50 | |
| 540.0 | 0.60 | 348.57 | 540.0 | 0.2 | 0.0 | 0.2 | 1.50 | 1.50 | |
| 570.0 | 1.05 | 348.57 | 570.0 | 0.6 | -0.1 | 0.6 | 1.50 | 1.50 | |
| 600.0 | 1.50 | 348.57 | 600.0 | 1.3 | -0.3 | 1.3 | 1.50 | 1.50 | |
| 630.0 | 1.95 | 348.57 | 630.0 | 2.2 | -0.4 | 2.2 | 1.50 | 1.50 | |
| 660.0 | 2.40 | 348.57 | 660.0 | 3.3 | -0.7 | 3.4 | 1.50 | 1.50 | |
| 690.0 | 2.85 | 348.57 | 689.9 | 4.6 | -0.9 | 4.7 | 1.50 | 1.50 | |
| 720.0 | 3.30 | 348.57 | 719.9 | 6.2 | -1.3 | 6.3 | 1.50 | 1.50 | |
| 750.0 | 3.75 | 348.57 | 749.8 | 8.0 | -1.6 | 8.2 | 1.50 | 1.50 | |
| 780.0 | 4.20 | 348.57 | 779.7 | 10.1 | -2.0 | 10.3 | 1.50 | 1.50 | |
| 810.0 | 4.65 | 348.57 | 809.7 | 12.3 | -2.5 | 12.6 | 1.50 | 1.50 | |
| 840.0 | 5.10 | 348.57 | 839.6 | 14.8 | -3.0 | 15.1 | 1.50 | 1.50 | |
| 870.0 | 5.55 | 348.57 | 869.4 | 17.6 | -3.5 | 17.9 | 1.50 | 1.50 | |
| 900.0 | 6.00 | 348.57 | 899.3 | 20.5 | -4.1 | 20.9 | 1.50 | 1.50 | |
| 930.0 | 6.45 | 348.57 | 929.1 | 23.7 | -4.8 | 24.2 | 1.50 | 1.50 | |
| 960.0 | 6.90 | 348.57 | 958.9 | 27.1 | -5.5 | 27.7 | 1.50 | 1.50 | |
| 990.0 | 7.35 | 348.57 | 988.7 | 30.8 | -6.2 | 31.4 | 1.50 | 1.50 | |
| 1,020.0 | 7.80 | 348.57 | 1,018.4 | 34.6 | -7.0 | 35.3 | 1.50 | 1.50 | |
| 1,050.0 | 8.25 | 348.57 | 1,048.1 | 38.7 | -7.8 | 39.5 | 1.50 | 1.50 | |
| 1,080.0 | 8.70 | 348.57 | 1,077.8 | 43.1 | -8.7 | 44.0 | 1.50 | 1.50 | |
| 1,110.0 | 9.15 | 348.57 | 1,107.4 | 47.6 | -9.6 | 48.6 | 1.50 | 1.50 | |
| 1,140.0 | 9.60 | 348.57 | 1,137.0 | 52.4 | -10.6 | 53.5 | 1.50 | 1.50 | |
| 1,170.0 | 10.05 | 348.57 | 1,166.6 | 57.4 | -11.6 | 58.6 | 1.50 | 1.50 | |
| 1,200.0 | 10.50 | 348.57 | 1,196.1 | 62.7 | -12.7 | 64.0 | 1.50 | 1.50 | |
| 1,230.0 | 10.95 | 348.57 | 1,225.6 | 68.2 | -13.8 | 69.5 | 1.50 | 1.50 | |
| 1,260.0 | 11.40 | 348.57 | 1,255.0 | 73.9 | -14.9 | 75.4 | 1.50 | 1.50 | |
| 1,287.4 | 11.81 | 348.57 | 1,281.8 | 79.3 | -16.0 | 80.9 | 1.50 | 1.50 | EOB; Inc=11.81° |
| 1,290.0 | 11.81 | 348.57 | 1,284.4 | 79.8 | -16.1 | 81.4 | 0.00 | 0.00 | |
| 1,320.0 | 11.81 | 348.57 | 1,313.7 | 85.8 | -17.4 | 87.5 | 0.00 | 0.00 | |
| 1,350.0 | 11.81 | 348.57 | 1,343.1 | 91.8 | -18.6 | 93.7 | 0.00 | 0.00 | |
| 1,380.0 | 11.81 | 348.57 | 1,372.5 | 97.8 | -19.8 | 99.8 | 0.00 | 0.00 | |
| 1,410.0 | 11.81 | 348.57 | 1,401.8 | 103.9 | -21.0 | 106.0 | 0.00 | 0.00 | |
| 1,440.0 | 11.81 | 348.57 | 1,431.2 | 109.9 | -22.2 | 112.1 | 0.00 | 0.00 | |
| 1,470.0 | 11.81 | 348.57 | 1,460.6 | 115.9 | -23.4 | 118.2 | 0.00 | 0.00 | |

Directional Plus

Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 2003.21 US Multi User Db | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Company: | Berry Petroleum Company (NAD 83) | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Project: | Garfield County | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site: | SENW S28-T6S-R97W (F28 Pad) | North Reference: | True |
| Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| 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) | Comments / Formations |
| 1,500.0 | 11.81 | 348.57 | 1,489.9 | 121.9 | -24.7 | 124.4 | 0.00 | 0.00 | |
| 1,530.0 | 11.81 | 348.57 | 1,519.3 | 127.9 | -25.9 | 130.5 | 0.00 | 0.00 | |
| 1,560.0 | 11.81 | 348.57 | 1,548.7 | 134.0 | -27.1 | 136.7 | 0.00 | 0.00 | |
| 1,590.0 | 11.81 | 348.57 | 1,578.0 | 140.0 | -28.3 | 142.8 | 0.00 | 0.00 | |
| 1,620.0 | 11.81 | 348.57 | 1,607.4 | 146.0 | -29.5 | 148.9 | 0.00 | 0.00 | |
| 1,650.0 | 11.81 | 348.57 | 1,636.8 | 152.0 | -30.7 | 155.1 | 0.00 | 0.00 | |
| 1,680.0 | 11.81 | 348.57 | 1,666.1 | 158.0 | -32.0 | 161.2 | 0.00 | 0.00 | |
| 1,710.0 | 11.81 | 348.57 | 1,695.5 | 164.0 | -33.2 | 167.4 | 0.00 | 0.00 | |
| 1,740.0 | 11.81 | 348.57 | 1,724.9 | 170.1 | -34.4 | 173.5 | 0.00 | 0.00 | |
| 1,770.0 | 11.81 | 348.57 | 1,754.2 | 176.1 | -35.6 | 179.6 | 0.00 | 0.00 | |
| 1,800.0 | 11.81 | 348.57 | 1,783.6 | 182.1 | -36.8 | 185.8 | 0.00 | 0.00 | |
| 1,830.0 | 11.81 | 348.57 | 1,812.9 | 188.1 | -38.0 | 191.9 | 0.00 | 0.00 | |
| 1,860.0 | 11.81 | 348.57 | 1,842.3 | 194.1 | -39.3 | 198.1 | 0.00 | 0.00 | |
| 1,890.0 | 11.81 | 348.57 | 1,871.7 | 200.2 | -40.5 | 204.2 | 0.00 | 0.00 | |
| 1,920.0 | 11.81 | 348.57 | 1,901.0 | 206.2 | -41.7 | 210.3 | 0.00 | 0.00 | |
| 1,950.0 | 11.81 | 348.57 | 1,930.4 | 212.2 | -42.9 | 216.5 | 0.00 | 0.00 | |
| 1,980.0 | 11.81 | 348.57 | 1,959.8 | 218.2 | -44.1 | 222.6 | 0.00 | 0.00 | |
| 2,010.0 | 11.81 | 348.57 | 1,989.1 | 224.2 | -45.3 | 228.8 | 0.00 | 0.00 | |
| 2,040.0 | 11.81 | 348.57 | 2,018.5 | 230.2 | -46.6 | 234.9 | 0.00 | 0.00 | |
| 2,070.0 | 11.81 | 348.57 | 2,047.9 | 236.3 | -47.8 | 241.0 | 0.00 | 0.00 | |
| 2,100.0 | 11.81 | 348.57 | 2,077.2 | 242.3 | -49.0 | 247.2 | 0.00 | 0.00 | |
| 2,130.0 | 11.81 | 348.57 | 2,106.6 | 248.3 | -50.2 | 253.3 | 0.00 | 0.00 | |
| 2,160.0 | 11.81 | 348.57 | 2,136.0 | 254.3 | -51.4 | 259.5 | 0.00 | 0.00 | |
| 2,190.0 | 11.81 | 348.57 | 2,165.3 | 260.3 | -52.7 | 265.6 | 0.00 | 0.00 | |
| 2,220.0 | 11.81 | 348.57 | 2,194.7 | 266.4 | -53.9 | 271.8 | 0.00 | 0.00 | |
| 2,250.0 | 11.81 | 348.57 | 2,224.1 | 272.4 | -55.1 | 277.9 | 0.00 | 0.00 | |
| 2,280.0 | 11.81 | 348.57 | 2,253.4 | 278.4 | -56.3 | 284.0 | 0.00 | 0.00 | |
| 2,310.0 | 11.81 | 348.57 | 2,282.8 | 284.4 | -57.5 | 290.2 | 0.00 | 0.00 | |
| 2,340.0 | 11.81 | 348.57 | 2,312.2 | 290.4 | -58.7 | 296.3 | 0.00 | 0.00 | |
| 2,370.0 | 11.81 | 348.57 | 2,341.5 | 296.4 | -60.0 | 302.5 | 0.00 | 0.00 | |
| 2,400.0 | 11.81 | 348.57 | 2,370.9 | 302.5 | -61.2 | 308.6 | 0.00 | 0.00 | |
| 2,430.0 | 11.81 | 348.57 | 2,400.2 | 308.5 | -62.4 | 314.7 | 0.00 | 0.00 | |
| 2,446.1 | 11.81 | 348.57 | 2,416.0 | 311.7 | -63.0 | 318.0 | 0.00 | 0.00 | Wasatch |
| 2,460.0 | 11.81 | 348.57 | 2,429.6 | 314.5 | -63.6 | 320.9 | 0.00 | 0.00 | |
| 2,490.0 | 11.81 | 348.57 | 2,459.0 | 320.5 | -64.8 | 327.0 | 0.00 | 0.00 | |

| Targets | | | | | | | | | |
|---------------------------------------------------------------------------------------|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| Oxy 28-22D (F28 Pad) E - hit/miss target - Shape | 0.00 | 0.00 | 8,566.0 | 1,112.0 | -224.9 | 1,618,097.63 | 2,230,653.68 | 39.498747 | -108.226772 |
| - plan misses target center by 6160.2ft at 2490.0ft MD (2459.0 TVD, 320.5 N, -64.8 E) | | | | | | | | | |
| - Rectangle (sides W100.0 H200.0 D0.0) | | | | | | | | | |
| Oxy 28-22D (F28 Pad) T - hit/miss target - Shape | 0.00 | 0.00 | 6,716.0 | 1,112.0 | -224.9 | 1,618,097.63 | 2,230,653.68 | 39.498747 | -108.226772 |
| - plan misses target center by 4332.9ft at 2490.0ft MD (2459.0 TVD, 320.5 N, -64.8 E) | | | | | | | | | |
| - Point | | | | | | | | | |

