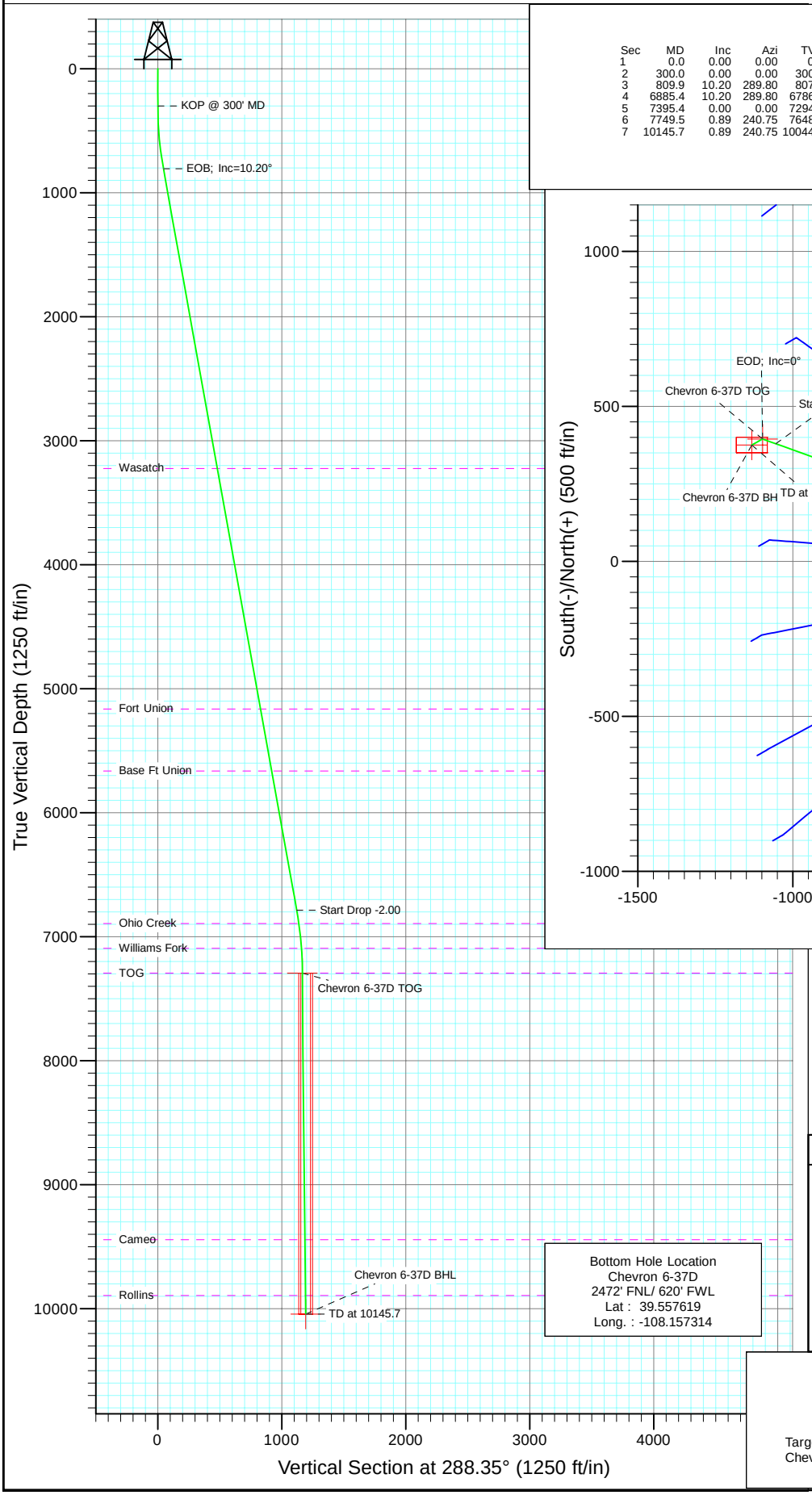
Berry Petroleum Company

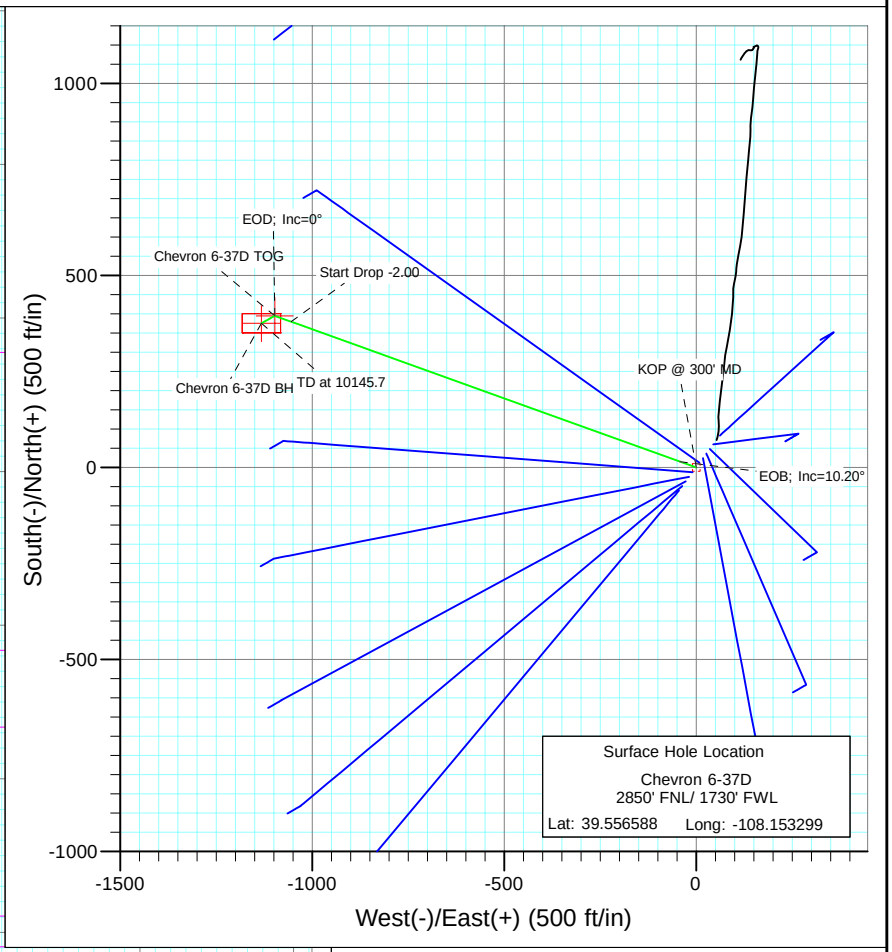
Project: Garfield County
Site: Sec 6 T6S R96W (F06 696)
Well: Chevron 6-37D
Wellbore: DD
Design: Plan #2

CATHEDRAL

SECTION DETAILS

| Sec | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 2 | 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 809.9 | 10.20 | 289.80 | 807.2 | 15.3 | -42.6 | 2.00 | 289.80 | 45.3 | |
| 4 | 6885.4 | 10.20 | 289.80 | 6786.8 | 379.7 | -1054.8 | 0.00 | 0.00 | 1120.7 | |
| 5 | 7395.4 | 0.00 | 0.00 | 7294.0 | 395.0 | -1097.3 | 2.00 | 180.00 | 1165.9 | Chevron 6-37D TOG |
| 6 | 7749.5 | 0.89 | 240.75 | 7648.2 | 393.7 | -1099.7 | 0.25 | 240.75 | 1167.8 | |
| 7 | 10145.7 | 0.89 | 240.75 | 10044.0 | 375.6 | -1132.0 | 0.00 | 0.00 | 1192.7 | Chevron 6-37D BHL |




Surface Hole Location
Chevron 6-37D
2850' FNL/ 1730' FWL
Lat: 39.556588 Long: -108.153299

Bottom Hole Location
Chevron 6-37D
2472' FNL/ 620' FWL
Lat : 39.557619
Long. : -108.157314


Azimuths to True North
Magnetic North: 10.61°

Magnetic Field
Strength: 52427.0snT
Dip Angle: 65.81°
Date: 12/2/2009
Model: IGRF200510

FORMATION TOP DETAILS

| TVDPath | MDPath | Formation |
|---|---|---|
| 3224.0 | 3265.5 | Wasatch |
| 5164.0 | 5236.6 | Fort Union |
| 5664.0 | 5744.7 | Base Ft Union |
| 6894.0 | 6994.1 | Ohio Creek |
| 7094.0 | 7195.2 | Williams Fork |
| 7294.0 | 7395.4 | TOG |
| 9444.0 | 9545.6 | Cameo |
| 9894.0 | 9995.7 | Rollins |

DESIGN DETAILS: Plan #2

95XXX; BH
KBE @ 8244.0ft (Original Well Elev)

| Target | Azimuth | Origin | N/S | E/W | From TVD |
|---|---|---|---|---|---|
| Chevron 6-37D BHL | 288.35 | Slot | 0.0 | 0.0 | 0.0 |

# Cathedral Energy Services

Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.1 US Multi Users DB | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Company:** | Berry Petroleum Company (NAD 83) | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Project:** | Garfield County | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site:** | Sec 6 T6S R96W (F06 696) | **North Reference:** | True |
| **Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | DD | | |
| **Design:** | Plan #2 | | |

**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** Sec 6 T6S R96W (F06 696)

| | | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 1,638,592.01 ft | **Latitude:** | 39.556729 |
| **From:** | Lat/Long | **Easting:** | 2,252,075.57 ft | **Longitude:** | -108.153012 |
| **Position Uncertainty:** | 0.0 ft | **Slot Radius:** | 13.200 in | **Grid Convergence:** | -1.67 ° |

**Well** Chevron 6-37D

| | | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 0.0 ft | **Northing:** | 1,638,543.02 ft | **Latitude:** | 39.556588 |
| | **+E/-W** | 0.0 ft | **Easting:** | 2,251,993.18 ft | **Longitude:** | -108.153299 |
| **Position Uncertainty** | | 0.0 ft | **Wellhead Elevation:** | ft | **Ground Level:** | 8,222.0 ft |

**Wellbore** DD

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|---|---|---|---|---|---|
| | IGRF200510 | 12/2/2009 | 10.60 | 65.81 | 52,427 |

**Design** Plan #2

**Audit Notes:**

| | | | | | |
|---|---|---|---|---|---|
| **Version:** | | **Phase:** | PLAN | **Tie On Depth:** | 0.0 |

| Vertical Section: | Depth From (TVD) (ft) | +N/-S (ft) | +E/-W (ft) | Direction (°) |
|---|---|---|---|---|
| | 0.0 | 0.0 | 0.0 | 288.35 |

**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 | |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 809.9 | 10.20 | 289.80 | 807.2 | 15.3 | -42.6 | 2.00 | 2.00 | 0.00 | 289.80 | |
| 6,885.4 | 10.20 | 289.80 | 6,786.8 | 379.7 | -1,054.8 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,395.4 | 0.00 | 0.00 | 7,294.0 | 395.0 | -1,097.3 | 2.00 | -2.00 | 0.00 | 180.00 | Chevron 6-37D TOG |
| 7,749.5 | 0.89 | 240.75 | 7,648.2 | 393.7 | -1,099.7 | 0.25 | 0.25 | -33.67 | 240.75 | |
| 10,145.7 | 0.89 | 240.75 | 10,044.0 | 375.6 | -1,132.0 | 0.00 | 0.00 | 0.00 | 0.00 | Chevron 6-37D BHL |