Directional Plus

Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 2003.21 US Multi User Db | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Company: | Berry Petroleum Company (NAD 83) | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Project: | Garfield County | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site: | SENW S28-T6S-R97W (F28 Pad) | North Reference: | True |
| Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| 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) | Comments / Formations |
| 2,500.0 | 11.81 | 348.57 | 2,468.8 | 322.5 | -65.2 | 329.1 | 0.00 | 0.00 | |
| 2,600.0 | 11.81 | 348.57 | 2,566.6 | 342.6 | -69.3 | 349.5 | 0.00 | 0.00 | |
| 2,700.0 | 11.81 | 348.57 | 2,664.5 | 362.7 | -73.3 | 370.0 | 0.00 | 0.00 | |
| 2,800.0 | 11.81 | 348.57 | 2,762.4 | 382.7 | -77.4 | 390.5 | 0.00 | 0.00 | |
| 2,900.0 | 11.81 | 348.57 | 2,860.3 | 402.8 | -81.5 | 410.9 | 0.00 | 0.00 | |
| 3,000.0 | 11.81 | 348.57 | 2,958.2 | 422.8 | -85.5 | 431.4 | 0.00 | 0.00 | |
| 3,100.0 | 11.81 | 348.57 | 3,056.1 | 442.9 | -89.6 | 451.9 | 0.00 | 0.00 | |
| 3,200.0 | 11.81 | 348.57 | 3,153.9 | 463.0 | -93.6 | 472.3 | 0.00 | 0.00 | |
| 3,300.0 | 11.81 | 348.57 | 3,251.8 | 483.0 | -97.7 | 492.8 | 0.00 | 0.00 | |
| 3,400.0 | 11.81 | 348.57 | 3,349.7 | 503.1 | -101.7 | 513.3 | 0.00 | 0.00 | |
| 3,500.0 | 11.81 | 348.57 | 3,447.6 | 523.1 | -105.8 | 533.7 | 0.00 | 0.00 | |
| 3,600.0 | 11.81 | 348.57 | 3,545.5 | 543.2 | -109.9 | 554.2 | 0.00 | 0.00 | |
| 3,700.0 | 11.81 | 348.57 | 3,643.4 | 563.3 | -113.9 | 574.7 | 0.00 | 0.00 | |
| 3,800.0 | 11.81 | 348.57 | 3,741.2 | 583.3 | -118.0 | 595.1 | 0.00 | 0.00 | |
| 3,900.0 | 11.81 | 348.57 | 3,839.1 | 603.4 | -122.0 | 615.6 | 0.00 | 0.00 | |
| 4,000.0 | 11.81 | 348.57 | 3,937.0 | 623.4 | -126.1 | 636.1 | 0.00 | 0.00 | |
| 4,100.0 | 11.81 | 348.57 | 4,034.9 | 643.5 | -130.1 | 656.5 | 0.00 | 0.00 | |
| 4,200.0 | 11.81 | 348.57 | 4,132.8 | 663.6 | -134.2 | 677.0 | 0.00 | 0.00 | |
| 4,300.0 | 11.81 | 348.57 | 4,230.7 | 683.6 | -138.3 | 697.5 | 0.00 | 0.00 | |
| 4,400.0 | 11.81 | 348.57 | 4,328.5 | 703.7 | -142.3 | 717.9 | 0.00 | 0.00 | |
| 4,500.0 | 11.81 | 348.57 | 4,426.4 | 723.8 | -146.4 | 738.4 | 0.00 | 0.00 | |
| 4,591.5 | 11.81 | 348.57 | 4,516.0 | 742.1 | -150.1 | 757.1 | 0.00 | 0.00 | Fort Union |
| 4,600.0 | 11.81 | 348.57 | 4,524.3 | 743.8 | -150.4 | 758.9 | 0.00 | 0.00 | |
| 4,700.0 | 11.81 | 348.57 | 4,622.2 | 763.9 | -154.5 | 779.3 | 0.00 | 0.00 | |
| 4,800.0 | 11.81 | 348.57 | 4,720.1 | 783.9 | -158.5 | 799.8 | 0.00 | 0.00 | |
| 4,900.0 | 11.81 | 348.57 | 4,818.0 | 804.0 | -162.6 | 820.3 | 0.00 | 0.00 | |
| 5,000.0 | 11.81 | 348.57 | 4,915.8 | 824.1 | -166.7 | 840.7 | 0.00 | 0.00 | |
| 5,100.0 | 11.81 | 348.57 | 5,013.7 | 844.1 | -170.7 | 861.2 | 0.00 | 0.00 | |
| 5,102.3 | 11.81 | 348.57 | 5,016.0 | 844.6 | -170.8 | 861.7 | 0.00 | 0.00 | Base Ft Union |
| 5,200.0 | 11.81 | 348.57 | 5,111.6 | 864.2 | -174.8 | 881.7 | 0.00 | 0.00 | |
| 5,300.0 | 11.81 | 348.57 | 5,209.5 | 884.2 | -178.8 | 902.1 | 0.00 | 0.00 | |
| 5,400.0 | 11.81 | 348.57 | 5,307.4 | 904.3 | -182.9 | 922.6 | 0.00 | 0.00 | |
| 5,500.0 | 11.81 | 348.57 | 5,405.3 | 924.4 | -187.0 | 943.1 | 0.00 | 0.00 | |
| 5,600.0 | 11.81 | 348.57 | 5,503.1 | 944.4 | -191.0 | 963.6 | 0.00 | 0.00 | |
| 5,613.1 | 11.81 | 348.57 | 5,516.0 | 947.1 | -191.5 | 966.2 | 0.00 | 0.00 | Ohio Creek |
| 5,700.0 | 11.81 | 348.57 | 5,601.0 | 964.5 | -195.1 | 984.0 | 0.00 | 0.00 | |
| 5,800.0 | 11.81 | 348.57 | 5,698.9 | 984.6 | -199.1 | 1,004.5 | 0.00 | 0.00 | |
| 5,817.5 | 11.81 | 348.57 | 5,716.0 | 988.1 | -199.8 | 1,008.1 | 0.00 | 0.00 | Williams Fork |
| 5,900.0 | 11.81 | 348.57 | 5,796.8 | 1,004.6 | -203.2 | 1,025.0 | 0.00 | 0.00 | |
| 6,000.0 | 11.81 | 348.57 | 5,894.7 | 1,024.7 | -207.2 | 1,045.4 | 0.00 | 0.00 | |
| 6,040.4 | 11.81 | 348.57 | 5,934.2 | 1,032.8 | -208.9 | 1,053.7 | 0.00 | 0.00 | Start Drop -1.50 |
| 6,100.0 | 10.92 | 348.57 | 5,992.6 | 1,044.3 | -211.2 | 1,065.4 | 1.50 | -1.50 | |
| 6,200.0 | 9.42 | 348.57 | 6,091.1 | 1,061.6 | -214.7 | 1,083.1 | 1.50 | -1.50 | |
| 6,300.0 | 7.92 | 348.57 | 6,189.9 | 1,076.4 | -217.7 | 1,098.2 | 1.50 | -1.50 | |
| 6,400.0 | 6.42 | 348.57 | 6,289.1 | 1,088.6 | -220.2 | 1,110.6 | 1.50 | -1.50 | |
| 6,500.0 | 4.92 | 348.57 | 6,388.7 | 1,098.3 | -222.1 | 1,120.5 | 1.50 | -1.50 | |
| 6,600.0 | 3.42 | 348.57 | 6,488.4 | 1,105.4 | -223.6 | 1,127.8 | 1.50 | -1.50 | |
| 6,700.0 | 1.92 | 348.57 | 6,588.3 | 1,109.9 | -224.5 | 1,132.4 | 1.50 | -1.50 | |
| 6,800.0 | 0.42 | 348.57 | 6,688.3 | 1,111.9 | -224.9 | 1,134.5 | 1.50 | -1.50 | |
| 6,827.7 | 0.00 | 0.00 | 6,716.0 | 1,112.0 | -224.9 | 1,134.6 | 1.50 | -1.50 | EOD; Inc=0° - Approx TOG - Oxy 28-22D (F28 |
| 6,900.0 | 0.00 | 0.00 | 6,788.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,000.0 | 0.00 | 0.00 | 6,888.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |

Directional Plus

Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 2003.21 US Multi User Db | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Company: | Berry Petroleum Company (NAD 83) | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Project: | Garfield County | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site: | SENW S28-T6S-R97W (F28 Pad) | North Reference: | True |
| Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| 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) | Comments / Formations |
| 7,100.0 | 0.00 | 0.00 | 6,988.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,200.0 | 0.00 | 0.00 | 7,088.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,300.0 | 0.00 | 0.00 | 7,188.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,400.0 | 0.00 | 0.00 | 7,288.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,500.0 | 0.00 | 0.00 | 7,388.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,600.0 | 0.00 | 0.00 | 7,488.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,700.0 | 0.00 | 0.00 | 7,588.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,800.0 | 0.00 | 0.00 | 7,688.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 7,900.0 | 0.00 | 0.00 | 7,788.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 8,000.0 | 0.00 | 0.00 | 7,888.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 8,100.0 | 0.00 | 0.00 | 7,988.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 8,177.7 | 0.00 | 0.00 | 8,066.0 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | Cameo |
| 8,200.0 | 0.00 | 0.00 | 8,088.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 8,300.0 | 0.00 | 0.00 | 8,188.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 8,400.0 | 0.00 | 0.00 | 8,288.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 8,500.0 | 0.00 | 0.00 | 8,388.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 8,527.7 | 0.00 | 0.00 | 8,416.0 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | Rollins SS |
| 8,600.0 | 0.00 | 0.00 | 8,488.3 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | |
| 8,677.7 | 0.00 | 0.00 | 8,566.0 | 1,112.0 | -224.9 | 1,134.6 | 0.00 | 0.00 | TD at 8677.7 - Oxy 28-22D (F28 Pad) BHL |

| Targets | | | | | | | | | |
|--------------------------------------------------------------------------------------------------|---------------|--------------|----------|------------|------------|---------------|--------------|-----------|-------------|
| Target Name | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| Oxy 28-22D (F28 Pad) E - hit/miss target - Shape - Rectangle (sides W100.0 H200.0 D0.0) | 0.00 | 0.00 | 8,566.0 | 1,112.0 | -224.9 | 1,618,097.63 | 2,230,653.68 | 39.498747 | -108.226772 |
| Oxy 28-22D (F28 Pad) T - plan hits target center - Point | 0.00 | 0.00 | 6,716.0 | 1,112.0 | -224.9 | 1,618,097.63 | 2,230,653.68 | 39.498747 | -108.226772 |

| Formations | | | | | |
|---------------------|---------------------|---------------|-----------|---------|-------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
| 2,446.1 | 2,416.0 | Wasatch | | 0.00 | |
| 4,591.5 | 4,516.0 | Fort Union | | 0.00 | |
| 5,102.3 | 5,016.0 | Base Ft Union | | 0.00 | |
| 5,613.1 | 5,516.0 | Ohio Creek | | 0.00 | |
| 5,817.5 | 5,716.0 | Williams Fork | | 0.00 | |
| 6,827.7 | 6,716.0 | Approx TOG | | 0.00 | |
| 8,177.7 | 8,066.0 | Cameo | | 0.00 | |
| 8,527.7 | 8,416.0 | Rollins SS | | 0.00 | |

Directional Plus

Planning Report

| | | | |
|------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Database: | EDM 2003.21 US Multi User Db | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Company: | Berry Petroleum Company (NAD 83) | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Project: | Garfield County | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site: | SENW S28-T6S-R97W (F28 Pad) | North Reference: | True |
| Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | DD | | |
| Design: | Plan #1 | | |

| Plan Annotations | | | | |
|---------------------------|---------------------------|-------------------|---------------|------------------|
| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates | | Comment |
| | | +N/-S (ft) | +E/-W (ft) | |
| 500.0 | 500.0 | 0.0 | 0.0 | KOP @ 500' |
| 1,287.4 | 1,281.8 | 79.3 | -16.0 | EOB; Inc=11.81° |
| 6,040.4 | 5,934.2 | 1,032.8 | -208.9 | Start Drop -1.50 |
| 6,827.7 | 6,716.0 | 1,112.0 | -224.9 | EOD; Inc=0° |
| 8,677.7 | 8,566.0 | 1,112.0 | -224.9 | TD at 8677.7 |