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.1 US Multi Users DB | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Company:** | Berry Petroleum Company (NAD 83) | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Project:** | Garfield County | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site:** | Sec 6 T6S R96W (F06 696) | **North Reference:** | True |
| **Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | DD | | |
| **Design:** | Plan #2 | | |

**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 | KOP @ 300' MD |
| 330.0 | 0.60 | 289.80 | 330.0 | 0.1 | -0.1 | 0.2 | 2.00 | 2.00 | |
| 360.0 | 1.20 | 289.80 | 360.0 | 0.2 | -0.6 | 0.6 | 2.00 | 2.00 | |
| 390.0 | 1.80 | 289.80 | 390.0 | 0.5 | -1.3 | 1.4 | 2.00 | 2.00 | |
| 420.0 | 2.40 | 289.80 | 420.0 | 0.9 | -2.4 | 2.5 | 2.00 | 2.00 | |
| 450.0 | 3.00 | 289.80 | 449.9 | 1.3 | -3.7 | 3.9 | 2.00 | 2.00 | |
| 480.0 | 3.60 | 289.80 | 479.9 | 1.9 | -5.3 | 5.7 | 2.00 | 2.00 | |
| 510.0 | 4.20 | 289.80 | 509.8 | 2.6 | -7.2 | 7.7 | 2.00 | 2.00 | |
| 540.0 | 4.80 | 289.80 | 539.7 | 3.4 | -9.5 | 10.0 | 2.00 | 2.00 | |
| 570.0 | 5.40 | 289.80 | 569.6 | 4.3 | -12.0 | 12.7 | 2.00 | 2.00 | |
| 600.0 | 6.00 | 289.80 | 599.5 | 5.3 | -14.8 | 15.7 | 2.00 | 2.00 | |
| 630.0 | 6.60 | 289.80 | 629.3 | 6.4 | -17.9 | 19.0 | 2.00 | 2.00 | |
| 660.0 | 7.20 | 289.80 | 659.1 | 7.7 | -21.3 | 22.6 | 2.00 | 2.00 | |
| 690.0 | 7.80 | 289.80 | 688.8 | 9.0 | -24.9 | 26.5 | 2.00 | 2.00 | |
| 720.0 | 8.40 | 289.80 | 718.5 | 10.4 | -28.9 | 30.7 | 2.00 | 2.00 | |
| 750.0 | 9.00 | 289.80 | 748.2 | 11.9 | -33.2 | 35.3 | 2.00 | 2.00 | |
| 780.0 | 9.60 | 289.80 | 777.8 | 13.6 | -37.7 | 40.1 | 2.00 | 2.00 | |
| 809.9 | 10.20 | 289.80 | 807.2 | 15.3 | -42.6 | 45.3 | 2.00 | 2.00 | EOB; Inc=10.20° |
| 810.0 | 10.20 | 289.80 | 807.3 | 15.3 | -42.6 | 45.3 | 0.00 | 0.00 | |
| 840.0 | 10.20 | 289.80 | 836.8 | 17.1 | -47.6 | 50.6 | 0.00 | 0.00 | |
| 870.0 | 10.20 | 289.80 | 866.4 | 18.9 | -52.6 | 55.9 | 0.00 | 0.00 | |
| 900.0 | 10.20 | 289.80 | 895.9 | 20.7 | -57.6 | 61.2 | 0.00 | 0.00 | |
| 930.0 | 10.20 | 289.80 | 925.4 | 22.5 | -62.6 | 66.5 | 0.00 | 0.00 | |
| 960.0 | 10.20 | 289.80 | 954.9 | 24.3 | -67.6 | 71.8 | 0.00 | 0.00 | |
| 990.0 | 10.20 | 289.80 | 984.5 | 26.1 | -72.6 | 77.1 | 0.00 | 0.00 | |
| 1,020.0 | 10.20 | 289.80 | 1,014.0 | 27.9 | -77.6 | 82.4 | 0.00 | 0.00 | |
| 1,050.0 | 10.20 | 289.80 | 1,043.5 | 29.7 | -82.6 | 87.7 | 0.00 | 0.00 | |
| 1,080.0 | 10.20 | 289.80 | 1,073.0 | 31.5 | -87.6 | 93.1 | 0.00 | 0.00 | |
| 1,110.0 | 10.20 | 289.80 | 1,102.6 | 33.3 | -92.6 | 98.4 | 0.00 | 0.00 | |
| 1,140.0 | 10.20 | 289.80 | 1,132.1 | 35.1 | -97.6 | 103.7 | 0.00 | 0.00 | |
| 1,170.0 | 10.20 | 289.80 | 1,161.6 | 36.9 | -102.6 | 109.0 | 0.00 | 0.00 | |
| 1,200.0 | 10.20 | 289.80 | 1,191.1 | 38.7 | -107.6 | 114.3 | 0.00 | 0.00 | |
| 1,230.0 | 10.20 | 289.80 | 1,220.7 | 40.5 | -112.6 | 119.6 | 0.00 | 0.00 | |
| 1,260.0 | 10.20 | 289.80 | 1,250.2 | 42.3 | -117.6 | 124.9 | 0.00 | 0.00 | |
| 1,290.0 | 10.20 | 289.80 | 1,279.7 | 44.1 | -122.6 | 130.2 | 0.00 | 0.00 | |
| 1,320.0 | 10.20 | 289.80 | 1,309.3 | 45.9 | -127.6 | 135.5 | 0.00 | 0.00 | |
| 1,350.0 | 10.20 | 289.80 | 1,338.8 | 47.7 | -132.6 | 140.8 | 0.00 | 0.00 | |
| 1,380.0 | 10.20 | 289.80 | 1,368.3 | 49.5 | -137.6 | 146.2 | 0.00 | 0.00 | |
| 1,410.0 | 10.20 | 289.80 | 1,397.8 | 51.3 | -142.6 | 151.5 | 0.00 | 0.00 | |
| 1,440.0 | 10.20 | 289.80 | 1,427.4 | 53.1 | -147.6 | 156.8 | 0.00 | 0.00 | |
| 1,470.0 | 10.20 | 289.80 | 1,456.9 | 54.9 | -152.6 | 162.1 | 0.00 | 0.00 | |
| 1,500.0 | 10.20 | 289.80 | 1,486.4 | 56.7 | -157.6 | 167.4 | 0.00 | 0.00 | |

| | | | |
|---|---|---|---|
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| **Project:** | Garfield County | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site:** | Sec 6 T6S R96W (F06 696) | **North Reference:** | True |
| **Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | DD | | |
| **Design:** | Plan #2 | | |

**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 |
|---|---|---|---|---|---|---|---|---|---|
| 1,530.0 | 10.20 | 289.80 | 1,515.9 | 58.5 | -162.6 | 172.7 | 0.00 | 0.00 | |
| 1,560.0 | 10.20 | 289.80 | 1,545.5 | 60.3 | -167.5 | 178.0 | 0.00 | 0.00 | |
| 1,590.0 | 10.20 | 289.80 | 1,575.0 | 62.1 | -172.5 | 183.3 | 0.00 | 0.00 | |
| 1,620.0 | 10.20 | 289.80 | 1,604.5 | 63.9 | -177.5 | 188.6 | 0.00 | 0.00 | |
| 1,650.0 | 10.20 | 289.80 | 1,634.0 | 65.7 | -182.5 | 193.9 | 0.00 | 0.00 | |
| 1,680.0 | 10.20 | 289.80 | 1,663.6 | 67.5 | -187.5 | 199.3 | 0.00 | 0.00 | |
| 1,710.0 | 10.20 | 289.80 | 1,693.1 | 69.3 | -192.5 | 204.6 | 0.00 | 0.00 | |
| 1,740.0 | 10.20 | 289.80 | 1,722.6 | 71.1 | -197.5 | 209.9 | 0.00 | 0.00 | |
| 1,770.0 | 10.20 | 289.80 | 1,752.1 | 72.9 | -202.5 | 215.2 | 0.00 | 0.00 | |
| 1,800.0 | 10.20 | 289.80 | 1,781.7 | 74.7 | -207.5 | 220.5 | 0.00 | 0.00 | |
| 1,830.0 | 10.20 | 289.80 | 1,811.2 | 76.5 | -212.5 | 225.8 | 0.00 | 0.00 | |
| 1,860.0 | 10.20 | 289.80 | 1,840.7 | 78.3 | -217.5 | 231.1 | 0.00 | 0.00 | |
| 1,890.0 | 10.20 | 289.80 | 1,870.2 | 80.1 | -222.5 | 236.4 | 0.00 | 0.00 | |
| 1,920.0 | 10.20 | 289.80 | 1,899.8 | 81.9 | -227.5 | 241.7 | 0.00 | 0.00 | |
| 1,950.0 | 10.20 | 289.80 | 1,929.3 | 83.7 | -232.5 | 247.0 | 0.00 | 0.00 | |
| 1,980.0 | 10.20 | 289.80 | 1,958.8 | 85.5 | -237.5 | 252.4 | 0.00 | 0.00 | |
| 2,010.0 | 10.20 | 289.80 | 1,988.3 | 87.3 | -242.5 | 257.7 | 0.00 | 0.00 | |
| 2,040.0 | 10.20 | 289.80 | 2,017.9 | 89.1 | -247.5 | 263.0 | 0.00 | 0.00 | |
| 2,070.0 | 10.20 | 289.80 | 2,047.4 | 90.9 | -252.5 | 268.3 | 0.00 | 0.00 | |
| 2,100.0 | 10.20 | 289.80 | 2,076.9 | 92.7 | -257.5 | 273.6 | 0.00 | 0.00 | |
| 2,130.0 | 10.20 | 289.80 | 2,106.5 | 94.5 | -262.5 | 278.9 | 0.00 | 0.00 | |
| 2,160.0 | 10.20 | 289.80 | 2,136.0 | 96.3 | -267.5 | 284.2 | 0.00 | 0.00 | |
| 2,190.0 | 10.20 | 289.80 | 2,165.5 | 98.1 | -272.5 | 289.5 | 0.00 | 0.00 | |
| 2,220.0 | 10.20 | 289.80 | 2,195.0 | 99.9 | -277.5 | 294.8 | 0.00 | 0.00 | |
| 2,250.0 | 10.20 | 289.80 | 2,224.6 | 101.7 | -282.5 | 300.2 | 0.00 | 0.00 | |
| 2,280.0 | 10.20 | 289.80 | 2,254.1 | 103.5 | -287.5 | 305.5 | 0.00 | 0.00 | |
| 2,310.0 | 10.20 | 289.80 | 2,283.6 | 105.3 | -292.5 | 310.8 | 0.00 | 0.00 | |
| 2,340.0 | 10.20 | 289.80 | 2,313.1 | 107.1 | -297.5 | 316.1 | 0.00 | 0.00 | |
| 2,370.0 | 10.20 | 289.80 | 2,342.7 | 108.9 | -302.5 | 321.4 | 0.00 | 0.00 | |
| 2,400.0 | 10.20 | 289.80 | 2,372.2 | 110.7 | -307.5 | 326.7 | 0.00 | 0.00 | |
| 2,430.0 | 10.20 | 289.80 | 2,401.7 | 112.5 | -312.5 | 332.0 | 0.00 | 0.00 | |
| 2,460.0 | 10.20 | 289.80 | 2,431.2 | 114.3 | -317.5 | 337.3 | 0.00 | 0.00 | |
| 2,490.0 | 10.20 | 289.80 | 2,460.8 | 116.1 | -322.5 | 342.6 | 0.00 | 0.00 | |