Directional Plus

Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---------------------------------------------------------------------|-----------------------|---------------------|
| Reference | Plan #1 | | |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| Interpolation Method: | MD Interval 100.0ft | Error Model: | Systematic Ellipse |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum center-center distance of 200.0ft | Error Surface: | Elliptical Conic |
| Warning Levels Evaluated at: | 2.00 Sigma | | |

| | | | | |
|----------------------------|----------------|--------------------------|------------------|--------------------|
| Survey Tool Program | Date | 10/26/2009 | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description |
| 0.0 | 8,677.7 | Plan #1 (DD) | MWD | Geolink MWD |

| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
|---------------------------------------------|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|--------------|
| Summary | | | | | | |
| Offset Well - Wellbore - Design | | | | | | |
| SENW S28-T6S-R97W (F28 Pad) | | | | | | |
| 687-28A-18 (Marathon offset) - DD - Plan #1 | | | | | | Out of range |
| Oxy 28-15D (F28 Pad) - DD - Plan #1 | 629.7 | 629.9 | 17.2 | 15.0 | 7.974 | CC, ES |
| Oxy 28-15D (F28 Pad) - DD - Plan #1 | 700.0 | 699.9 | 18.1 | 15.7 | 7.540 | SF |
| Oxy 28-17D (F28 Pad) - DD - Plan #1 | 628.3 | 628.1 | 31.9 | 29.7 | 14.870 | CC, ES |
| Oxy 28-17D (F28 Pad) - DD - Plan #1 | 800.0 | 798.2 | 36.3 | 33.5 | 13.130 | SF |
| Oxy 28-18D (F28 pad) - DD - Plan #1 | 643.2 | 642.8 | 46.0 | 43.8 | 20.956 | CC, ES |
| Oxy 28-18D (F28 pad) - DD - Plan #1 | 800.0 | 797.4 | 49.2 | 46.5 | 17.811 | SF |
| Oxy 28-19D (F28 Pad) - DD - Plan #1 | 716.1 | 714.1 | 73.7 | 71.3 | 30.058 | CC, ES |
| Oxy 28-19D (F28 Pad) - DD - Plan #1 | 1,400.0 | 1,392.0 | 92.8 | 87.2 | 16.494 | SF |
| Oxy 28-20D (F28 Pad) - DD - Plan #1 | 500.0 | 500.0 | 60.5 | 58.8 | 35.708 | CC |
| Oxy 28-20D (F28 Pad) - DD - Plan #1 | 600.0 | 598.9 | 60.7 | 58.7 | 29.750 | ES |
| Oxy 28-20D (F28 Pad) - DD - Plan #1 | 1,500.0 | 1,493.2 | 76.1 | 69.8 | 12.041 | SF |
| Oxy 28-21D (F28 Pad) - DD - Plan #1 | 400.0 | 400.0 | 45.5 | 44.1 | 33.822 | CC, ES |
| Oxy 28-21D (F28 Pad) - DD - Plan #1 | 1,900.0 | 1,893.5 | 62.3 | 52.9 | 6.634 | SF |
| Oxy 28-23D (F28 Pad) - DD - Plan #1 | 500.0 | 500.0 | 30.8 | 29.1 | 18.195 | CC |
| Oxy 28-23D (F28 Pad) - DD - Plan #1 | 1,200.0 | 1,196.9 | 32.8 | 28.1 | 7.007 | ES |
| Oxy 28-23D (F28 Pad) - DD - Plan #1 | 1,500.0 | 1,495.4 | 37.9 | 31.4 | 5.821 | SF |
| Oxy 28-24D (F28 Pad) - DD - Plan #1 | 300.0 | 300.0 | 15.0 | 14.0 | 15.081 | CC, ES |
| Oxy 28-24D (F28 Pad) - DD - Plan #1 | 500.0 | 499.4 | 18.3 | 16.6 | 10.804 | SF |
| Oxy 28-25D (F28 Pad) - DD - Plan #1 | 400.0 | 400.0 | 61.1 | 59.7 | 45.445 | CC, ES |
| Oxy 28-25D (F28 Pad) - DD - Plan #1 | 800.0 | 792.5 | 78.3 | 75.5 | 28.403 | SF |
| Oxy 28-26D (F28 Pad) - DD - Plan #1 | 400.0 | 400.0 | 75.8 | 74.5 | 56.435 | CC, ES |
| Oxy 28-26D (F28 Pad) - DD - Plan #1 | 1,000.0 | 983.3 | 115.7 | 112.1 | 32.661 | SF |
| Oxy 28-27D (F28 Pad) - DD - Plan #1 | 400.0 | 400.0 | 90.7 | 89.3 | 67.482 | CC, ES |
| Oxy 28-27D (F28 Pad) - DD - Plan #1 | 1,200.0 | 1,171.1 | 159.5 | 155.0 | 35.451 | SF |
| Oxy 28-28D (F28 Pad) - DD - Plan #1 | 400.0 | 400.0 | 106.2 | 104.8 | 78.993 | CC, ES |
| Oxy 28-28D (F28 Pad) - DD - Plan #1 | 1,300.0 | 1,264.0 | 186.2 | 181.1 | 36.587 | SF |
| Oxy 28-29D (F28 Pad) - DD - Plan #1 | 400.0 | 400.0 | 121.1 | 119.7 | 90.080 | CC, ES |
| Oxy 28-29D (F28 Pad) - DD - Plan #1 | 1,300.0 | 1,264.4 | 190.7 | 185.6 | 37.226 | SF |
| Oxy 28-30D (F28 Pad) - DD - Plan #1 | 200.0 | 200.0 | 120.6 | 119.9 | 186.691 | CC, ES |
| Oxy 28-30D (F28 Pad) - DD - Plan #1 | 1,100.0 | 1,063.6 | 195.7 | 191.7 | 48.784 | SF |
| Oxy 28-31D (F28 Pad) - DD - Plan #1 | 300.0 | 300.0 | 105.1 | 104.1 | 105.648 | CC, ES |
| Oxy 28-31D (F28 Pad) - DD - Plan #1 | 1,400.0 | 1,359.9 | 196.4 | 190.6 | 33.853 | SF |
| Oxy 28-32D (F28 Pad) - DD - Plan #1 | 200.0 | 200.0 | 90.1 | 89.5 | 139.528 | CC, ES |
| Oxy 28-32D (F28 Pad) - DD - Plan #1 | 1,400.0 | 1,358.3 | 197.9 | 192.1 | 34.053 | SF |

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

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|------------------------------------------------------------------------------|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|-----------------------------------------|-----------------------------------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference: SENW S28-T6S-R97W (F28 Pad) - Oxy 28-15D (F28 Pad) - DD - Plan #1 | | | | | | | | | | | | | | | |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | Total Uncertainty Axis | Separation Factor | 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) | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -103.09 | -4.0 | -17.2 | 17.7 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -103.09 | -4.0 | -17.2 | 17.7 | 17.4 | 0.30 | 59.566 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -103.09 | -4.0 | -17.2 | 17.7 | 17.0 | 0.65 | 27.368 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -103.09 | -4.0 | -17.2 | 17.7 | 16.7 | 0.99 | 17.765 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -103.09 | -4.0 | -17.2 | 17.7 | 16.3 | 1.34 | 13.151 | | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.8 | 0.8 | -103.09 | -4.0 | -17.2 | 17.7 | 16.0 | 1.69 | 10.439 | | | |
| 600.0 | 600.0 | 600.2 | 600.2 | 1.0 | 1.0 | -99.84 | -5.0 | -16.3 | 17.2 | 15.2 | 2.04 | 8.434 | | | |
| 629.7 | 629.7 | 629.9 | 629.9 | 1.1 | 1.1 | -105.58 | -5.6 | -15.7 | 17.2 | 15.0 | 2.15 | 7.974 | CC, ES | | |
| 700.0 | 699.9 | 699.9 | 699.9 | 1.2 | 1.2 | -124.30 | -7.9 | -13.7 | 18.1 | 15.7 | 2.40 | 7.540 | SF | | |
| 800.0 | 799.7 | 799.0 | 798.7 | 1.4 | 1.4 | -152.31 | -12.6 | -9.3 | 25.2 | 22.4 | 2.76 | 9.118 | | | |
| 900.0 | 899.3 | 896.9 | 896.2 | 1.6 | 1.6 | -169.68 | -19.2 | -3.3 | 39.8 | 36.7 | 3.10 | 12.827 | | | |
| 1,000.0 | 998.6 | 993.3 | 991.9 | 1.9 | 1.8 | -178.81 | -27.4 | 4.3 | 60.8 | 57.4 | 3.44 | 17.649 | | | |
| 1,100.0 | 1,097.5 | 1,088.0 | 1,085.6 | 2.1 | 2.1 | 176.10 | -37.3 | 13.3 | 87.2 | 83.4 | 3.78 | 23.043 | | | |
| 1,200.0 | 1,196.1 | 1,180.5 | 1,176.9 | 2.4 | 2.4 | 173.01 | -48.5 | 23.7 | 118.6 | 114.5 | 4.12 | 28.762 | | | |
| 1,300.0 | 1,294.2 | 1,270.7 | 1,265.5 | 2.8 | 2.7 | 170.99 | -61.1 | 35.2 | 154.6 | 150.2 | 4.46 | 34.657 | | | |
| 1,400.0 | 1,392.1 | 1,358.9 | 1,351.7 | 3.1 | 3.0 | 169.60 | -74.8 | 47.8 | 193.7 | 188.9 | 4.82 | 40.232 | | | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -90.00 | 0.0 | -32.2 | 32.2 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -90.00 | 0.0 | -32.2 | 32.2 | 31.9 | 0.30 | 108.427 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -90.00 | 0.0 | -32.2 | 32.2 | 31.5 | 0.65 | 49.818 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -90.00 | 0.0 | -32.2 | 32.2 | 31.2 | 0.99 | 32.338 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -90.00 | 0.0 | -32.2 | 32.2 | 30.8 | 1.34 | 23.939 | | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.8 | 0.8 | -90.00 | 0.0 | -32.2 | 32.2 | 30.5 | 1.69 | 19.003 | | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | -80.87 | 0.0 | -32.2 | 31.9 | 29.9 | 2.04 | 15.633 | | | |
| 628.3 | 628.3 | 628.1 | 628.1 | 1.1 | 1.1 | -82.52 | -0.1 | -32.2 | 31.9 | 29.7 | 2.14 | 14.870 | CC, ES | | |
| 700.0 | 699.9 | 699.3 | 699.3 | 1.2 | 1.2 | -89.57 | -1.1 | -32.9 | 32.4 | 30.0 | 2.40 | 13.524 | | | |
| 800.0 | 799.7 | 798.2 | 798.1 | 1.4 | 1.4 | -104.31 | -4.3 | -34.9 | 36.3 | 33.5 | 2.76 | 13.130 | SF | | |
| 900.0 | 899.3 | 896.2 | 895.9 | 1.6 | 1.6 | -119.50 | -9.7 | -38.3 | 45.7 | 42.6 | 3.13 | 14.601 | | | |
| 1,000.0 | 998.6 | 993.7 | 993.1 | 1.9 | 1.8 | -131.14 | -16.8 | -42.9 | 61.2 | 57.7 | 3.50 | 17.505 | | | |
| 1,100.0 | 1,097.5 | 1,091.4 | 1,090.3 | 2.1 | 2.0 | -139.14 | -24.3 | -47.6 | 80.4 | 76.6 | 3.86 | 20.850 | | | |
| 1,200.0 | 1,196.1 | 1,188.4 | 1,187.0 | 2.4 | 2.2 | -144.80 | -31.6 | -52.3 | 102.7 | 98.5 | 4.22 | 24.353 | | | |
| 1,300.0 | 1,294.2 | 1,284.9 | 1,283.0 | 2.8 | 2.4 | -149.00 | -38.9 | -56.9 | 127.8 | 123.2 | 4.58 | 27.920 | | | |
| 1,400.0 | 1,392.1 | 1,381.0 | 1,378.8 | 3.1 | 2.6 | -152.12 | -46.3 | -61.6 | 154.2 | 149.3 | 4.94 | 31.202 | | | |
| 1,500.0 | 1,489.9 | 1,477.2 | 1,474.5 | 3.5 | 2.8 | -154.33 | -53.6 | -66.2 | 181.0 | 175.7 | 5.31 | 34.081 | | | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -83.71 | 5.1 | -46.3 | 46.6 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -83.71 | 5.1 | -46.3 | 46.6 | 46.3 | 0.30 | 156.927 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -83.71 | 5.1 | -46.3 | 46.6 | 45.9 | 0.65 | 72.102 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -83.71 | 5.1 | -46.3 | 46.6 | 45.6 | 0.99 | 46.803 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -83.71 | 5.1 | -46.3 | 46.6 | 45.2 | 1.34 | 34.646 | | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.8 | 0.8 | -83.71 | 5.1 | -46.3 | 46.6 | 44.9 | 1.69 | 27.503 | | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | -73.83 | 5.1 | -46.3 | 46.2 | 44.1 | 2.04 | 22.605 | | | |
| 643.2 | 643.2 | 642.8 | 642.8 | 1.1 | 1.1 | -75.64 | 5.0 | -46.5 | 46.0 | 43.8 | 2.20 | 20.956 | CC, ES | | |
| 700.0 | 699.9 | 698.9 | 698.9 | 1.2 | 1.2 | -79.37 | 4.4 | -47.4 | 46.4 | 44.0 | 2.40 | 19.341 | | | |
| 800.0 | 799.7 | 797.4 | 797.3 | 1.4 | 1.4 | -88.97 | 2.5 | -50.7 | 49.2 | 46.5 | 2.76 | 17.811 | SF | | |
| 900.0 | 899.3 | 895.6 | 895.3 | 1.6 | 1.6 | -100.36 | -0.7 | -56.0 | 56.2 | 53.0 | 3.15 | 17.862 | | | |
| 1,000.0 | 998.6 | 994.4 | 993.9 | 1.9 | 1.8 | -111.11 | -4.3 | -62.0 | 66.5 | 63.0 | 3.54 | 18.789 | | | |
| 1,100.0 | 1,097.5 | 1,092.8 | 1,092.0 | 2.1 | 1.9 | -120.34 | -7.9 | -68.0 | 79.9 | 75.9 | 3.94 | 20.267 | | | |
| 1,200.0 | 1,196.1 | 1,190.7 | 1,189.7 | 2.4 | 2.1 | -127.99 | -11.4 | -73.9 | 96.3 | 92.0 | 4.34 | 22.176 | | | |
| 1,300.0 | 1,294.2 | 1,288.1 | 1,286.8 | 2.8 | 2.3 | -134.24 | -14.9 | -79.8 | 115.8 | 111.1 | 4.74 | 24.410 | | | |
| 1,400.0 | 1,392.1 | 1,385.2 | 1,383.7 | 3.1 | 2.5 | -139.09 | -18.5 | -85.7 | 137.0 | 131.9 | 5.14 | 26.659 | | | |
| 1,500.0 | 1,489.9 | 1,482.4 | 1,480.6 | 3.5 | 2.7 | -142.63 | -22.0 | -91.6 | 159.0 | 153.4 | 5.53 | 28.723 | | | |
| 1,600.0 | 1,587.8 | 1,579.6 | 1,577.6 | 3.9 | 2.9 | -145.31 | -25.5 | -97.4 | 181.3 | 175.4 | 5.93 | 30.593 | | | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | | | | | | | | | | | | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -71.92 | 23.3 | -71.4 | 75.1 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -71.92 | 23.3 | -71.4 | 75.1 | 74.8 | 0.30 | 253.134 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -71.92 | 23.3 | -71.4 | 75.1 | 74.5 | 0.65 | 116.305 | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -71.92 | 23.3 | -71.4 | 75.1 | 74.1 | 0.99 | 75.496 | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -71.92 | 23.3 | -71.4 | 75.1 | 73.8 | 1.34 | 55.887 | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.8 | 0.8 | -71.92 | 23.3 | -71.4 | 75.1 | 73.4 | 1.69 | 44.364 | | |
| 600.0 | 600.0 | 600.0 | 600.0 | 1.0 | 1.0 | -61.37 | 23.3 | -71.4 | 74.5 | 72.4 | 2.04 | 36.457 | | |
| 700.0 | 699.9 | 698.3 | 698.3 | 1.2 | 1.2 | -63.50 | 24.3 | -72.2 | 73.7 | 71.3 | 2.39 | 30.798 | | |
| 716.1 | 715.9 | 714.1 | 714.1 | 1.2 | 1.2 | -63.92 | 24.6 | -72.5 | 73.7 | 71.3 | 2.45 | 30.058 CC, ES | | |
| 800.0 | 799.7 | 796.7 | 796.6 | 1.4 | 1.4 | -66.34 | 27.1 | -74.8 | 74.1 | 71.4 | 2.76 | 26.875 | | |
| 900.0 | 899.3 | 895.4 | 895.1 | 1.6 | 1.6 | -69.79 | 31.8 | -78.9 | 75.8 | 72.6 | 3.15 | 24.069 | | |
| 1,000.0 | 998.6 | 995.2 | 994.6 | 1.9 | 1.8 | -74.57 | 37.1 | -83.7 | 77.5 | 73.9 | 3.57 | 21.684 | | |
| 1,100.0 | 1,097.5 | 1,094.8 | 1,094.0 | 2.1 | 2.0 | -80.96 | 42.4 | -88.4 | 79.2 | 75.2 | 4.04 | 19.607 | | |
| 1,200.0 | 1,196.1 | 1,194.1 | 1,193.1 | 2.4 | 2.2 | -88.77 | 47.7 | -93.1 | 81.9 | 77.3 | 4.56 | 17.967 | | |
| 1,300.0 | 1,294.2 | 1,293.1 | 1,291.8 | 2.8 | 2.4 | -97.63 | 52.9 | -97.8 | 86.2 | 81.1 | 5.10 | 16.910 | | |
| 1,400.0 | 1,392.1 | 1,392.0 | 1,390.5 | 3.1 | 2.6 | -106.11 | 58.2 | -102.5 | 92.8 | 87.2 | 5.63 | 16.494 SF | | |
| 1,500.0 | 1,489.9 | 1,490.9 | 1,489.1 | 3.5 | 2.8 | -113.35 | 63.5 | -107.2 | 101.1 | 95.0 | 6.12 | 16.516 | | |
| 1,600.0 | 1,587.8 | 1,589.8 | 1,587.8 | 3.9 | 3.0 | -119.42 | 68.7 | -111.8 | 110.8 | 104.2 | 6.59 | 16.814 | | |
| 1,700.0 | 1,685.7 | 1,688.7 | 1,686.4 | 4.2 | 3.2 | -124.48 | 74.0 | -116.5 | 121.5 | 114.5 | 7.03 | 17.279 | | |
| 1,800.0 | 1,783.6 | 1,787.6 | 1,785.1 | 4.6 | 3.4 | -128.70 | 79.2 | -121.2 | 133.0 | 125.6 | 7.46 | 17.837 | | |
| 1,900.0 | 1,881.5 | 1,886.5 | 1,883.7 | 5.0 | 3.6 | -132.24 | 84.5 | -125.9 | 145.2 | 137.3 | 7.87 | 18.441 | | |
| 2,000.0 | 1,979.3 | 1,985.4 | 1,982.3 | 5.4 | 3.8 | -135.23 | 89.8 | -130.6 | 157.8 | 149.5 | 8.28 | 19.062 | | |
| 2,100.0 | 2,077.2 | 2,084.3 | 2,081.0 | 5.8 | 4.0 | -137.77 | 95.0 | -135.3 | 170.7 | 162.0 | 8.67 | 19.681 | | |
| 2,200.0 | 2,175.1 | 2,183.2 | 2,179.6 | 6.2 | 4.2 | -139.95 | 100.3 | -140.0 | 183.9 | 174.9 | 9.07 | 20.287 | | |
| 2,300.0 | 2,273.0 | 2,282.1 | 2,278.3 | 6.6 | 4.4 | -141.84 | 105.5 | -144.6 | 197.4 | 187.9 | 9.46 | 20.873 | | |

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

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | | |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--|--|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft | | |
| Reference | | | | | | | | | | | | | | | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -71.38 | 19.3 | -57.3 | 60.5 | | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -71.38 | 19.3 | -57.3 | 60.5 | 60.2 | 0.30 | 203.744 | | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -71.38 | 19.3 | -57.3 | 60.5 | 59.8 | 0.65 | 93.612 | | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -71.38 | 19.3 | -57.3 | 60.5 | 59.5 | 0.99 | 60.766 | | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -71.38 | 19.3 | -57.3 | 60.5 | 59.1 | 1.34 | 44.983 | | | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.8 | 0.8 | -71.38 | 19.3 | -57.3 | 60.5 | 58.8 | 1.69 | 35.708 | CC | | | |
| 600.0 | 600.0 | 598.9 | 598.9 | 1.0 | 1.0 | -60.16 | 20.4 | -57.9 | 60.7 | 58.7 | 2.04 | 29.750 | ES | | | |
| 700.0 | 699.9 | 697.7 | 697.7 | 1.2 | 1.2 | -60.79 | 23.9 | -59.6 | 61.6 | 59.2 | 2.40 | 25.684 | | | | |
| 800.0 | 799.7 | 796.6 | 796.3 | 1.4 | 1.4 | -61.79 | 29.5 | -62.6 | 63.0 | 60.2 | 2.77 | 22.740 | | | | |
| 900.0 | 899.3 | 896.1 | 895.4 | 1.6 | 1.6 | -63.44 | 37.1 | -66.5 | 64.6 | 61.5 | 3.17 | 20.418 | | | | |
| 1,000.0 | 998.6 | 996.0 | 995.0 | 1.9 | 1.8 | -66.94 | 45.0 | -70.5 | 65.5 | 61.9 | 3.60 | 18.183 | | | | |
| 1,100.0 | 1,097.5 | 1,095.8 | 1,094.4 | 2.1 | 2.0 | -72.49 | 52.8 | -74.6 | 65.7 | 61.6 | 4.08 | 16.080 | | | | |
| 1,200.0 | 1,196.1 | 1,195.4 | 1,193.6 | 2.4 | 2.2 | -80.14 | 60.6 | -78.6 | 66.0 | 61.4 | 4.63 | 14.260 | | | | |
| 1,300.0 | 1,294.2 | 1,294.8 | 1,292.5 | 2.8 | 2.5 | -89.74 | 68.4 | -82.6 | 67.4 | 62.2 | 5.22 | 12.920 | | | | |
| 1,400.0 | 1,392.1 | 1,394.0 | 1,391.4 | 3.1 | 2.7 | -99.50 | 76.2 | -86.6 | 70.9 | 65.1 | 5.79 | 12.230 | | | | |
| 1,500.0 | 1,489.9 | 1,493.2 | 1,490.2 | 3.5 | 2.9 | -108.15 | 84.0 | -90.7 | 76.1 | 69.8 | 6.32 | 12.041 | SF | | | |
| 1,600.0 | 1,587.8 | 1,592.5 | 1,589.1 | 3.9 | 3.1 | -115.55 | 91.7 | -94.7 | 82.9 | 76.1 | 6.80 | 12.187 | | | | |
| 1,700.0 | 1,685.7 | 1,691.7 | 1,687.9 | 4.2 | 3.4 | -121.75 | 99.5 | -98.7 | 90.9 | 83.6 | 7.25 | 12.543 | | | | |
| 1,800.0 | 1,783.6 | 1,791.0 | 1,786.8 | 4.6 | 3.6 | -126.91 | 107.3 | -102.7 | 99.7 | 92.1 | 7.66 | 13.023 | | | | |
| 1,900.0 | 1,881.5 | 1,890.2 | 1,885.6 | 5.0 | 3.8 | -131.21 | 115.1 | -106.7 | 109.2 | 101.2 | 8.05 | 13.571 | | | | |
| 2,000.0 | 1,979.3 | 1,989.4 | 1,984.5 | 5.4 | 4.0 | -134.81 | 122.9 | -110.7 | 119.3 | 110.8 | 8.43 | 14.150 | | | | |
| 2,100.0 | 2,077.2 | 2,088.7 | 2,083.3 | 5.8 | 4.3 | -137.84 | 130.6 | -114.7 | 129.7 | 120.9 | 8.80 | 14.738 | | | | |
| 2,200.0 | 2,175.1 | 2,187.9 | 2,182.2 | 6.2 | 4.5 | -140.41 | 138.4 | -118.8 | 140.4 | 131.3 | 9.17 | 15.319 | | | | |
| 2,300.0 | 2,273.0 | 2,287.1 | 2,281.1 | 6.6 | 4.7 | -142.62 | 146.2 | -122.8 | 151.4 | 141.9 | 9.53 | 15.885 | | | | |
| 2,400.0 | 2,370.9 | 2,386.4 | 2,379.9 | 7.0 | 5.0 | -144.53 | 154.0 | -126.8 | 162.6 | 152.7 | 9.90 | 16.431 | | | | |
| 2,500.0 | 2,468.8 | 2,485.6 | 2,478.8 | 7.3 | 5.2 | -146.19 | 161.8 | -130.8 | 173.9 | 163.7 | 10.26 | 16.954 | | | | |
| 2,600.0 | 2,566.6 | 2,584.9 | 2,577.6 | 7.7 | 5.4 | -147.65 | 169.5 | -134.8 | 185.4 | 174.7 | 10.62 | 17.455 | | | | |
| 2,700.0 | 2,664.5 | 2,684.1 | 2,676.5 | 8.1 | 5.6 | -148.93 | 177.3 | -138.8 | 196.9 | 185.9 | 10.98 | 17.931 | | | | |