**Targets**

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| Chevron 6-37D BHL | 0.00 | 0.00 | 10,044.0 | 375.6 | -1,132.0 | 1,638,951.50 | 2,250,872.59 | 39.557619 | -108.157314 |
| - plan misses target center by 7630.7ft at 2490.0ft MD (2460.8 TVD, 116.1 N, -322.5 E) | | | | | | | | | |
| - Rectangle (sides W50.0 H100.0 D0.0) | | | | | | | | | |
| Chevron 6-37D TOG | 0.00 | 0.00 | 7,294.0 | 395.0 | -1,097.3 | 1,638,969.90 | 2,250,907.83 | 39.557672 | -108.157191 |
| - plan misses target center by 4902.9ft at 2490.0ft MD (2460.8 TVD, 116.1 N, -322.5 E) | | | | | | | | | |
| - Point | | | | | | | | | |

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.1 US Multi Users DB | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
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| **Project:** | Garfield County | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site:** | Sec 6 T6S R96W (F06 696) | **North Reference:** | True |
| **Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | DD | | |
| **Design:** | Plan #2 | | |

**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 | 10.20 | 289.80 | 2,470.6 | 116.7 | -324.2 | 344.4 | 0.00 | 0.00 | |
| 2,600.0 | 10.20 | 289.80 | 2,569.0 | 122.7 | -340.8 | 362.1 | 0.00 | 0.00 | |
| 2,700.0 | 10.20 | 289.80 | 2,667.4 | 128.7 | -357.5 | 379.8 | 0.00 | 0.00 | |
| 2,800.0 | 10.20 | 289.80 | 2,765.9 | 134.7 | -374.1 | 397.5 | 0.00 | 0.00 | |
| 2,900.0 | 10.20 | 289.80 | 2,864.3 | 140.7 | -390.8 | 415.2 | 0.00 | 0.00 | |
| 3,000.0 | 10.20 | 289.80 | 2,962.7 | 146.7 | -407.5 | 432.9 | 0.00 | 0.00 | |
| 3,100.0 | 10.20 | 289.80 | 3,061.1 | 152.7 | -424.1 | 450.6 | 0.00 | 0.00 | |
| 3,200.0 | 10.20 | 289.80 | 3,159.5 | 158.7 | -440.8 | 468.3 | 0.00 | 0.00 | |
| 3,265.5 | 10.20 | 289.80 | 3,224.0 | 162.6 | -451.7 | 479.9 | 0.00 | 0.00 | Wasatch |
| 3,300.0 | 10.20 | 289.80 | 3,258.0 | 164.7 | -457.4 | 486.0 | 0.00 | 0.00 | |
| 3,400.0 | 10.20 | 289.80 | 3,356.4 | 170.7 | -474.1 | 503.7 | 0.00 | 0.00 | |
| 3,500.0 | 10.20 | 289.80 | 3,454.8 | 176.6 | -490.8 | 521.4 | 0.00 | 0.00 | |
| 3,600.0 | 10.20 | 289.80 | 3,553.2 | 182.6 | -507.4 | 539.1 | 0.00 | 0.00 | |
| 3,700.0 | 10.20 | 289.80 | 3,651.6 | 188.6 | -524.1 | 556.8 | 0.00 | 0.00 | |
| 3,800.0 | 10.20 | 289.80 | 3,750.1 | 194.6 | -540.7 | 574.5 | 0.00 | 0.00 | |
| 3,900.0 | 10.20 | 289.80 | 3,848.5 | 200.6 | -557.4 | 592.2 | 0.00 | 0.00 | |
| 4,000.0 | 10.20 | 289.80 | 3,946.9 | 206.6 | -574.1 | 609.9 | 0.00 | 0.00 | |
| 4,100.0 | 10.20 | 289.80 | 4,045.3 | 212.6 | -590.7 | 627.6 | 0.00 | 0.00 | |
| 4,200.0 | 10.20 | 289.80 | 4,143.7 | 218.6 | -607.4 | 645.3 | 0.00 | 0.00 | |
| 4,300.0 | 10.20 | 289.80 | 4,242.2 | 224.6 | -624.0 | 663.0 | 0.00 | 0.00 | |
| 4,400.0 | 10.20 | 289.80 | 4,340.6 | 230.6 | -640.7 | 680.7 | 0.00 | 0.00 | |
| 4,500.0 | 10.20 | 289.80 | 4,439.0 | 236.6 | -657.3 | 698.4 | 0.00 | 0.00 | |
| 4,600.0 | 10.20 | 289.80 | 4,537.4 | 242.6 | -674.0 | 716.1 | 0.00 | 0.00 | |
| 4,700.0 | 10.20 | 289.80 | 4,635.8 | 248.6 | -690.7 | 733.8 | 0.00 | 0.00 | |
| 4,800.0 | 10.20 | 289.80 | 4,734.3 | 254.6 | -707.3 | 751.5 | 0.00 | 0.00 | |
| 4,900.0 | 10.20 | 289.80 | 4,832.7 | 260.6 | -724.0 | 769.2 | 0.00 | 0.00 | |
| 5,000.0 | 10.20 | 289.80 | 4,931.1 | 266.6 | -740.6 | 786.9 | 0.00 | 0.00 | |
| 5,100.0 | 10.20 | 289.80 | 5,029.5 | 272.6 | -757.3 | 804.6 | 0.00 | 0.00 | |
| 5,200.0 | 10.20 | 289.80 | 5,127.9 | 278.6 | -774.0 | 822.3 | 0.00 | 0.00 | |
| 5,236.6 | 10.20 | 289.80 | 5,164.0 | 280.8 | -780.1 | 828.8 | 0.00 | 0.00 | Fort Union |
| 5,300.0 | 10.20 | 289.80 | 5,226.4 | 284.6 | -790.6 | 840.0 | 0.00 | 0.00 | |
| 5,400.0 | 10.20 | 289.80 | 5,324.8 | 290.6 | -807.3 | 857.7 | 0.00 | 0.00 | |
| 5,500.0 | 10.20 | 289.80 | 5,423.2 | 296.6 | -823.9 | 875.4 | 0.00 | 0.00 | |
| 5,600.0 | 10.20 | 289.80 | 5,521.6 | 302.6 | -840.6 | 893.1 | 0.00 | 0.00 | |
| 5,700.0 | 10.20 | 289.80 | 5,620.0 | 308.6 | -857.3 | 910.8 | 0.00 | 0.00 | |
| 5,744.7 | 10.20 | 289.80 | 5,664.0 | 311.3 | -864.7 | 918.7 | 0.00 | 0.00 | Base Ft Union |
| 5,800.0 | 10.20 | 289.80 | 5,718.5 | 314.6 | -873.9 | 928.5 | 0.00 | 0.00 | |
| 5,900.0 | 10.20 | 289.80 | 5,816.9 | 320.6 | -890.6 | 946.2 | 0.00 | 0.00 | |
| 6,000.0 | 10.20 | 289.80 | 5,915.3 | 326.6 | -907.2 | 963.9 | 0.00 | 0.00 | |
| 6,100.0 | 10.20 | 289.80 | 6,013.7 | 332.6 | -923.9 | 981.6 | 0.00 | 0.00 | |
| 6,200.0 | 10.20 | 289.80 | 6,112.1 | 338.6 | -940.6 | 999.3 | 0.00 | 0.00 | |
| 6,300.0 | 10.20 | 289.80 | 6,210.6 | 344.6 | -957.2 | 1,017.0 | 0.00 | 0.00 | |
| 6,400.0 | 10.20 | 289.80 | 6,309.0 | 350.6 | -973.9 | 1,034.7 | 0.00 | 0.00 | |
| 6,500.0 | 10.20 | 289.80 | 6,407.4 | 356.6 | -990.5 | 1,052.4 | 0.00 | 0.00 | |
| 6,600.0 | 10.20 | 289.80 | 6,505.8 | 362.6 | -1,007.2 | 1,070.1 | 0.00 | 0.00 | |
| 6,700.0 | 10.20 | 289.80 | 6,604.2 | 368.5 | -1,023.9 | 1,087.8 | 0.00 | 0.00 | |
| 6,800.0 | 10.20 | 289.80 | 6,702.7 | 374.5 | -1,040.5 | 1,105.5 | 0.00 | 0.00 | |
| 6,885.4 | 10.20 | 289.80 | 6,786.8 | 379.7 | -1,054.8 | 1,120.7 | 0.00 | 0.00 | Start Drop -2.00 |
| 6,900.0 | 9.91 | 289.80 | 6,801.1 | 380.5 | -1,057.2 | 1,123.2 | 2.00 | -2.00 | |
| 6,994.1 | 8.03 | 289.80 | 6,894.0 | 385.5 | -1,070.9 | 1,137.9 | 2.00 | -2.00 | Ohio Creek |
| 7,000.0 | 7.91 | 289.80 | 6,899.9 | 385.8 | -1,071.7 | 1,138.7 | 2.00 | -2.00 | |
| 7,100.0 | 5.91 | 289.80 | 6,999.1 | 389.8 | -1,083.0 | 1,150.7 | 2.00 | -2.00 | |

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.1 US Multi Users DB | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Company:** | Berry Petroleum Company (NAD 83) | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Project:** | Garfield County | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site:** | Sec 6 T6S R96W (F06 696) | **North Reference:** | True |
| **Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | DD | | |
| **Design:** | Plan #2 | | |