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

Directional Plus

Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | | | | | | | | |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|-----------------|--|----------|--|--|--|---------|--|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft | | | | | | | |
| Reference | | | | | | | | | | | | | Offset | | Semi Major Axis | | Distance | | | | Warning | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | | | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -71.79 | 14.2 | -43.2 | 45.5 | | | | | | | | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -71.79 | 14.2 | -43.2 | 45.5 | 45.2 | 0.30 | 153.194 | | | | | | | | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -71.79 | 14.2 | -43.2 | 45.5 | 44.8 | 0.65 | 70.387 | | | | | | | | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -71.79 | 14.2 | -43.2 | 45.5 | 44.5 | 0.99 | 45.690 | | | | | | | | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -71.79 | 14.2 | -43.2 | 45.5 | 44.1 | 1.34 | 33.822 CC, ES | | | | | | | | | | |
| 500.0 | 500.0 | 499.3 | 499.3 | 0.8 | 0.8 | -70.51 | 15.4 | -43.6 | 46.2 | 44.6 | 1.69 | 27.326 | | | | | | | | | | |
| 600.0 | 600.0 | 598.5 | 598.4 | 1.0 | 1.0 | -56.74 | 19.1 | -44.8 | 48.0 | 46.0 | 2.05 | 23.473 | | | | | | | | | | |
| 700.0 | 699.9 | 697.6 | 697.3 | 1.2 | 1.2 | -54.83 | 25.2 | -46.9 | 50.1 | 47.7 | 2.41 | 20.795 | | | | | | | | | | |
| 800.0 | 799.7 | 796.6 | 795.9 | 1.4 | 1.4 | -53.31 | 33.7 | -49.7 | 52.4 | 49.7 | 2.79 | 18.801 | | | | | | | | | | |
| 900.0 | 899.3 | 895.6 | 894.2 | 1.6 | 1.7 | -52.15 | 44.7 | -53.4 | 55.1 | 51.9 | 3.19 | 17.237 | | | | | | | | | | |
| 1,000.0 | 998.6 | 995.3 | 992.9 | 1.9 | 1.9 | -51.73 | 57.5 | -57.7 | 57.5 | 53.9 | 3.63 | 15.855 | | | | | | | | | | |
| 1,100.0 | 1,097.5 | 1,095.2 | 1,092.0 | 2.1 | 2.2 | -53.27 | 70.6 | -62.1 | 58.4 | 54.3 | 4.10 | 14.246 | | | | | | | | | | |
| 1,200.0 | 1,196.1 | 1,195.2 | 1,190.9 | 2.4 | 2.5 | -56.89 | 83.7 | -66.4 | 57.9 | 53.3 | 4.64 | 12.476 | | | | | | | | | | |
| 1,300.0 | 1,294.2 | 1,295.0 | 1,289.8 | 2.8 | 2.8 | -62.85 | 96.7 | -70.8 | 56.4 | 51.2 | 5.28 | 10.687 | | | | | | | | | | |
| 1,400.0 | 1,392.1 | 1,394.7 | 1,388.6 | 3.1 | 3.1 | -70.01 | 109.8 | -75.2 | 55.2 | 49.3 | 5.99 | 9.227 | | | | | | | | | | |
| 1,483.6 | 1,473.9 | 1,478.1 | 1,471.2 | 3.4 | 3.3 | -76.15 | 120.7 | -78.8 | 54.9 | 48.3 | 6.60 | 8.320 | | | | | | | | | | |
| 1,500.0 | 1,489.9 | 1,494.5 | 1,487.4 | 3.5 | 3.3 | -77.36 | 122.8 | -79.5 | 54.9 | 48.2 | 6.72 | 8.173 | | | | | | | | | | |
| 1,600.0 | 1,587.8 | 1,594.2 | 1,586.2 | 3.9 | 3.6 | -84.67 | 135.8 | -83.9 | 55.5 | 48.1 | 7.45 | 7.452 | | | | | | | | | | |
| 1,700.0 | 1,685.7 | 1,694.0 | 1,685.0 | 4.2 | 3.9 | -91.72 | 148.9 | -88.3 | 57.0 | 48.9 | 8.15 | 6.994 | | | | | | | | | | |
| 1,800.0 | 1,783.6 | 1,793.7 | 1,783.8 | 4.6 | 4.2 | -98.31 | 161.9 | -92.6 | 59.3 | 50.5 | 8.80 | 6.738 | | | | | | | | | | |
| 1,900.0 | 1,881.5 | 1,893.5 | 1,882.6 | 5.0 | 4.5 | -104.35 | 175.0 | -97.0 | 62.3 | 52.9 | 9.40 | 6.634 SF | | | | | | | | | | |
| 2,000.0 | 1,979.3 | 1,993.2 | 1,981.4 | 5.4 | 4.8 | -109.77 | 188.0 | -101.3 | 66.0 | 56.1 | 9.94 | 6.641 | | | | | | | | | | |
| 2,100.0 | 2,077.2 | 2,093.0 | 2,080.2 | 5.8 | 5.1 | -114.58 | 201.0 | -105.7 | 70.2 | 59.7 | 10.43 | 6.727 | | | | | | | | | | |
| 2,200.0 | 2,175.1 | 2,192.7 | 2,179.0 | 6.2 | 5.4 | -118.84 | 214.1 | -110.1 | 74.8 | 63.9 | 10.89 | 6.870 | | | | | | | | | | |
| 2,300.0 | 2,273.0 | 2,292.5 | 2,277.8 | 6.6 | 5.7 | -122.58 | 227.1 | -114.4 | 79.8 | 68.5 | 11.32 | 7.051 | | | | | | | | | | |
| 2,400.0 | 2,370.9 | 2,392.2 | 2,376.6 | 7.0 | 6.0 | -125.87 | 240.2 | -118.8 | 85.1 | 73.3 | 11.72 | 7.257 | | | | | | | | | | |
| 2,500.0 | 2,468.8 | 2,492.0 | 2,475.4 | 7.3 | 6.3 | -128.76 | 253.2 | -123.2 | 90.6 | 78.5 | 12.11 | 7.479 | | | | | | | | | | |
| 2,600.0 | 2,566.6 | 2,591.7 | 2,574.2 | 7.7 | 6.5 | -131.32 | 266.2 | -127.5 | 96.3 | 83.8 | 12.49 | 7.711 | | | | | | | | | | |
| 2,700.0 | 2,664.5 | 2,691.5 | 2,672.9 | 8.1 | 6.8 | -133.59 | 279.3 | -131.9 | 102.2 | 89.4 | 12.86 | 7.946 | | | | | | | | | | |
| 2,800.0 | 2,762.4 | 2,791.2 | 2,771.7 | 8.5 | 7.1 | -135.61 | 292.3 | -136.3 | 108.3 | 95.0 | 13.23 | 8.182 | | | | | | | | | | |
| 2,900.0 | 2,860.3 | 2,891.0 | 2,870.5 | 8.9 | 7.4 | -137.41 | 305.4 | -140.6 | 114.4 | 100.8 | 13.60 | 8.415 | | | | | | | | | | |
| 3,000.0 | 2,958.2 | 2,990.7 | 2,969.3 | 9.3 | 7.7 | -139.03 | 318.4 | -145.0 | 120.7 | 106.7 | 13.96 | 8.645 | | | | | | | | | | |
| 3,100.0 | 3,056.1 | 3,090.5 | 3,068.1 | 9.7 | 8.0 | -140.48 | 331.4 | -149.3 | 127.1 | 112.7 | 14.32 | 8.870 | | | | | | | | | | |
| 3,200.0 | 3,153.9 | 3,190.2 | 3,166.9 | 10.1 | 8.3 | -141.80 | 344.5 | -153.7 | 133.5 | 118.8 | 14.69 | 9.088 | | | | | | | | | | |
| 3,300.0 | 3,251.8 | 3,290.0 | 3,265.7 | 10.5 | 8.6 | -143.00 | 357.5 | -158.1 | 140.0 | 124.9 | 15.05 | 9.301 | | | | | | | | | | |
| 3,400.0 | 3,349.7 | 3,389.7 | 3,364.5 | 10.9 | 8.9 | -144.09 | 370.5 | -162.4 | 146.5 | 131.1 | 15.41 | 9.506 | | | | | | | | | | |
| 3,500.0 | 3,447.6 | 3,489.5 | 3,463.3 | 11.3 | 9.2 | -145.08 | 383.6 | -166.8 | 153.1 | 137.3 | 15.78 | 9.705 | | | | | | | | | | |
| 3,600.0 | 3,545.5 | 3,589.2 | 3,562.1 | 11.7 | 9.5 | -146.00 | 396.6 | -171.2 | 159.7 | 143.6 | 16.14 | 9.897 | | | | | | | | | | |
| 3,700.0 | 3,643.4 | 3,688.9 | 3,660.9 | 12.1 | 9.8 | -146.84 | 409.7 | -175.5 | 166.4 | 149.9 | 16.51 | 10.082 | | | | | | | | | | |
| 3,800.0 | 3,741.2 | 3,788.7 | 3,759.7 | 12.5 | 10.1 | -147.61 | 422.7 | -179.9 | 173.1 | 156.3 | 16.87 | 10.260 | | | | | | | | | | |
| 3,900.0 | 3,839.1 | 3,888.4 | 3,858.5 | 12.9 | 10.4 | -148.33 | 435.7 | -184.3 | 179.9 | 162.6 | 17.24 | 10.432 | | | | | | | | | | |
| 4,000.0 | 3,937.0 | 3,988.2 | 3,957.3 | 13.3 | 10.7 | -149.00 | 448.8 | -188.6 | 186.6 | 169.0 | 17.61 | 10.598 | | | | | | | | | | |
| 4,100.0 | 4,034.9 | 4,087.9 | 4,056.1 | 13.7 | 11.0 | -149.62 | 461.8 | -193.0 | 193.4 | 175.4 | 17.98 | 10.758 | | | | | | | | | | |

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

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -70.67 | 10.2 | -29.1 | 30.8 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -70.67 | 10.2 | -29.1 | 30.8 | 30.5 | 0.30 | 103.820 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -70.67 | 10.2 | -29.1 | 30.8 | 30.2 | 0.65 | 47.701 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -70.67 | 10.2 | -29.1 | 30.8 | 29.8 | 0.99 | 30.964 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -70.67 | 10.2 | -29.1 | 30.8 | 29.5 | 1.34 | 22.921 | | | |
| 500.0 | 500.0 | 500.0 | 500.0 | 0.8 | 0.8 | -70.67 | 10.2 | -29.1 | 30.8 | 29.1 | 1.69 | 18.195 CC | | | |
| 600.0 | 600.0 | 599.6 | 599.6 | 1.0 | 1.0 | -59.29 | 11.5 | -29.4 | 30.8 | 28.8 | 2.04 | 15.101 | | | |
| 700.0 | 699.9 | 699.1 | 699.0 | 1.2 | 1.2 | -59.47 | 15.2 | -30.3 | 31.0 | 28.6 | 2.40 | 12.900 | | | |
| 800.0 | 799.7 | 798.7 | 798.4 | 1.4 | 1.4 | -59.75 | 21.5 | -31.8 | 31.2 | 28.4 | 2.78 | 11.227 | | | |
| 900.0 | 899.3 | 898.3 | 897.5 | 1.6 | 1.6 | -60.15 | 30.4 | -34.0 | 31.5 | 28.3 | 3.18 | 9.887 | | | |
| 1,000.0 | 998.6 | 997.8 | 996.4 | 1.9 | 1.8 | -60.65 | 41.7 | -36.7 | 31.8 | 28.2 | 3.63 | 8.774 | | | |
| 1,100.0 | 1,097.5 | 1,097.4 | 1,094.9 | 2.1 | 2.1 | -61.25 | 55.5 | -40.1 | 32.3 | 28.2 | 4.13 | 7.826 | | | |
| 1,200.0 | 1,196.1 | 1,196.9 | 1,193.1 | 2.4 | 2.4 | -61.93 | 71.8 | -44.1 | 32.8 | 28.1 | 4.69 | 7.007 ES | | | |
| 1,300.0 | 1,294.2 | 1,296.5 | 1,290.8 | 2.8 | 2.8 | -62.66 | 90.6 | -48.7 | 33.5 | 28.2 | 5.31 | 6.299 | | | |
| 1,400.0 | 1,392.1 | 1,396.0 | 1,387.9 | 3.1 | 3.2 | -61.09 | 111.8 | -53.8 | 35.0 | 29.0 | 5.95 | 5.876 | | | |
| 1,500.0 | 1,489.9 | 1,495.4 | 1,484.2 | 3.5 | 3.6 | -56.36 | 135.5 | -59.6 | 37.9 | 31.4 | 6.52 | 5.821 SF | | | |
| 1,600.0 | 1,587.8 | 1,594.9 | 1,580.0 | 3.9 | 4.0 | -49.93 | 161.4 | -65.9 | 42.7 | 35.7 | 6.97 | 6.123 | | | |
| 1,700.0 | 1,685.7 | 1,694.6 | 1,676.0 | 4.2 | 4.5 | -44.49 | 187.7 | -72.3 | 48.1 | 40.8 | 7.36 | 6.533 | | | |
| 1,800.0 | 1,783.6 | 1,794.4 | 1,772.0 | 4.6 | 5.0 | -40.19 | 214.0 | -78.7 | 53.9 | 46.2 | 7.74 | 6.967 | | | |
| 1,900.0 | 1,881.5 | 1,894.2 | 1,868.0 | 5.0 | 5.5 | -36.74 | 240.3 | -85.1 | 60.0 | 51.9 | 8.10 | 7.403 | | | |
| 2,000.0 | 1,979.3 | 1,993.9 | 1,964.1 | 5.4 | 6.0 | -33.93 | 266.7 | -91.5 | 66.2 | 57.7 | 8.45 | 7.829 | | | |
| 2,100.0 | 2,077.2 | 2,093.7 | 2,060.1 | 5.8 | 6.4 | -31.60 | 293.0 | -98.0 | 72.5 | 63.7 | 8.81 | 8.239 | | | |
| 2,200.0 | 2,175.1 | 2,193.4 | 2,156.1 | 6.2 | 6.9 | -29.65 | 319.3 | -104.4 | 79.0 | 69.8 | 9.16 | 8.629 | | | |
| 2,300.0 | 2,273.0 | 2,293.2 | 2,252.1 | 6.6 | 7.4 | -28.00 | 345.6 | -110.8 | 85.5 | 76.0 | 9.51 | 8.998 | | | |
| 2,400.0 | 2,370.9 | 2,392.9 | 2,348.1 | 7.0 | 7.9 | -26.59 | 372.0 | -117.2 | 92.1 | 82.3 | 9.86 | 9.347 | | | |
| 2,500.0 | 2,468.8 | 2,492.7 | 2,444.1 | 7.3 | 8.4 | -25.36 | 398.3 | -123.6 | 98.8 | 88.6 | 10.21 | 9.677 | | | |
| 2,600.0 | 2,566.6 | 2,592.5 | 2,540.1 | 7.7 | 8.9 | -24.29 | 424.6 | -130.0 | 105.4 | 94.9 | 10.56 | 9.987 | | | |
| 2,700.0 | 2,664.5 | 2,692.2 | 2,636.1 | 8.1 | 9.4 | -23.34 | 450.9 | -136.4 | 112.2 | 101.2 | 10.91 | 10.279 | | | |
| 2,800.0 | 2,762.4 | 2,792.0 | 2,732.1 | 8.5 | 9.9 | -22.51 | 477.2 | -142.8 | 118.9 | 107.6 | 11.26 | 10.555 | | | |
| 2,900.0 | 2,860.3 | 2,891.7 | 2,828.1 | 8.9 | 10.4 | -21.76 | 503.6 | -149.3 | 125.7 | 114.0 | 11.62 | 10.815 | | | |
| 3,000.0 | 2,958.2 | 2,991.5 | 2,924.1 | 9.3 | 10.9 | -21.09 | 529.9 | -155.7 | 132.4 | 120.5 | 11.97 | 11.060 | | | |
| 3,100.0 | 3,056.1 | 3,091.3 | 3,020.2 | 9.7 | 11.4 | -20.48 | 556.2 | -162.1 | 139.2 | 126.9 | 12.33 | 11.292 | | | |
| 3,200.0 | 3,153.9 | 3,191.0 | 3,116.2 | 10.1 | 11.9 | -19.93 | 582.5 | -168.5 | 146.0 | 133.4 | 12.69 | 11.511 | | | |
| 3,300.0 | 3,251.8 | 3,290.8 | 3,212.2 | 10.5 | 12.4 | -19.43 | 608.9 | -174.9 | 152.9 | 139.8 | 13.04 | 11.719 | | | |
| 3,400.0 | 3,349.7 | 3,390.5 | 3,308.2 | 10.9 | 12.9 | -18.98 | 635.2 | -181.3 | 159.7 | 146.3 | 13.40 | 11.916 | | | |
| 3,500.0 | 3,447.6 | 3,490.3 | 3,404.2 | 11.3 | 13.4 | -18.56 | 661.5 | -187.7 | 166.6 | 152.8 | 13.76 | 12.102 | | | |
| 3,600.0 | 3,545.5 | 3,590.0 | 3,500.2 | 11.7 | 13.9 | -18.17 | 687.8 | -194.1 | 173.4 | 159.3 | 14.12 | 12.280 | | | |
| 3,700.0 | 3,643.4 | 3,689.8 | 3,596.2 | 12.1 | 14.4 | -17.81 | 714.1 | -200.6 | 180.3 | 165.8 | 14.48 | 12.449 | | | |
| 3,800.0 | 3,741.2 | 3,789.6 | 3,692.2 | 12.5 | 14.9 | -17.48 | 740.5 | -207.0 | 187.1 | 172.3 | 14.84 | 12.609 | | | |
| 3,900.0 | 3,839.1 | 3,889.3 | 3,788.2 | 12.9 | 15.4 | -17.17 | 766.8 | -213.4 | 194.0 | 178.8 | 15.20 | 12.762 | | | |

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

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|---------------------------|---------------------------|---------------------------|---------------------------|-------------------|----------------|-----------------------------|-----------------------------------------|---------------|----------------------------|-----------------------------|------------------------------|----------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | Warning | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | Total Uncertainty Axis | Separation Factor | Warning | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -70.13 | 5.1 | -14.1 | 15.0 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -70.13 | 5.1 | -14.1 | 15.0 | 14.7 | 0.30 | 50.566 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -70.13 | 5.1 | -14.1 | 15.0 | 14.4 | 0.65 | 23.233 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -70.13 | 5.1 | -14.1 | 15.0 | 14.0 | 0.99 | 15.081 CC, ES | | | |
| 400.0 | 400.0 | 399.8 | 399.8 | 0.7 | 0.7 | -66.10 | 6.4 | -14.4 | 15.7 | 14.4 | 1.34 | 11.706 | | | |
| 500.0 | 500.0 | 499.4 | 499.3 | 0.8 | 0.9 | -56.18 | 10.2 | -15.2 | 18.3 | 16.6 | 1.70 | 10.804 SF | | | |
| 600.0 | 600.0 | 598.9 | 598.6 | 1.0 | 1.1 | -35.46 | 16.5 | -16.6 | 22.4 | 20.3 | 2.05 | 10.900 | | | |
| 700.0 | 699.9 | 698.2 | 697.5 | 1.2 | 1.3 | -29.21 | 25.4 | -18.5 | 26.8 | 24.4 | 2.41 | 11.137 | | | |
| 800.0 | 799.7 | 797.4 | 796.0 | 1.4 | 1.5 | -24.84 | 36.7 | -20.9 | 31.5 | 28.7 | 2.77 | 11.388 | | | |
| 900.0 | 899.3 | 896.4 | 894.0 | 1.6 | 1.8 | -21.68 | 50.5 | -23.9 | 36.3 | 33.2 | 3.13 | 11.618 | | | |
| 1,000.0 | 998.6 | 995.3 | 991.5 | 1.9 | 2.1 | -19.31 | 66.8 | -27.4 | 41.2 | 37.7 | 3.49 | 11.817 | | | |
| 1,100.0 | 1,097.5 | 1,094.1 | 1,088.4 | 2.1 | 2.5 | -17.50 | 85.5 | -31.4 | 46.1 | 42.3 | 3.85 | 11.985 | | | |
| 1,200.0 | 1,196.1 | 1,192.8 | 1,184.7 | 2.4 | 2.9 | -16.08 | 106.6 | -36.0 | 51.0 | 46.8 | 4.21 | 12.124 | | | |
| 1,300.0 | 1,294.2 | 1,291.3 | 1,280.2 | 2.8 | 3.3 | -14.94 | 130.2 | -41.0 | 56.0 | 51.4 | 4.57 | 12.240 | | | |
| 1,400.0 | 1,392.1 | 1,389.6 | 1,374.9 | 3.1 | 3.8 | -13.69 | 156.0 | -46.6 | 62.5 | 57.5 | 4.94 | 12.651 | | | |
| 1,500.0 | 1,489.9 | 1,487.5 | 1,468.5 | 3.5 | 4.3 | -12.26 | 184.1 | -52.6 | 71.5 | 66.2 | 5.29 | 13.512 | | | |
| 1,600.0 | 1,587.8 | 1,584.9 | 1,560.8 | 3.9 | 4.9 | -10.83 | 214.4 | -59.2 | 83.1 | 77.4 | 5.64 | 14.736 | | | |
| 1,700.0 | 1,685.7 | 1,683.6 | 1,653.9 | 4.2 | 5.5 | -9.58 | 246.6 | -66.1 | 96.3 | 90.3 | 5.98 | 16.107 | | | |
| 1,800.0 | 1,783.6 | 1,782.7 | 1,747.3 | 4.6 | 6.0 | -8.63 | 279.0 | -73.1 | 109.7 | 103.3 | 6.33 | 17.335 | | | |
| 1,900.0 | 1,881.5 | 1,881.8 | 1,840.6 | 5.0 | 6.6 | -7.88 | 311.4 | -80.0 | 123.0 | 116.4 | 6.67 | 18.436 | | | |
| 2,000.0 | 1,979.3 | 1,980.9 | 1,934.0 | 5.4 | 7.2 | -7.28 | 343.8 | -87.0 | 136.4 | 129.4 | 7.02 | 19.429 | | | |
| 2,100.0 | 2,077.2 | 2,080.0 | 2,027.4 | 5.8 | 7.8 | -6.79 | 376.2 | -94.0 | 149.8 | 142.4 | 7.37 | 20.329 | | | |
| 2,200.0 | 2,175.1 | 2,179.1 | 2,120.8 | 6.2 | 8.4 | -6.37 | 408.6 | -101.0 | 163.2 | 155.5 | 7.72 | 21.148 | | | |
| 2,300.0 | 2,273.0 | 2,278.2 | 2,214.2 | 6.6 | 9.0 | -6.02 | 441.0 | -107.9 | 176.6 | 168.5 | 8.07 | 21.896 | | | |
| 2,400.0 | 2,370.9 | 2,377.3 | 2,307.6 | 7.0 | 9.6 | -5.72 | 473.4 | -114.9 | 190.0 | 181.6 | 8.41 | 22.582 | | | |