**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 |
|---|---|---|---|---|---|---|---|---|---|
| 7,195.2 | 4.00 | 289.80 | 7,094.0 | 392.6 | -1,090.8 | 1,158.9 | 2.00 | -2.00 | Williams Fork |
| 7,200.0 | 3.91 | 289.80 | 7,098.8 | 392.7 | -1,091.1 | 1,159.2 | 2.00 | -2.00 | |
| 7,300.0 | 1.91 | 289.80 | 7,198.6 | 394.5 | -1,095.9 | 1,164.3 | 2.00 | -2.00 | |
| 7,395.4 | 0.00 | 0.00 | 7,294.0 | 395.0 | -1,097.3 | 1,165.9 | 2.00 | -2.00 | EOD; Inc=0° - TOG - Chevron 6-37D TOG |
| 7,400.0 | 0.01 | 240.75 | 7,298.6 | 395.0 | -1,097.4 | 1,165.9 | 0.25 | 0.25 | |
| 7,500.0 | 0.26 | 240.75 | 7,398.6 | 394.9 | -1,097.6 | 1,166.1 | 0.25 | 0.25 | |
| 7,600.0 | 0.51 | 240.75 | 7,498.6 | 394.6 | -1,098.1 | 1,166.5 | 0.25 | 0.25 | |
| 7,700.0 | 0.76 | 240.75 | 7,598.6 | 394.0 | -1,099.1 | 1,167.3 | 0.25 | 0.25 | |
| 7,749.5 | 0.89 | 240.75 | 7,648.2 | 393.7 | -1,099.7 | 1,167.8 | 0.25 | 0.25 | |
| 7,800.0 | 0.89 | 240.75 | 7,698.6 | 393.3 | -1,100.4 | 1,168.3 | 0.00 | 0.00 | |
| 7,900.0 | 0.89 | 240.75 | 7,798.6 | 392.5 | -1,101.8 | 1,169.3 | 0.00 | 0.00 | |
| 8,000.0 | 0.89 | 240.75 | 7,898.6 | 391.8 | -1,103.1 | 1,170.4 | 0.00 | 0.00 | |
| 8,100.0 | 0.89 | 240.75 | 7,998.6 | 391.0 | -1,104.5 | 1,171.4 | 0.00 | 0.00 | |
| 8,200.0 | 0.89 | 240.75 | 8,098.6 | 390.3 | -1,105.8 | 1,172.4 | 0.00 | 0.00 | |
| 8,300.0 | 0.89 | 240.75 | 8,198.5 | 389.5 | -1,107.2 | 1,173.5 | 0.00 | 0.00 | |
| 8,400.0 | 0.89 | 240.75 | 8,298.5 | 388.8 | -1,108.5 | 1,174.5 | 0.00 | 0.00 | |
| 8,500.0 | 0.89 | 240.75 | 8,398.5 | 388.0 | -1,109.9 | 1,175.6 | 0.00 | 0.00 | |
| 8,600.0 | 0.89 | 240.75 | 8,498.5 | 387.2 | -1,111.2 | 1,176.6 | 0.00 | 0.00 | |
| 8,700.0 | 0.89 | 240.75 | 8,598.5 | 386.5 | -1,112.6 | 1,177.7 | 0.00 | 0.00 | |
| 8,800.0 | 0.89 | 240.75 | 8,698.5 | 385.7 | -1,113.9 | 1,178.7 | 0.00 | 0.00 | |
| 8,900.0 | 0.89 | 240.75 | 8,798.5 | 385.0 | -1,115.2 | 1,179.7 | 0.00 | 0.00 | |
| 9,000.0 | 0.89 | 240.75 | 8,898.5 | 384.2 | -1,116.6 | 1,180.8 | 0.00 | 0.00 | |
| 9,100.0 | 0.89 | 240.75 | 8,998.5 | 383.5 | -1,117.9 | 1,181.8 | 0.00 | 0.00 | |
| 9,200.0 | 0.89 | 240.75 | 9,098.4 | 382.7 | -1,119.3 | 1,182.9 | 0.00 | 0.00 | |
| 9,300.0 | 0.89 | 240.75 | 9,198.4 | 382.0 | -1,120.6 | 1,183.9 | 0.00 | 0.00 | |
| 9,400.0 | 0.89 | 240.75 | 9,298.4 | 381.2 | -1,122.0 | 1,185.0 | 0.00 | 0.00 | |
| 9,500.0 | 0.89 | 240.75 | 9,398.4 | 380.4 | -1,123.3 | 1,186.0 | 0.00 | 0.00 | |
| 9,545.6 | 0.89 | 240.75 | 9,444.0 | 380.1 | -1,124.0 | 1,186.5 | 0.00 | 0.00 | Cameo |
| 9,600.0 | 0.89 | 240.75 | 9,498.4 | 379.7 | -1,124.7 | 1,187.0 | 0.00 | 0.00 | |
| 9,700.0 | 0.89 | 240.75 | 9,598.4 | 378.9 | -1,126.0 | 1,188.1 | 0.00 | 0.00 | |
| 9,800.0 | 0.89 | 240.75 | 9,698.4 | 378.2 | -1,127.4 | 1,189.1 | 0.00 | 0.00 | |
| 9,900.0 | 0.89 | 240.75 | 9,798.4 | 377.4 | -1,128.7 | 1,190.2 | 0.00 | 0.00 | |
| 9,995.7 | 0.89 | 240.75 | 9,894.0 | 376.7 | -1,130.0 | 1,191.2 | 0.00 | 0.00 | Rollins |
| 10,000.0 | 0.89 | 240.75 | 9,898.3 | 376.7 | -1,130.1 | 1,191.2 | 0.00 | 0.00 | |
| 10,100.0 | 0.89 | 240.75 | 9,998.3 | 375.9 | -1,131.4 | 1,192.2 | 0.00 | 0.00 | |
| 10,145.7 | 0.89 | 240.75 | 10,044.0 | 375.6 | -1,132.0 | 1,192.7 | 0.00 | 0.00 | Chevron 6-37D BHL |

**Targets**

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| Chevron 6-37D BHL<br>- plan hits target center<br>- Rectangle (sides W50.0 H100.0 D0.0) | 0.00 | 0.00 | 10,044.0 | 375.6 | -1,132.0 | 1,638,951.50 | 2,250,872.59 | 39.557619 | -108.157314 |
| Chevron 6-37D TOG<br>- plan hits target center<br>- Point | 0.00 | 0.00 | 7,294.0 | 395.0 | -1,097.3 | 1,638,969.90 | 2,250,907.83 | 39.557672 | -108.157191 |

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.1 US Multi Users DB | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Company:** | Berry Petroleum Company (NAD 83) | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Project:** | Garfield County | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site:** | Sec 6 T6S R96W (F06 696) | **North Reference:** | True |
| **Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | DD | | |
| **Design:** | Plan #2 | | |

**Formations**

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---|---|---|---|---|---|
| 3,265.5 | 3,224.0 | Wasatch | | 0.00 | |
| 5,236.6 | 5,164.0 | Fort Union | | 0.00 | |
| 5,744.7 | 5,664.0 | Base Ft Union | | 0.00 | |
| 6,994.1 | 6,894.0 | Ohio Creek | | 0.00 | |
| 7,195.2 | 7,094.0 | Williams Fork | | 0.00 | |
| 7,395.4 | 7,294.0 | TOG | | 0.00 | |
| 9,545.6 | 9,444.0 | Cameo | | 0.00 | |
| 9,995.7 | 9,894.0 | Rollins | | 0.00 | |

**Plan Annotations**

| Measured Depth (ft) | Vertical Depth (ft) | Local Coordinates +N/-S (ft) | Local Coordinates +E/-W (ft) | Comment |
|---|---|---|---|---|
| 300.0 | 300.0 | 0.0 | 0.0 | KOP @ 300' MD |
| 809.9 | 807.2 | 15.3 | -42.6 | EOB; Inc=10.20° |
| 6,885.4 | 6,786.8 | 379.7 | -1,054.8 | Start Drop -2.00 |
| 7,395.4 | 7,294.0 | 395.0 | -1,097.3 | EOD; Inc=0° |
| 10,145.7 | 10,044.0 | 393.7 | -1,099.7 | TD at 10145.7 |

# Berry Petroleum Company (NAD 83)

**Garfield County**
**Sec 6 T6S R96W (F06 696)**
**Chevron 6-37D**
**DD**
**Plan #2**

# Anticollision Report

**17 November, 2010**

# Cathedral Energy Services

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Reference** Plan #2

| | | | |
|---|---|---|---|
| **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 1,221.6ft | **Error Surface:** | Elliptical Conic |
| **Warning Levels Evaluated at:** | 2.00 **Sigma** | | |

**Survey Tool Program** **Date** 11/17/2010

| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description |
|---|---|---|---|---|
| 0.0 | 10,145.7 | Plan #2 (DD) | MWD | Geolink MWD |

**Summary**

| Site Name<br>Offset Well - Wellbore - Design | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
|---|---|---|---|---|---|---|
| Chevron C06 696 (NWNW S6-T6S-R96W) | | | | | | |
| Chevron 6-39D - DD - Plan #1 | 7,488.7 | 7,424.6 | 719.4 | 672.5 | 15.353 | CC |
| Chevron 6-39D - DD - Plan #1 | 7,500.0 | 7,434.5 | 719.4 | 672.5 | 15.347 | ES |
| Chevron 6-39D - DD - Plan #1 | 10,145.7 | 10,079.9 | 739.4 | 686.7 | 14.031 | SF |
| Chevron 6-40D - DD - Plan #1 | 7,502.6 | 7,415.1 | 1,010.9 | 963.4 | 21.290 | CC, ES |
| Chevron 6-40D - DD - Plan #1 | 10,145.7 | 10,055.8 | 1,029.7 | 976.3 | 19.259 | SF |
| Sec 6 T6S R96W (F06 696) | | | | | | |
| Chevron 6-19D - DD - Plan #2 | 423.3 | 424.4 | 42.5 | 41.1 | 29.535 | CC, ES |
| Chevron 6-19D - DD - Plan #2 | 600.0 | 599.2 | 52.1 | 50.0 | 24.312 | SF |
| Chevron 6-20D - DD - Plan #2 | 300.0 | 300.0 | 60.0 | 59.0 | 61.778 | CC, ES |
| Chevron 6-20D - DD - Plan #2 | 700.0 | 697.2 | 75.1 | 72.6 | 30.630 | SF |
| Chevron 6-21D - DD - Plan #2 | 432.3 | 433.3 | 26.2 | 24.8 | 17.797 | CC, ES |
| Chevron 6-21D - DD - Plan #2 | 500.0 | 500.5 | 27.9 | 26.2 | 15.961 | SF |
| Chevron 6-22D - DD - Plan #3 | 300.0 | 300.0 | 75.1 | 74.1 | 77.395 | CC, ES |
| Chevron 6-22D - DD - Plan #3 | 900.0 | 895.9 | 109.6 | 106.3 | 33.708 | SF |
| Chevron 6-23D - DD - Plan #2 | 200.0 | 200.0 | 103.9 | 103.3 | 167.294 | CC, ES |
| Chevron 6-23D - DD - Plan #2 | 1,400.0 | 1,372.9 | 273.3 | 267.9 | 50.937 | SF |
| Chevron 6-25D - DD - DD | 0.0 | 0.0 | 88.9 | | | |
| Chevron 6-25D - DD - DD | 5,800.0 | 5,669.1 | 1,180.8 | 1,149.3 | 37.464 | SF |
| Chevron 6-32D - DD - Plan #2 | 200.0 | 200.0 | 75.0 | 74.4 | 120.675 | CC, ES |
| Chevron 6-32D - DD - Plan #2 | 5,400.0 | 5,241.5 | 1,210.6 | 1,177.9 | 37.065 | SF |
| Chevron 6-33D - DD - Plan #2 | 300.0 | 300.0 | 60.1 | 59.1 | 61.952 | CC, ES |
| Chevron 6-33D - DD - Plan #2 | 6,800.0 | 6,676.3 | 1,218.7 | 1,176.3 | 28.788 | SF |
| Chevron 6-34D - DD - Plan #2 | 528.3 | 527.7 | 43.4 | 41.6 | 24.137 | CC, ES |
| Chevron 6-34D - DD - Plan #2 | 10,100.0 | 10,081.1 | 1,003.0 | 950.2 | 19.027 | SF |
| Chevron 6-35D - DD - Plan #2 | 300.0 | 300.0 | 30.1 | 29.1 | 30.976 | CC, ES |
| Chevron 6-35D - DD - Plan #2 | 10,100.0 | 10,080.5 | 633.5 | 580.4 | 11.939 | SF |
| Chevron 6-36D - DD - Plan #2 | 200.0 | 200.0 | 15.0 | 14.4 | 24.189 | CC, ES |
| Chevron 6-36D - DD - Plan #2 | 10,109.5 | 10,089.8 | 327.3 | 274.9 | 6.248 | SF |
| Chevron 6-38D - DD - Plan #2 | 233.3 | 233.3 | 14.9 | 14.1 | 20.142 | CC |
| Chevron 6-38D - DD - Plan #2 | 300.0 | 300.0 | 14.9 | 14.0 | 15.392 | ES |
| Chevron 6-38D - DD - Plan #2 | 10,145.7 | 10,158.3 | 344.2 | 289.2 | 6.252 | SF |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Chevron C06 696 (NWNW S6-T6S-R96W) - Chevron 6-39D - DD - Plan #1