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

Directional Plus

Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | | | | | | | | | | | | |
| Semi Major Axis | | | | | | | | | | | | | | | |
| Distance | | | | | | | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -81.43 | 9.1 | -60.4 | 61.1 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -81.43 | 9.1 | -60.4 | 61.1 | 60.8 | 0.30 | 205.840 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -81.43 | 9.1 | -60.4 | 61.1 | 60.4 | 0.65 | 94.575 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -81.43 | 9.1 | -60.4 | 61.1 | 60.1 | 0.99 | 61.391 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -81.43 | 9.1 | -60.4 | 61.1 | 59.7 | 1.34 | 45.445 CC, ES | | | |
| 500.0 | 500.0 | 498.5 | 498.5 | 0.8 | 0.8 | -81.90 | 8.8 | -61.6 | 62.3 | 60.6 | 1.69 | 36.821 | | | |
| 600.0 | 600.0 | 596.9 | 596.8 | 1.0 | 1.0 | -72.80 | 7.8 | -65.3 | 65.4 | 63.4 | 2.04 | 32.092 | | | |
| 700.0 | 699.9 | 695.0 | 694.7 | 1.2 | 1.2 | -77.56 | 6.1 | -71.4 | 70.5 | 68.1 | 2.39 | 29.488 | | | |
| 800.0 | 799.7 | 792.5 | 791.8 | 1.4 | 1.4 | -83.82 | 3.8 | -79.8 | 78.3 | 75.5 | 2.76 | 28.403 SF | | | |
| 900.0 | 899.3 | 889.2 | 887.9 | 1.6 | 1.7 | -90.57 | 0.9 | -90.6 | 89.4 | 86.2 | 3.14 | 28.488 | | | |
| 1,000.0 | 998.6 | 985.0 | 982.7 | 1.9 | 1.9 | -97.00 | -2.6 | -103.5 | 104.3 | 100.7 | 3.54 | 29.446 | | | |
| 1,100.0 | 1,097.5 | 1,079.7 | 1,076.1 | 2.1 | 2.2 | -102.64 | -6.7 | -118.6 | 123.2 | 119.3 | 3.98 | 31.001 | | | |
| 1,200.0 | 1,196.1 | 1,173.0 | 1,167.8 | 2.4 | 2.6 | -107.35 | -11.3 | -135.6 | 146.3 | 141.8 | 4.44 | 32.911 | | | |
| 1,300.0 | 1,294.2 | 1,264.9 | 1,257.6 | 2.8 | 2.9 | -111.20 | -16.5 | -154.5 | 173.3 | 168.3 | 4.95 | 35.006 | | | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -79.20 | 14.2 | -74.5 | 75.8 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -79.20 | 14.2 | -74.5 | 75.8 | 75.5 | 0.30 | 255.618 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -79.20 | 14.2 | -74.5 | 75.8 | 75.2 | 0.65 | 117.446 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -79.20 | 14.2 | -74.5 | 75.8 | 74.8 | 0.99 | 76.237 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -79.20 | 14.2 | -74.5 | 75.8 | 74.5 | 1.34 | 56.435 CC, ES | | | |
| 500.0 | 500.0 | 498.1 | 498.1 | 0.8 | 0.8 | -79.45 | 14.1 | -75.8 | 77.1 | 75.4 | 1.69 | 45.614 | | | |
| 600.0 | 600.0 | 596.1 | 596.0 | 1.0 | 1.0 | -69.53 | 13.8 | -79.5 | 80.3 | 78.3 | 2.04 | 39.449 | | | |
| 700.0 | 699.9 | 693.7 | 693.5 | 1.2 | 1.2 | -72.86 | 13.3 | -85.8 | 85.4 | 83.0 | 2.39 | 35.738 | | | |
| 800.0 | 799.7 | 791.0 | 790.3 | 1.4 | 1.4 | -77.49 | 12.6 | -94.4 | 92.6 | 89.8 | 2.75 | 33.653 | | | |
| 900.0 | 899.3 | 887.5 | 886.2 | 1.6 | 1.7 | -82.80 | 11.7 | -105.5 | 102.5 | 99.4 | 3.13 | 32.733 | | | |
| 1,000.0 | 998.6 | 983.3 | 981.1 | 1.9 | 1.9 | -88.21 | 10.6 | -118.8 | 115.7 | 112.1 | 3.54 | 32.661 SF | | | |
| 1,100.0 | 1,097.5 | 1,078.2 | 1,074.6 | 2.1 | 2.2 | -93.30 | 9.4 | -134.4 | 132.3 | 128.3 | 3.99 | 33.178 | | | |
| 1,200.0 | 1,196.1 | 1,172.0 | 1,166.7 | 2.4 | 2.5 | -97.82 | 8.0 | -152.0 | 152.5 | 148.1 | 4.48 | 34.072 | | | |
| 1,300.0 | 1,294.2 | 1,264.5 | 1,257.2 | 2.8 | 2.9 | -101.74 | 6.4 | -171.6 | 176.4 | 171.3 | 5.01 | 35.197 | | | |

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

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | | | | | | | | | | | | |
| Semi Major Axis | | | | | | | | | | | | | | | |
| Distance | | | | | | | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -77.71 | 19.3 | -88.6 | 90.7 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -77.71 | 19.3 | -88.6 | 90.7 | 90.4 | 0.30 | 305.656 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -77.71 | 19.3 | -88.6 | 90.7 | 90.0 | 0.65 | 140.436 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -77.71 | 19.3 | -88.6 | 90.7 | 89.7 | 0.99 | 91.161 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -77.71 | 19.3 | -88.6 | 90.7 | 89.3 | 1.34 | 67.482 CC, ES | | | |
| 500.0 | 500.0 | 497.7 | 497.7 | 0.8 | 0.8 | -77.78 | 19.5 | -89.9 | 92.0 | 90.3 | 1.69 | 54.448 | | | |
| 600.0 | 600.0 | 595.2 | 595.1 | 1.0 | 1.0 | -67.21 | 19.9 | -93.6 | 95.3 | 93.2 | 2.03 | 46.824 | | | |
| 700.0 | 699.9 | 692.5 | 692.2 | 1.2 | 1.2 | -69.43 | 20.7 | -99.7 | 100.2 | 97.8 | 2.38 | 42.012 | | | |
| 800.0 | 799.7 | 789.5 | 788.8 | 1.4 | 1.4 | -72.69 | 21.7 | -108.3 | 107.0 | 104.3 | 2.75 | 38.961 | | | |
| 900.0 | 899.3 | 885.9 | 884.6 | 1.6 | 1.7 | -76.62 | 23.1 | -119.2 | 116.1 | 112.9 | 3.13 | 37.096 | | | |
| 1,000.0 | 998.6 | 981.8 | 979.5 | 1.9 | 1.9 | -80.85 | 24.7 | -132.5 | 127.7 | 124.1 | 3.54 | 36.051 | | | |
| 1,100.0 | 1,097.5 | 1,076.9 | 1,073.3 | 2.1 | 2.2 | -85.07 | 26.6 | -148.0 | 142.1 | 138.1 | 4.00 | 35.566 | | | |
| 1,200.0 | 1,196.1 | 1,171.1 | 1,165.9 | 2.4 | 2.5 | -89.04 | 28.8 | -165.6 | 159.5 | 155.0 | 4.50 | 35.451 SF | | | |
| 1,300.0 | 1,294.2 | 1,264.4 | 1,257.0 | 2.8 | 2.9 | -92.68 | 31.2 | -185.3 | 180.0 | 175.0 | 5.06 | 35.590 | | | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | | | | | | | | | | | | |
| Semi Major Axis | | | | | | | | | | | | | | | |
| Distance | | | | | | | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -77.32 | 23.3 | -103.6 | 106.2 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -77.32 | 23.3 | -103.6 | 106.2 | 105.9 | 0.30 | 357.792 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -77.32 | 23.3 | -103.6 | 106.2 | 105.5 | 0.65 | 164.391 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -77.32 | 23.3 | -103.6 | 106.2 | 105.2 | 0.99 | 106.710 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -77.32 | 23.3 | -103.6 | 106.2 | 104.8 | 1.34 | 78.993 CC, ES | | | |
| 500.0 | 500.0 | 497.3 | 497.3 | 0.8 | 0.8 | -77.26 | 23.7 | -104.8 | 107.4 | 105.7 | 1.69 | 63.633 | | | |
| 600.0 | 600.0 | 594.5 | 594.4 | 1.0 | 1.0 | -66.24 | 24.8 | -108.3 | 110.7 | 108.7 | 2.03 | 54.445 | | | |
| 700.0 | 699.9 | 691.4 | 691.2 | 1.2 | 1.2 | -67.64 | 26.6 | -114.2 | 115.5 | 113.1 | 2.38 | 48.463 | | | |
| 800.0 | 799.7 | 788.1 | 787.5 | 1.4 | 1.4 | -69.86 | 29.1 | -122.4 | 122.0 | 119.2 | 2.74 | 44.428 | | | |
| 900.0 | 899.3 | 884.4 | 883.1 | 1.6 | 1.7 | -72.67 | 32.4 | -132.9 | 130.3 | 127.1 | 3.13 | 41.649 | | | |
| 1,000.0 | 998.6 | 980.3 | 978.0 | 1.9 | 1.9 | -75.84 | 36.3 | -145.6 | 140.7 | 137.1 | 3.54 | 39.706 | | | |
| 1,100.0 | 1,097.5 | 1,075.5 | 1,072.0 | 2.1 | 2.2 | -79.16 | 40.9 | -160.5 | 153.4 | 149.4 | 4.00 | 38.323 | | | |
| 1,200.0 | 1,196.1 | 1,170.1 | 1,164.9 | 2.4 | 2.5 | -82.44 | 46.2 | -177.5 | 168.5 | 164.0 | 4.52 | 37.316 | | | |
| 1,300.0 | 1,294.2 | 1,264.0 | 1,256.6 | 2.8 | 2.9 | -85.58 | 52.1 | -196.5 | 186.2 | 181.1 | 5.09 | 36.587 SF | | | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | | | | | | | | | | | | |
| Semi Major Axis | | | | | | | | | | | | | | | |
| Distance | | | | | | | | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -76.43 | 28.4 | -117.7 | 121.1 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -76.43 | 28.4 | -117.7 | 121.1 | 120.8 | 0.30 | 408.010 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -76.43 | 28.4 | -117.7 | 121.1 | 120.4 | 0.65 | 187.464 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -76.43 | 28.4 | -117.7 | 121.1 | 120.1 | 0.99 | 121.687 | | | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -76.43 | 28.4 | -117.7 | 121.1 | 119.7 | 1.34 | 90.080 CC, ES | | | |
| 500.0 | 500.0 | 497.0 | 497.0 | 0.8 | 0.8 | -76.28 | 29.0 | -118.8 | 122.3 | 120.6 | 1.69 | 72.456 | | | |
| 600.0 | 600.0 | 593.9 | 593.8 | 1.0 | 1.0 | -64.91 | 30.7 | -122.0 | 125.4 | 123.4 | 2.03 | 61.697 | | | |
| 700.0 | 699.9 | 690.7 | 690.4 | 1.2 | 1.2 | -65.68 | 33.6 | -127.4 | 129.9 | 127.5 | 2.38 | 54.505 | | | |
| 800.0 | 799.7 | 787.2 | 786.5 | 1.4 | 1.4 | -67.07 | 37.7 | -135.0 | 135.8 | 133.1 | 2.75 | 49.444 | | | |
| 900.0 | 899.3 | 883.5 | 882.2 | 1.6 | 1.6 | -68.95 | 42.9 | -144.6 | 143.2 | 140.1 | 3.13 | 45.729 | | | |
| 1,000.0 | 998.6 | 979.4 | 977.2 | 1.9 | 1.9 | -71.18 | 49.2 | -156.3 | 152.3 | 148.8 | 3.55 | 42.889 | | | |
| 1,100.0 | 1,097.5 | 1,074.9 | 1,071.4 | 2.1 | 2.2 | -73.63 | 56.5 | -170.1 | 163.2 | 159.2 | 4.02 | 40.633 | | | |
| 1,200.0 | 1,196.1 | 1,169.9 | 1,164.7 | 2.4 | 2.5 | -76.16 | 65.0 | -185.8 | 176.0 | 171.4 | 4.54 | 38.775 | | | |
| 1,300.0 | 1,294.2 | 1,264.4 | 1,257.0 | 2.8 | 2.9 | -78.71 | 74.5 | -203.5 | 190.7 | 185.6 | 5.12 | 37.226 SF | | | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|-----------------------------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | | | | | | | | | | | | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -71.87 | 37.5 | -114.6 | 120.6 | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -71.87 | 37.5 | -114.6 | 120.6 | 120.3 | 0.30 | 406.328 | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -71.87 | 37.5 | -114.6 | 120.6 | 119.9 | 0.65 | 186.691 | CC, ES | |
| 300.0 | 300.0 | 297.0 | 297.0 | 0.5 | 0.5 | -71.71 | 38.2 | -115.6 | 121.8 | 120.8 | 0.99 | 123.050 | | |
| 400.0 | 400.0 | 393.9 | 393.9 | 0.7 | 0.7 | -71.25 | 40.3 | -118.6 | 125.4 | 124.1 | 1.33 | 94.077 | | |
| 500.0 | 500.0 | 490.6 | 490.3 | 0.8 | 0.9 | -70.54 | 43.7 | -123.7 | 131.6 | 129.9 | 1.68 | 78.464 | | |
| 600.0 | 600.0 | 587.0 | 586.3 | 1.0 | 1.1 | -58.56 | 48.5 | -130.8 | 139.5 | 137.5 | 2.03 | 68.846 | | |
| 700.0 | 699.9 | 683.1 | 681.8 | 1.2 | 1.3 | -58.66 | 54.6 | -139.8 | 148.5 | 146.1 | 2.38 | 62.417 | | |
| 800.0 | 799.7 | 778.8 | 776.6 | 1.4 | 1.6 | -59.28 | 62.1 | -150.8 | 158.5 | 155.8 | 2.74 | 57.773 | | |
| 900.0 | 899.3 | 874.2 | 870.7 | 1.6 | 1.9 | -60.32 | 70.8 | -163.7 | 169.7 | 166.6 | 3.13 | 54.205 | | |
| 1,000.0 | 998.6 | 969.1 | 963.9 | 1.9 | 2.3 | -61.66 | 80.8 | -178.5 | 182.1 | 178.5 | 3.55 | 51.294 | | |
| 1,100.0 | 1,097.5 | 1,063.6 | 1,056.2 | 2.1 | 2.6 | -63.22 | 92.0 | -195.1 | 195.7 | 191.7 | 4.01 | 48.784 | SF | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | |
|-----------------------|---------------------|---------------------|---------------------|-----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|--------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft |
| Reference | | | | | | | | | | | | | | | |
| Offset | | | | Semi Major Axis | | | Distance | | | | | | | | |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -71.41 | 33.5 | -99.6 | 105.1 | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -71.41 | 33.5 | -99.6 | 105.1 | 104.8 | 0.30 | 354.231 | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -71.41 | 33.5 | -99.6 | 105.1 | 104.5 | 0.65 | 162.755 | | | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -71.41 | 33.5 | -99.6 | 105.1 | 104.1 | 0.99 | 105.648 | CC, ES | | |
| 400.0 | 400.0 | 397.5 | 397.5 | 0.7 | 0.7 | -71.15 | 34.3 | -100.6 | 106.3 | 104.9 | 1.34 | 79.338 | | | |
| 500.0 | 500.0 | 494.9 | 494.8 | 0.8 | 0.8 | -70.41 | 36.8 | -103.4 | 109.8 | 108.1 | 1.68 | 65.204 | | | |
| 600.0 | 600.0 | 592.1 | 591.8 | 1.0 | 1.0 | -58.32 | 40.9 | -108.0 | 115.1 | 113.1 | 2.03 | 56.596 | | | |
| 700.0 | 699.9 | 689.1 | 688.4 | 1.2 | 1.3 | -58.31 | 46.5 | -114.5 | 121.3 | 119.0 | 2.39 | 50.810 | | | |
| 800.0 | 799.7 | 785.8 | 784.5 | 1.4 | 1.5 | -58.85 | 53.8 | -122.8 | 128.6 | 125.8 | 2.76 | 46.650 | | | |
| 900.0 | 899.3 | 882.4 | 880.1 | 1.6 | 1.8 | -59.84 | 62.7 | -133.0 | 136.9 | 133.7 | 3.15 | 43.482 | | | |
| 1,000.0 | 998.6 | 978.6 | 975.0 | 1.9 | 2.1 | -61.17 | 73.1 | -144.9 | 146.3 | 142.7 | 3.57 | 40.931 | | | |
| 1,100.0 | 1,097.5 | 1,074.5 | 1,069.2 | 2.1 | 2.4 | -62.75 | 85.0 | -158.5 | 156.8 | 152.7 | 4.04 | 38.767 | | | |
| 1,200.0 | 1,196.1 | 1,170.0 | 1,162.5 | 2.4 | 2.8 | -64.49 | 98.5 | -173.9 | 168.5 | 163.9 | 4.57 | 36.853 | | | |
| 1,300.0 | 1,294.2 | 1,265.2 | 1,254.9 | 2.8 | 3.2 | -66.33 | 113.4 | -190.9 | 181.5 | 176.3 | 5.17 | 35.134 | | | |
| 1,400.0 | 1,392.1 | 1,359.9 | 1,346.3 | 3.1 | 3.7 | -67.96 | 129.7 | -209.6 | 196.4 | 190.6 | 5.80 | 33.853 | SF | | |

Directional Plus Anticollision Report

| | | | |
|---------------------------|----------------------------------|-------------------------------------|-------------------------------------|
| Company: | Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: | Well Oxy 28-22D (F28 Pad) |
| Project: | Garfield County | TVD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Reference Site: | SENW S28-T6S-R97W (F28 Pad) | MD Reference: | KBE @ 8308.0ft (Original Well Elev) |
| Site Error: | 0.0ft | North Reference: | True |
| Reference Well: | Oxy 28-22D (F28 Pad) | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0ft | Output errors are at | 2.00 sigma |
| Reference Wellbore | DD | Database: | EDM 2003.21 US Multi User Db |
| Reference Design: | Plan #1 | Offset TVD Reference: | Offset Datum |

| Offset Design | | | | | | | | | | | | | Offset Site Error: | 0.0 ft | | | | | | | |
|-----------------------|---------------------|---------------------|---------------------|----------------|-------------|-----------------------|-----------------------------------|------------|----------------------|-----------------------|------------------------|-------------------|--------------------|--------|-----------------|--|----------|--|--|--|---------|
| Survey Program: 0-MWD | | | | | | | | | | | | | Offset Well Error: | | 0.0 ft | | | | | | |
| Reference | | | | | | | | | | | | | Offset | | Semi Major Axis | | Distance | | | | Warning |
| Measured Depth (ft) | Vertical Depth (ft) | Measured Depth (ft) | Vertical Depth (ft) | Reference (ft) | Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | +E/-W (ft) | Between Centres (ft) | Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | | | | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -71.62 | 28.4 | -85.5 | 90.1 | | | | | | | | | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -71.62 | 28.4 | -85.5 | 90.1 | 89.8 | 0.30 | 303.679 | | | | | | | | | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -71.62 | 28.4 | -85.5 | 90.1 | 89.5 | 0.65 | 139.528 | CC, ES | | | | | | | | |
| 300.0 | 300.0 | 298.0 | 297.9 | 0.5 | 0.5 | -71.24 | 29.3 | -86.4 | 91.2 | 90.2 | 0.99 | 92.014 | | | | | | | | | |
| 400.0 | 400.0 | 395.8 | 395.7 | 0.7 | 0.7 | -70.15 | 32.1 | -88.9 | 94.6 | 93.3 | 1.34 | 70.741 | | | | | | | | | |
| 500.0 | 500.0 | 493.4 | 493.1 | 0.8 | 0.9 | -68.51 | 36.7 | -93.1 | 100.4 | 98.7 | 1.68 | 59.587 | | | | | | | | | |
| 600.0 | 600.0 | 590.6 | 590.0 | 1.0 | 1.1 | -55.53 | 43.1 | -99.1 | 107.7 | 105.7 | 2.04 | 52.737 | | | | | | | | | |
| 700.0 | 699.9 | 687.7 | 686.4 | 1.2 | 1.3 | -54.72 | 51.2 | -106.6 | 116.0 | 113.6 | 2.40 | 48.249 | | | | | | | | | |
| 800.0 | 799.7 | 784.5 | 782.2 | 1.4 | 1.6 | -54.50 | 61.2 | -115.8 | 125.1 | 122.3 | 2.78 | 44.998 | | | | | | | | | |
| 900.0 | 899.3 | 881.0 | 877.4 | 1.6 | 1.9 | -54.75 | 72.9 | -126.6 | 135.0 | 131.8 | 3.18 | 42.474 | | | | | | | | | |
| 1,000.0 | 998.6 | 977.2 | 971.8 | 1.9 | 2.3 | -55.37 | 86.3 | -139.0 | 145.7 | 142.0 | 3.61 | 40.380 | | | | | | | | | |
| 1,100.0 | 1,097.5 | 1,073.0 | 1,065.4 | 2.1 | 2.7 | -56.27 | 101.4 | -152.9 | 157.2 | 153.1 | 4.08 | 38.535 | | | | | | | | | |
| 1,200.0 | 1,196.1 | 1,168.5 | 1,158.2 | 2.4 | 3.1 | -57.37 | 118.1 | -168.4 | 169.6 | 165.0 | 4.60 | 36.836 | | | | | | | | | |
| 1,300.0 | 1,294.2 | 1,263.6 | 1,249.9 | 2.8 | 3.6 | -58.63 | 136.5 | -185.4 | 182.9 | 177.7 | 5.19 | 35.245 | | | | | | | | | |
| 1,400.0 | 1,392.1 | 1,358.3 | 1,340.6 | 3.1 | 4.1 | -59.75 | 156.4 | -203.8 | 197.9 | 192.1 | 5.81 | 34.053 | SF | | | | | | | | |

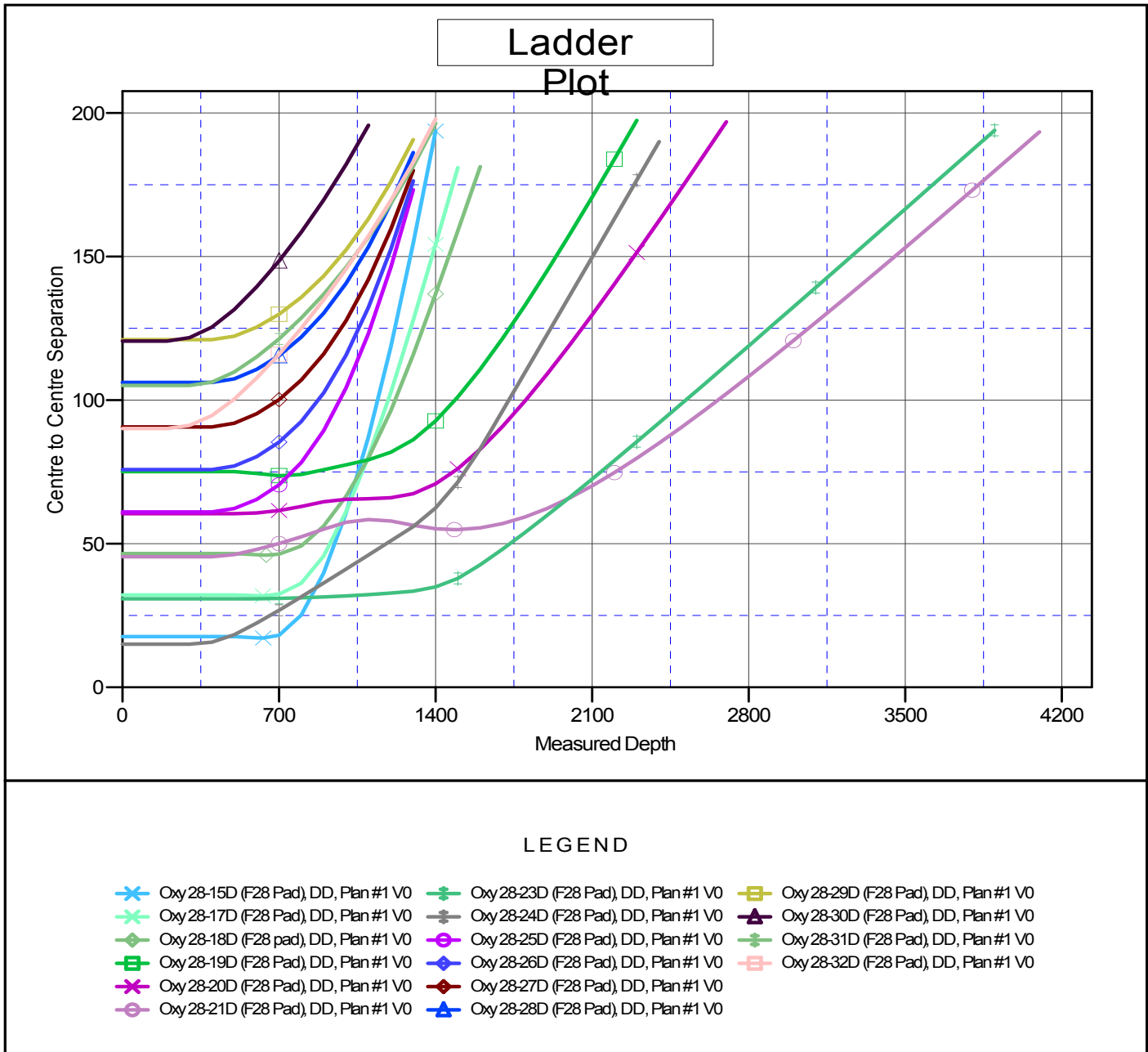
Directional Plus

Anticollision Report

| | | |
|----------------------------------------------------|---------------------------------------------------------------|--|
| Company: Berry Petroleum Company (NAD 83) | Local Co-ordinate Reference: Well Oxy 28-22D (F28 Pad) | |
| Project: Garfield County | TVD Reference: KBE @ 8308.0ft (Original Well Elev) | |
| Reference Site: SENW S28-T6S-R97W (F28 Pad) | MD Reference: KBE @ 8308.0ft (Original Well Elev) | |
| Site Error: 0.0ft | North Reference: True | |
| Reference Well: Oxy 28-22D (F28 Pad) | Survey Calculation Method: Minimum Curvature | |
| Well Error: 0.0ft | Output errors are at 2.00 sigma | |
| Reference Wellbore DD | Database: EDM 2003.21 US Multi User Db | |
| Reference Design: Plan #1 | Offset TVD Reference: Offset Datum | |

Reference Depths are relative to KBE @ 8308.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Oxy 28-22D (F28 Pad)
 Coordinate System is US State Plane 1983, Colorado Central Zone
 Grid Convergence at Surface is: -1.72°



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