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4,500.0 | 4,439.0 | 4,576.5 | 4,487.0 | 14.8 | 17.3 | 71.00 | 1,444.3 | -673.2 | 1,217.9 | 1,189.4 | 28.53 | 42.683 | |
| 4,600.0 | 4,537.4 | 4,674.8 | 4,583.0 | 15.1 | 17.7 | 71.00 | 1,431.6 | -689.6 | 1,199.1 | 1,169.9 | 29.21 | 41.051 | |
| 4,700.0 | 4,635.8 | 4,773.0 | 4,678.9 | 15.5 | 18.1 | 71.00 | 1,418.9 | -706.0 | 1,180.2 | 1,150.3 | 29.88 | 39.493 | |
| 4,800.0 | 4,734.3 | 4,871.2 | 4,774.9 | 15.8 | 18.6 | 71.00 | 1,406.2 | -722.4 | 1,161.4 | 1,130.8 | 30.56 | 38.004 | |
| 4,900.0 | 4,832.7 | 4,969.4 | 4,870.9 | 16.2 | 19.0 | 71.00 | 1,393.5 | -738.8 | 1,142.5 | 1,111.3 | 31.23 | 36.578 | |
| 5,000.0 | 4,931.1 | 5,067.6 | 4,966.9 | 16.5 | 19.4 | 71.00 | 1,380.8 | -755.2 | 1,123.7 | 1,091.8 | 31.91 | 35.214 | |
| 5,100.0 | 5,029.5 | 5,165.8 | 5,062.9 | 16.9 | 19.8 | 71.00 | 1,368.1 | -771.6 | 1,104.8 | 1,072.2 | 32.59 | 33.905 | |
| 5,200.0 | 5,127.9 | 5,264.0 | 5,158.9 | 17.3 | 20.2 | 71.00 | 1,355.4 | -788.1 | 1,086.0 | 1,052.7 | 33.26 | 32.650 | |
| 5,300.0 | 5,226.4 | 5,362.2 | 5,254.9 | 17.6 | 20.6 | 71.00 | 1,342.7 | -804.5 | 1,067.1 | 1,033.2 | 33.94 | 31.445 | |
| 5,400.0 | 5,324.8 | 5,460.4 | 5,350.9 | 18.0 | 21.0 | 71.00 | 1,330.1 | -820.9 | 1,048.3 | 1,013.7 | 34.61 | 30.287 | |
| 5,500.0 | 5,423.2 | 5,558.6 | 5,446.9 | 18.3 | 21.4 | 71.00 | 1,317.4 | -837.3 | 1,029.4 | 994.2 | 35.29 | 29.173 | |
| 5,600.0 | 5,521.6 | 5,656.8 | 5,542.9 | 18.7 | 21.8 | 71.00 | 1,304.7 | -853.7 | 1,010.6 | 974.6 | 35.96 | 28.101 | |
| 5,700.0 | 5,620.0 | 5,755.0 | 5,638.9 | 19.1 | 22.2 | 71.00 | 1,292.0 | -870.1 | 991.8 | 955.1 | 36.64 | 27.068 | |
| 5,800.0 | 5,718.5 | 5,853.2 | 5,734.9 | 19.4 | 22.6 | 71.00 | 1,279.3 | -886.5 | 972.9 | 935.6 | 37.31 | 26.073 | |
| 5,900.0 | 5,816.9 | 5,951.5 | 5,830.8 | 19.8 | 23.0 | 71.00 | 1,266.6 | -902.9 | 954.1 | 916.1 | 37.99 | 25.114 | |
| 6,000.0 | 5,915.3 | 6,049.7 | 5,926.8 | 20.1 | 23.4 | 71.00 | 1,253.9 | -919.3 | 935.2 | 896.6 | 38.67 | 24.187 | |
| 6,100.0 | 6,013.7 | 6,147.9 | 6,022.8 | 20.5 | 23.8 | 71.00 | 1,241.2 | -935.7 | 916.4 | 877.0 | 39.34 | 23.293 | |
| 6,200.0 | 6,112.1 | 6,246.1 | 6,118.8 | 20.8 | 24.2 | 71.01 | 1,228.5 | -952.1 | 897.5 | 857.5 | 40.02 | 22.429 | |
| 6,300.0 | 6,210.6 | 6,344.3 | 6,214.8 | 21.2 | 24.6 | 71.01 | 1,215.8 | -968.6 | 878.7 | 838.0 | 40.69 | 21.593 | |
| 6,400.0 | 6,309.0 | 6,442.5 | 6,310.8 | 21.6 | 25.0 | 71.01 | 1,203.1 | -985.0 | 859.8 | 818.5 | 41.37 | 20.785 | |
| 6,500.0 | 6,407.4 | 6,540.7 | 6,406.8 | 21.9 | 25.4 | 71.01 | 1,190.5 | -1,001.4 | 841.0 | 798.9 | 42.04 | 20.003 | |
| 6,600.0 | 6,505.8 | 6,638.9 | 6,502.8 | 22.3 | 25.8 | 71.01 | 1,177.8 | -1,017.8 | 822.1 | 779.4 | 42.72 | 19.245 | |
| 6,700.0 | 6,604.2 | 6,737.1 | 6,598.8 | 22.6 | 26.2 | 71.01 | 1,165.1 | -1,034.2 | 803.3 | 759.9 | 43.39 | 18.511 | |
| 6,800.0 | 6,702.7 | 6,833.7 | 6,693.2 | 23.0 | 26.6 | 71.01 | 1,152.6 | -1,050.3 | 784.5 | 740.4 | 44.06 | 17.803 | |
| 6,900.0 | 6,801.1 | 6,918.2 | 6,776.1 | 23.4 | 26.9 | 71.05 | 1,142.6 | -1,063.2 | 766.7 | 722.0 | 44.66 | 17.168 | |
| 7,000.0 | 6,899.9 | 7,000.0 | 6,856.8 | 23.7 | 27.2 | 70.87 | 1,134.3 | -1,073.9 | 751.5 | 706.2 | 45.22 | 16.616 | |
| 7,100.0 | 6,999.1 | 7,088.8 | 6,944.7 | 23.9 | 27.4 | 70.68 | 1,127.0 | -1,083.4 | 739.2 | 693.4 | 45.72 | 16.168 | |
| 7,200.0 | 7,098.8 | 7,174.8 | 7,030.2 | 24.1 | 27.6 | 70.49 | 1,121.4 | -1,090.6 | 729.8 | 683.7 | 46.12 | 15.824 | |
| 7,300.0 | 7,198.6 | 7,261.1 | 7,116.4 | 24.2 | 27.8 | 70.29 | 1,117.5 | -1,095.8 | 723.5 | 677.1 | 46.44 | 15.580 | |
| 7,400.0 | 7,298.6 | 7,347.7 | 7,202.8 | 24.3 | 27.9 | 119.13 | 1,115.1 | -1,098.8 | 720.2 | 673.5 | 46.68 | 15.430 | |
| 7,488.7 | 7,387.3 | 7,424.6 | 7,279.7 | 24.4 | 27.9 | 119.06 | 1,114.3 | -1,099.9 | 719.4 | 672.5 | 46.86 | 15.353 | CC |
| 7,500.0 | 7,398.6 | 7,434.5 | 7,289.6 | 24.4 | 27.9 | 119.06 | 1,114.3 | -1,099.9 | 719.4 | 672.5 | 46.88 | 15.347 | ES |
| 7,600.0 | 7,498.6 | 7,534.5 | 7,389.6 | 24.5 | 28.0 | 119.11 | 1,114.3 | -1,099.9 | 719.7 | 672.6 | 47.08 | 15.288 | |
| 7,700.0 | 7,598.6 | 7,634.5 | 7,489.6 | 24.6 | 28.1 | 119.18 | 1,114.3 | -1,099.9 | 720.3 | 673.0 | 47.28 | 15.234 | |
| 7,800.0 | 7,698.6 | 7,734.5 | 7,589.6 | 24.7 | 28.2 | 119.29 | 1,114.3 | -1,099.9 | 721.0 | 673.5 | 47.49 | 15.183 | |
| 7,900.0 | 7,798.6 | 7,834.5 | 7,689.6 | 24.8 | 28.3 | 119.39 | 1,114.3 | -1,099.9 | 721.8 | 674.1 | 47.69 | 15.133 | |
| 8,000.0 | 7,898.6 | 7,934.5 | 7,789.6 | 25.0 | 28.4 | 119.50 | 1,114.3 | -1,099.9 | 722.5 | 674.6 | 47.90 | 15.084 | |
| 8,100.0 | 7,998.6 | 8,034.5 | 7,889.6 | 25.1 | 28.4 | 119.61 | 1,114.3 | -1,099.9 | 723.3 | 675.2 | 48.11 | 15.034 | |
| 8,200.0 | 8,098.6 | 8,134.4 | 7,989.6 | 25.2 | 28.5 | 119.71 | 1,114.3 | -1,099.9 | 724.0 | 675.7 | 48.32 | 14.984 | |
| 8,300.0 | 8,198.5 | 8,234.4 | 8,089.5 | 25.3 | 28.6 | 119.82 | 1,114.3 | -1,099.9 | 724.8 | 676.3 | 48.53 | 14.935 | |
| 8,400.0 | 8,298.5 | 8,334.4 | 8,189.5 | 25.4 | 28.7 | 119.93 | 1,114.3 | -1,099.9 | 725.6 | 676.8 | 48.75 | 14.885 | |
| 8,500.0 | 8,398.5 | 8,434.4 | 8,289.5 | 25.5 | 28.8 | 120.03 | 1,114.3 | -1,099.9 | 726.3 | 677.4 | 48.96 | 14.835 | |
| 8,600.0 | 8,498.5 | 8,534.4 | 8,389.5 | 25.6 | 28.9 | 120.14 | 1,114.3 | -1,099.9 | 727.1 | 677.9 | 49.18 | 14.786 | |
| 8,700.0 | 8,598.5 | 8,634.4 | 8,489.5 | 25.8 | 29.0 | 120.24 | 1,114.3 | -1,099.9 | 727.9 | 678.5 | 49.40 | 14.736 | |
| 8,800.0 | 8,698.5 | 8,734.4 | 8,589.5 | 25.9 | 29.1 | 120.35 | 1,114.3 | -1,099.9 | 728.7 | 679.1 | 49.61 | 14.687 | |
| 8,900.0 | 8,798.5 | 8,834.4 | 8,689.5 | 26.0 | 29.2 | 120.45 | 1,114.3 | -1,099.9 | 729.5 | 679.6 | 49.84 | 14.637 | |
| 9,000.0 | 8,898.5 | 8,934.4 | 8,789.5 | 26.1 | 29.3 | 120.56 | 1,114.3 | -1,099.9 | 730.2 | 680.2 | 50.06 | 14.588 | |
| 9,100.0 | 8,998.5 | 9,034.3 | 8,889.5 | 26.2 | 29.3 | 120.66 | 1,114.3 | -1,099.9 | 731.0 | 680.8 | 50.28 | 14.539 | |
| 9,200.0 | 9,098.4 | 9,134.3 | 8,989.4 | 26.4 | 29.4 | 120.76 | 1,114.3 | -1,099.9 | 731.8 | 681.3 | 50.51 | 14.490 | |
| 9,300.0 | 9,198.4 | 9,234.3 | 9,089.4 | 26.5 | 29.5 | 120.87 | 1,114.3 | -1,099.9 | 732.6 | 681.9 | 50.73 | 14.441 | |
| 9,400.0 | 9,298.4 | 9,334.3 | 9,189.4 | 26.6 | 29.6 | 120.97 | 1,114.3 | -1,099.9 | 733.4 | 682.4 | 50.96 | 14.392 | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Chevron C06 696 (NWNW S6-T6S-R96W) - Chevron 6-39D - DD - Plan #1

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,500.0 | 9,398.4 | 9,434.3 | 9,289.4 | 26.7 | 29.7 | 121.08 | 1,114.3 | -1,099.9 | 734.2 | 683.0 | 51.19 | 14.343 | |
| 9,600.0 | 9,498.4 | 9,534.3 | 9,389.4 | 26.8 | 29.8 | 121.18 | 1,114.3 | -1,099.9 | 735.0 | 683.6 | 51.42 | 14.294 | |
| 9,700.0 | 9,598.4 | 9,634.3 | 9,489.4 | 27.0 | 29.9 | 121.28 | 1,114.3 | -1,099.9 | 735.8 | 684.2 | 51.65 | 14.246 | |
| 9,800.0 | 9,698.4 | 9,734.3 | 9,589.4 | 27.1 | 30.0 | 121.38 | 1,114.3 | -1,099.9 | 736.6 | 684.7 | 51.88 | 14.197 | |
| 9,900.0 | 9,798.4 | 9,834.2 | 9,689.4 | 27.2 | 30.1 | 121.49 | 1,114.3 | -1,099.9 | 737.4 | 685.3 | 52.12 | 14.149 | |
| 10,000.0 | 9,898.3 | 9,934.2 | 9,789.3 | 27.3 | 30.2 | 121.59 | 1,114.3 | -1,099.9 | 738.2 | 685.9 | 52.35 | 14.101 | |
| 10,100.0 | 9,998.3 | 10,034.2 | 9,889.3 | 27.5 | 30.3 | 121.69 | 1,114.3 | -1,099.9 | 739.0 | 686.4 | 52.59 | 14.053 | |
| 10,145.7 | 10,044.0 | 10,079.9 | 9,935.0 | 27.5 | 30.4 | 121.74 | 1,114.3 | -1,099.9 | 739.4 | 686.7 | 52.70 | 14.031 | SF |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Chevron C06 696 (NWNW S6-T6S-R96W) - Chevron 6-40D - DD - Plan #1

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,800.0 | 5,718.5 | 5,809.1 | 5,711.7 | 19.4 | 20.9 | 70.19 | 1,521.6 | -897.6 | 1,211.5 | 1,173.8 | 37.70 | 32.139 | |
| 5,900.0 | 5,816.9 | 5,908.1 | 5,808.7 | 19.8 | 21.3 | 70.17 | 1,513.0 | -914.5 | 1,196.9 | 1,158.5 | 38.38 | 31.182 | |
| 6,000.0 | 5,915.3 | 6,007.0 | 5,905.8 | 20.1 | 21.6 | 70.14 | 1,504.4 | -931.5 | 1,182.3 | 1,143.2 | 39.07 | 30.259 | |
| 6,100.0 | 6,013.7 | 6,105.9 | 6,002.9 | 20.5 | 22.0 | 70.11 | 1,495.9 | -948.4 | 1,167.7 | 1,128.0 | 39.76 | 29.369 | |
| 6,200.0 | 6,112.1 | 6,204.8 | 6,100.0 | 20.8 | 22.4 | 70.08 | 1,487.3 | -965.4 | 1,153.1 | 1,112.7 | 40.45 | 28.508 | |
| 6,300.0 | 6,210.6 | 6,303.8 | 6,197.1 | 21.2 | 22.8 | 70.04 | 1,478.8 | -982.3 | 1,138.5 | 1,097.4 | 41.14 | 27.676 | |
| 6,400.0 | 6,309.0 | 6,402.7 | 6,294.2 | 21.6 | 23.2 | 70.01 | 1,470.2 | -999.3 | 1,123.9 | 1,082.1 | 41.83 | 26.872 | |
| 6,500.0 | 6,407.4 | 6,501.6 | 6,391.3 | 21.9 | 23.5 | 69.98 | 1,461.7 | -1,016.3 | 1,109.3 | 1,066.8 | 42.51 | 26.093 | |
| 6,600.0 | 6,505.8 | 6,600.5 | 6,488.3 | 22.3 | 23.9 | 69.94 | 1,453.1 | -1,033.2 | 1,094.7 | 1,051.5 | 43.20 | 25.339 | |
| 6,700.0 | 6,604.2 | 6,699.5 | 6,585.4 | 22.6 | 24.3 | 69.91 | 1,444.6 | -1,050.2 | 1,080.1 | 1,036.2 | 43.89 | 24.609 | |
| 6,800.0 | 6,702.7 | 6,798.4 | 6,682.5 | 23.0 | 24.7 | 69.87 | 1,436.0 | -1,067.1 | 1,065.5 | 1,021.0 | 44.58 | 23.902 | |
| 6,900.0 | 6,801.1 | 6,894.4 | 6,776.8 | 23.4 | 25.0 | 69.80 | 1,427.8 | -1,083.5 | 1,051.0 | 1,005.7 | 45.26 | 23.220 | |
| 7,000.0 | 6,899.9 | 6,980.1 | 6,861.2 | 23.7 | 25.3 | 69.51 | 1,421.2 | -1,096.6 | 1,038.1 | 992.2 | 45.84 | 22.644 | |
| 7,100.0 | 6,999.1 | 7,066.1 | 6,946.3 | 23.9 | 25.5 | 69.24 | 1,415.7 | -1,107.5 | 1,027.7 | 981.3 | 46.34 | 22.179 | |
| 7,200.0 | 7,098.8 | 7,152.5 | 7,032.1 | 24.1 | 25.7 | 68.99 | 1,411.3 | -1,116.1 | 1,019.8 | 973.0 | 46.74 | 21.819 | |
| 7,300.0 | 7,198.6 | 7,239.1 | 7,118.5 | 24.2 | 25.9 | 68.76 | 1,408.2 | -1,122.4 | 1,014.4 | 967.4 | 47.05 | 21.560 | |
| 7,400.0 | 7,298.6 | 7,325.9 | 7,205.2 | 24.3 | 26.0 | 117.60 | 1,406.1 | -1,126.4 | 1,011.7 | 964.4 | 47.28 | 21.397 | |
| 7,500.0 | 7,398.6 | 7,412.9 | 7,292.1 | 24.4 | 26.1 | 117.52 | 1,405.3 | -1,128.0 | 1,010.9 | 963.4 | 47.48 | 21.292 | |
| 7,502.6 | 7,401.2 | 7,415.1 | 7,294.4 | 24.4 | 26.1 | 117.52 | 1,405.3 | -1,128.0 | 1,010.9 | 963.4 | 47.48 | 21.290 | CC, ES |
| 7,600.0 | 7,498.6 | 7,510.4 | 7,389.6 | 24.5 | 26.2 | 117.55 | 1,405.3 | -1,128.1 | 1,011.2 | 963.5 | 47.68 | 21.209 | |
| 7,700.0 | 7,598.6 | 7,610.4 | 7,489.6 | 24.6 | 26.3 | 117.60 | 1,405.3 | -1,128.1 | 1,011.7 | 963.8 | 47.89 | 21.127 | |
| 7,800.0 | 7,698.6 | 7,710.4 | 7,589.6 | 24.7 | 26.4 | 117.68 | 1,405.3 | -1,128.1 | 1,012.4 | 964.3 | 48.10 | 21.049 | |
| 7,900.0 | 7,798.6 | 7,810.4 | 7,689.6 | 24.8 | 26.5 | 117.76 | 1,405.3 | -1,128.1 | 1,013.1 | 964.8 | 48.31 | 20.971 | |
| 8,000.0 | 7,898.6 | 7,910.3 | 7,789.6 | 25.0 | 26.5 | 117.83 | 1,405.3 | -1,128.1 | 1,013.8 | 965.3 | 48.53 | 20.892 | |
| 8,100.0 | 7,998.6 | 8,010.3 | 7,889.6 | 25.1 | 26.6 | 117.91 | 1,405.3 | -1,128.1 | 1,014.6 | 965.8 | 48.74 | 20.815 | |
| 8,200.0 | 8,098.6 | 8,110.3 | 7,989.6 | 25.2 | 26.7 | 117.99 | 1,405.3 | -1,128.1 | 1,015.3 | 966.3 | 48.96 | 20.737 | |
| 8,300.0 | 8,198.5 | 8,210.3 | 8,089.5 | 25.3 | 26.8 | 118.06 | 1,405.3 | -1,128.1 | 1,016.0 | 966.8 | 49.18 | 20.659 | |
| 8,400.0 | 8,298.5 | 8,310.3 | 8,189.5 | 25.4 | 26.9 | 118.14 | 1,405.3 | -1,128.1 | 1,016.7 | 967.3 | 49.40 | 20.581 | |
| 8,500.0 | 8,398.5 | 8,410.3 | 8,289.5 | 25.5 | 27.0 | 118.22 | 1,405.3 | -1,128.1 | 1,017.5 | 967.8 | 49.62 | 20.504 | |
| 8,600.0 | 8,498.5 | 8,510.3 | 8,389.5 | 25.6 | 27.1 | 118.29 | 1,405.3 | -1,128.1 | 1,018.2 | 968.3 | 49.85 | 20.427 | |
| 8,700.0 | 8,598.5 | 8,610.3 | 8,489.5 | 25.8 | 27.2 | 118.37 | 1,405.3 | -1,128.1 | 1,018.9 | 968.9 | 50.07 | 20.349 | |
| 8,800.0 | 8,698.5 | 8,710.2 | 8,589.5 | 25.9 | 27.3 | 118.45 | 1,405.3 | -1,128.1 | 1,019.7 | 969.4 | 50.30 | 20.272 | |
| 8,900.0 | 8,798.5 | 8,810.2 | 8,689.5 | 26.0 | 27.4 | 118.52 | 1,405.3 | -1,128.1 | 1,020.4 | 969.9 | 50.53 | 20.196 | |
| 9,000.0 | 8,898.5 | 8,910.2 | 8,789.5 | 26.1 | 27.5 | 118.60 | 1,405.3 | -1,128.1 | 1,021.1 | 970.4 | 50.75 | 20.119 | |
| 9,100.0 | 8,998.5 | 9,010.2 | 8,889.5 | 26.2 | 27.6 | 118.68 | 1,405.3 | -1,128.1 | 1,021.9 | 970.9 | 50.99 | 20.043 | |
| 9,200.0 | 9,098.4 | 9,110.2 | 8,989.4 | 26.4 | 27.7 | 118.75 | 1,405.3 | -1,128.1 | 1,022.6 | 971.4 | 51.22 | 19.967 | |
| 9,300.0 | 9,198.4 | 9,210.2 | 9,089.4 | 26.5 | 27.8 | 118.83 | 1,405.3 | -1,128.1 | 1,023.4 | 971.9 | 51.45 | 19.891 | |
| 9,400.0 | 9,298.4 | 9,310.2 | 9,189.4 | 26.6 | 27.9 | 118.90 | 1,405.3 | -1,128.1 | 1,024.1 | 972.4 | 51.68 | 19.815 | |
| 9,500.0 | 9,398.4 | 9,410.2 | 9,289.4 | 26.7 | 28.0 | 118.98 | 1,405.3 | -1,128.1 | 1,024.9 | 972.9 | 51.92 | 19.740 | |
| 9,600.0 | 9,498.4 | 9,510.2 | 9,389.4 | 26.8 | 28.1 | 119.05 | 1,405.3 | -1,128.1 | 1,025.6 | 973.5 | 52.16 | 19.664 | |
| 9,700.0 | 9,598.4 | 9,610.1 | 9,489.4 | 27.0 | 28.2 | 119.13 | 1,405.3 | -1,128.1 | 1,026.4 | 974.0 | 52.39 | 19.590 | |
| 9,800.0 | 9,698.4 | 9,710.1 | 9,589.4 | 27.1 | 28.3 | 119.21 | 1,405.3 | -1,128.1 | 1,027.1 | 974.5 | 52.63 | 19.515 | |
| 9,900.0 | 9,798.4 | 9,810.1 | 9,689.4 | 27.2 | 28.4 | 119.28 | 1,405.3 | -1,128.1 | 1,027.9 | 975.0 | 52.87 | 19.441 | |
| 10,000.0 | 9,898.3 | 9,910.1 | 9,789.3 | 27.3 | 28.5 | 119.36 | 1,405.3 | -1,128.1 | 1,028.6 | 975.5 | 53.11 | 19.367 | |
| 10,100.0 | 9,998.3 | 10,010.1 | 9,889.3 | 27.5 | 28.6 | 119.43 | 1,405.3 | -1,128.1 | 1,029.4 | 976.0 | 53.36 | 19.293 | |
| 10,145.7 | 10,044.0 | 10,055.8 | 9,935.0 | 27.5 | 28.7 | 119.46 | 1,405.3 | -1,128.1 | 1,029.7 | 976.3 | 53.47 | 19.259 | SF |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-19D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.61 | 36.1 | 26.8 | 44.9 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 36.61 | 36.1 | 26.8 | 44.9 | 44.6 | 0.27 | 164.984 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 36.61 | 36.1 | 26.8 | 44.9 | 44.3 | 0.62 | 72.296 | |
| 300.0 | 300.0 | 300.7 | 300.7 | 0.5 | 0.5 | 38.60 | 34.4 | 27.5 | 44.1 | 43.1 | 0.97 | 45.247 | |
| 400.0 | 400.0 | 401.1 | 401.0 | 0.7 | 0.7 | 117.36 | 29.6 | 29.6 | 42.6 | 41.3 | 1.35 | 31.661 | |
| 423.3 | 423.3 | 424.4 | 424.2 | 0.7 | 0.7 | 120.64 | 28.0 | 30.3 | 42.5 | 41.1 | 1.44 | 29.535 | CC, ES |
| 500.0 | 499.8 | 500.6 | 500.0 | 0.9 | 0.9 | 134.09 | 21.7 | 33.0 | 44.0 | 42.3 | 1.75 | 25.169 | |
| 600.0 | 599.5 | 599.2 | 598.2 | 1.1 | 1.1 | 151.49 | 13.0 | 36.7 | 52.1 | 50.0 | 2.14 | 24.312 | SF |
| 700.0 | 698.7 | 697.2 | 695.7 | 1.3 | 1.4 | 164.29 | 4.4 | 40.5 | 67.0 | 64.4 | 2.50 | 26.730 | |
| 800.0 | 797.5 | 794.4 | 792.5 | 1.6 | 1.6 | 172.55 | -4.2 | 44.2 | 87.3 | 84.5 | 2.85 | 30.655 | |
| 900.0 | 895.9 | 891.2 | 888.9 | 2.0 | 1.8 | 177.73 | -12.7 | 47.8 | 110.8 | 107.6 | 3.20 | 34.647 | |
| 1,000.0 | 994.3 | 988.0 | 985.3 | 2.3 | 2.1 | -178.90 | -21.2 | 51.5 | 134.9 | 131.4 | 3.56 | 37.950 | |
| 1,100.0 | 1,092.7 | 1,084.9 | 1,081.6 | 2.6 | 2.3 | -176.55 | -29.7 | 55.2 | 159.3 | 155.4 | 3.92 | 40.687 | |
| 1,200.0 | 1,191.1 | 1,181.7 | 1,178.0 | 3.0 | 2.5 | -174.83 | -38.3 | 58.9 | 183.9 | 179.6 | 4.28 | 42.971 | |
| 1,300.0 | 1,289.6 | 1,278.5 | 1,274.3 | 3.3 | 2.7 | -173.51 | -46.8 | 62.6 | 208.6 | 203.9 | 4.65 | 44.898 | |
| 1,400.0 | 1,388.0 | 1,375.3 | 1,370.7 | 3.7 | 3.0 | -172.48 | -55.3 | 66.3 | 233.3 | 228.3 | 5.01 | 46.540 | |
| 1,500.0 | 1,486.4 | 1,472.1 | 1,467.1 | 4.0 | 3.2 | -171.64 | -63.8 | 69.9 | 258.2 | 252.8 | 5.38 | 47.953 | |
| 1,600.0 | 1,584.8 | 1,568.9 | 1,563.4 | 4.4 | 3.4 | -170.94 | -72.4 | 73.6 | 283.1 | 277.3 | 5.76 | 49.180 | |
| 1,700.0 | 1,683.2 | 1,665.7 | 1,659.8 | 4.8 | 3.7 | -170.36 | -80.9 | 77.3 | 308.0 | 301.8 | 6.13 | 50.255 | |
| 1,800.0 | 1,781.7 | 1,762.5 | 1,756.1 | 5.1 | 3.9 | -169.87 | -89.4 | 81.0 | 332.9 | 326.4 | 6.50 | 51.204 | |
| 1,900.0 | 1,880.1 | 1,859.3 | 1,852.5 | 5.5 | 4.1 | -169.45 | -97.9 | 84.7 | 357.9 | 351.0 | 6.88 | 52.046 | |
| 2,000.0 | 1,978.5 | 1,956.1 | 1,948.8 | 5.8 | 4.4 | -169.08 | -106.5 | 88.3 | 382.8 | 375.6 | 7.25 | 52.800 | |
| 2,100.0 | 2,076.9 | 2,052.9 | 2,045.2 | 6.2 | 4.6 | -168.75 | -115.0 | 92.0 | 407.8 | 400.2 | 7.63 | 53.477 | |
| 2,200.0 | 2,175.3 | 2,149.7 | 2,141.6 | 6.5 | 4.8 | -168.47 | -123.5 | 95.7 | 432.8 | 424.8 | 8.00 | 54.089 | |
| 2,300.0 | 2,273.8 | 2,246.5 | 2,237.9 | 6.9 | 5.1 | -168.21 | -132.0 | 99.4 | 457.8 | 449.4 | 8.38 | 54.645 | |
| 2,400.0 | 2,372.2 | 2,343.3 | 2,334.3 | 7.2 | 5.3 | -167.98 | -140.5 | 103.1 | 482.8 | 474.1 | 8.75 | 55.151 | |
| 2,500.0 | 2,470.6 | 2,440.1 | 2,430.6 | 7.6 | 5.5 | -167.78 | -149.1 | 106.8 | 507.8 | 498.7 | 9.13 | 55.615 | |
| 2,600.0 | 2,569.0 | 2,536.9 | 2,527.0 | 8.0 | 5.8 | -167.59 | -157.6 | 110.4 | 532.9 | 523.4 | 9.51 | 56.041 | |
| 2,700.0 | 2,667.4 | 2,633.7 | 2,623.4 | 8.3 | 6.0 | -167.42 | -166.1 | 114.1 | 557.9 | 548.0 | 9.89 | 56.434 | |
| 2,800.0 | 2,765.9 | 2,730.5 | 2,719.7 | 8.7 | 6.2 | -167.26 | -174.6 | 117.8 | 582.9 | 572.7 | 10.26 | 56.797 | |
| 2,900.0 | 2,864.3 | 2,827.3 | 2,816.1 | 9.0 | 6.5 | -167.12 | -183.2 | 121.5 | 608.0 | 597.3 | 10.64 | 57.134 | |
| 3,000.0 | 2,962.7 | 2,924.1 | 2,912.4 | 9.4 | 6.7 | -166.99 | -191.7 | 125.2 | 633.0 | 622.0 | 11.02 | 57.447 | |
| 3,100.0 | 3,061.1 | 3,020.9 | 3,008.8 | 9.7 | 7.0 | -166.87 | -200.2 | 128.8 | 658.0 | 646.6 | 11.40 | 57.739 | |
| 3,200.0 | 3,159.5 | 3,117.8 | 3,105.1 | 10.1 | 7.2 | -166.76 | -208.7 | 132.5 | 683.1 | 671.3 | 11.77 | 58.012 | |
| 3,300.0 | 3,258.0 | 3,214.6 | 3,201.5 | 10.5 | 7.4 | -166.65 | -217.3 | 136.2 | 708.1 | 696.0 | 12.15 | 58.267 | |
| 3,400.0 | 3,356.4 | 3,311.4 | 3,297.9 | 10.8 | 7.7 | -166.55 | -225.8 | 139.9 | 733.2 | 720.6 | 12.53 | 58.507 | |
| 3,500.0 | 3,454.8 | 3,408.2 | 3,394.2 | 11.2 | 7.9 | -166.46 | -234.3 | 143.6 | 758.2 | 745.3 | 12.91 | 58.732 | |
| 3,600.0 | 3,553.2 | 3,505.0 | 3,490.6 | 11.5 | 8.1 | -166.38 | -242.8 | 147.3 | 783.3 | 770.0 | 13.29 | 58.945 | |
| 3,700.0 | 3,651.6 | 3,601.8 | 3,586.9 | 11.9 | 8.4 | -166.30 | -251.3 | 150.9 | 808.3 | 794.7 | 13.67 | 59.145 | |
| 3,800.0 | 3,750.1 | 3,698.6 | 3,683.3 | 12.2 | 8.6 | -166.22 | -259.9 | 154.6 | 833.4 | 819.3 | 14.05 | 59.334 | |
| 3,900.0 | 3,848.5 | 3,795.4 | 3,779.7 | 12.6 | 8.8 | -166.15 | -268.4 | 158.3 | 858.4 | 844.0 | 14.42 | 59.513 | |
| 4,000.0 | 3,946.9 | 3,892.2 | 3,876.0 | 13.0 | 9.1 | -166.08 | -276.9 | 162.0 | 883.5 | 868.7 | 14.80 | 59.683 | |
| 4,100.0 | 4,045.3 | 3,989.0 | 3,972.4 | 13.3 | 9.3 | -166.02 | -285.4 | 165.7 | 908.6 | 893.4 | 15.18 | 59.844 | |
| 4,200.0 | 4,143.7 | 4,085.8 | 4,068.7 | 13.7 | 9.5 | -165.96 | -294.0 | 169.3 | 933.6 | 918.1 | 15.56 | 59.997 | |
| 4,300.0 | 4,242.2 | 4,182.6 | 4,165.1 | 14.0 | 9.8 | -165.91 | -302.5 | 173.0 | 958.7 | 942.7 | 15.94 | 60.143 | |
| 4,400.0 | 4,340.6 | 4,279.4 | 4,261.4 | 14.4 | 10.0 | -165.85 | -311.0 | 176.7 | 983.7 | 967.4 | 16.32 | 60.282 | |
| 4,500.0 | 4,439.0 | 4,376.2 | 4,357.8 | 14.8 | 10.2 | -165.80 | -319.5 | 180.4 | 1,008.8 | 992.1 | 16.70 | 60.414 | |
| 4,600.0 | 4,537.4 | 4,473.0 | 4,454.2 | 15.1 | 10.5 | -165.75 | -328.1 | 184.1 | 1,033.9 | 1,016.8 | 17.08 | 60.541 | |
| 4,700.0 | 4,635.8 | 4,569.8 | 4,550.5 | 15.5 | 10.7 | -165.71 | -336.6 | 187.7 | 1,058.9 | 1,041.5 | 17.46 | 60.662 | |
| 4,800.0 | 4,734.3 | 4,666.6 | 4,646.9 | 15.8 | 10.9 | -165.66 | -345.1 | 191.4 | 1,084.0 | 1,066.2 | 17.84 | 60.777 | |
| 4,900.0 | 4,832.7 | 4,763.4 | 4,743.2 | 16.2 | 11.2 | -165.62 | -353.6 | 195.1 | 1,109.1 | 1,090.8 | 18.21 | 60.888 | |
| 5,000.0 | 4,931.1 | 4,860.2 | 4,839.6 | 16.5 | 11.4 | -165.58 | -362.1 | 198.8 | 1,134.1 | 1,115.5 | 18.59 | 60.994 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-19D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,100.0 | 5,029.5 | 4,957.0 | 4,936.0 | 16.9 | 11.6 | -165.54 | -370.7 | 202.5 | 1,159.2 | 1,140.2 | 18.97 | 61.096 | |
| 5,200.0 | 5,127.9 | 5,053.8 | 5,032.3 | 17.3 | 11.9 | -165.50 | -379.2 | 206.2 | 1,184.3 | 1,164.9 | 19.35 | 61.194 | |
| 5,300.0 | 5,226.4 | 5,150.6 | 5,128.7 | 17.6 | 12.1 | -165.47 | -387.7 | 209.8 | 1,209.3 | 1,189.6 | 19.73 | 61.288 | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-20D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.68 | 48.1 | 35.8 | 60.0 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 36.68 | 48.1 | 35.8 | 60.0 | 59.7 | 0.27 | 220.185 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 36.68 | 48.1 | 35.8 | 60.0 | 59.3 | 0.62 | 96.485 | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 36.68 | 48.1 | 35.8 | 60.0 | 59.0 | 0.97 | 61.778 | CC, ES |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | 108.45 | 48.1 | 35.8 | 60.5 | 59.2 | 1.32 | 45.752 | |
| 500.0 | 499.8 | 499.8 | 499.8 | 0.9 | 0.8 | 112.98 | 48.1 | 35.8 | 62.3 | 60.7 | 1.68 | 37.000 | |
| 600.0 | 599.5 | 599.2 | 599.2 | 1.1 | 1.0 | 121.30 | 46.9 | 37.0 | 66.4 | 64.4 | 2.06 | 32.187 | |
| 700.0 | 698.7 | 697.2 | 697.0 | 1.3 | 1.2 | 132.90 | 43.4 | 40.7 | 75.1 | 72.6 | 2.45 | 30.630 | SF |
| 800.0 | 797.5 | 794.0 | 793.5 | 1.6 | 1.4 | 144.65 | 37.9 | 46.3 | 90.4 | 87.6 | 2.82 | 32.045 | |
| 900.0 | 895.9 | 890.7 | 889.8 | 2.0 | 1.6 | 153.61 | 32.3 | 52.2 | 110.6 | 107.4 | 3.17 | 34.922 | |
| 1,000.0 | 994.3 | 987.4 | 986.2 | 2.3 | 1.8 | 159.76 | 26.6 | 58.1 | 132.6 | 129.1 | 3.50 | 37.855 | |
| 1,100.0 | 1,092.7 | 1,084.1 | 1,082.5 | 2.6 | 2.0 | 164.15 | 20.9 | 64.0 | 155.7 | 151.9 | 3.84 | 40.577 | |
| 1,200.0 | 1,191.1 | 1,180.8 | 1,178.9 | 3.0 | 2.2 | 167.41 | 15.2 | 69.9 | 179.5 | 175.3 | 4.17 | 43.017 | |
| 1,300.0 | 1,289.6 | 1,277.5 | 1,275.3 | 3.3 | 2.4 | 169.90 | 9.5 | 75.8 | 203.6 | 199.1 | 4.51 | 45.178 | |
| 1,400.0 | 1,388.0 | 1,374.2 | 1,371.6 | 3.7 | 2.6 | 171.87 | 3.8 | 81.7 | 228.1 | 223.2 | 4.84 | 47.085 | |
| 1,500.0 | 1,486.4 | 1,470.9 | 1,468.0 | 4.0 | 2.9 | 173.45 | -1.8 | 87.6 | 252.7 | 247.5 | 5.18 | 48.771 | |
| 1,600.0 | 1,584.8 | 1,567.6 | 1,564.3 | 4.4 | 3.1 | 174.75 | -7.5 | 93.5 | 277.5 | 272.0 | 5.52 | 50.265 | |
| 1,700.0 | 1,683.2 | 1,664.3 | 1,660.7 | 4.8 | 3.3 | 175.84 | -13.2 | 99.4 | 302.5 | 296.6 | 5.86 | 51.596 | |
| 1,800.0 | 1,781.7 | 1,761.0 | 1,757.0 | 5.1 | 3.5 | 176.77 | -18.9 | 105.3 | 327.5 | 321.3 | 6.20 | 52.786 | |
| 1,900.0 | 1,880.1 | 1,857.7 | 1,853.4 | 5.5 | 3.7 | 177.56 | -24.6 | 111.2 | 352.5 | 346.0 | 6.55 | 53.855 | |
| 2,000.0 | 1,978.5 | 1,954.3 | 1,949.7 | 5.8 | 3.9 | 178.25 | -30.3 | 117.1 | 377.7 | 370.8 | 6.89 | 54.820 | |
| 2,100.0 | 2,076.9 | 2,051.0 | 2,046.1 | 6.2 | 4.2 | 178.85 | -35.9 | 123.0 | 402.8 | 395.6 | 7.23 | 55.694 | |
| 2,200.0 | 2,175.3 | 2,147.7 | 2,142.4 | 6.5 | 4.4 | 179.38 | -41.6 | 128.9 | 428.0 | 420.5 | 7.58 | 56.490 | |
| 2,300.0 | 2,273.8 | 2,244.4 | 2,238.8 | 6.9 | 4.6 | 179.85 | -47.3 | 134.8 | 453.3 | 445.4 | 7.92 | 57.216 | |
| 2,400.0 | 2,372.2 | 2,341.1 | 2,335.1 | 7.2 | 4.8 | -179.72 | -53.0 | 140.7 | 478.6 | 470.3 | 8.27 | 57.883 | |
| 2,500.0 | 2,470.6 | 2,437.8 | 2,431.5 | 7.6 | 5.0 | -179.34 | -58.7 | 146.6 | 503.8 | 495.2 | 8.61 | 58.495 | |
| 2,600.0 | 2,569.0 | 2,534.5 | 2,527.8 | 8.0 | 5.3 | -179.00 | -64.4 | 152.5 | 529.2 | 520.2 | 8.96 | 59.060 | |
| 2,700.0 | 2,667.4 | 2,631.2 | 2,624.2 | 8.3 | 5.5 | -178.69 | -70.0 | 158.4 | 554.5 | 545.2 | 9.31 | 59.583 | |
| 2,800.0 | 2,765.9 | 2,727.9 | 2,720.5 | 8.7 | 5.7 | -178.40 | -75.7 | 164.3 | 579.8 | 570.2 | 9.65 | 60.068 | |
| 2,900.0 | 2,864.3 | 2,824.6 | 2,816.9 | 9.0 | 5.9 | -178.14 | -81.4 | 170.1 | 605.2 | 595.2 | 10.00 | 60.519 | |
| 3,000.0 | 2,962.7 | 2,921.3 | 2,913.2 | 9.4 | 6.1 | -177.90 | -87.1 | 176.0 | 630.5 | 620.2 | 10.35 | 60.940 | |
| 3,100.0 | 3,061.1 | 3,018.0 | 3,009.6 | 9.7 | 6.4 | -177.68 | -92.8 | 181.9 | 655.9 | 645.2 | 10.69 | 61.333 | |
| 3,200.0 | 3,159.5 | 3,114.7 | 3,105.9 | 10.1 | 6.6 | -177.48 | -98.5 | 187.8 | 681.3 | 670.2 | 11.04 | 61.701 | |
| 3,300.0 | 3,258.0 | 3,211.4 | 3,202.3 | 10.5 | 6.8 | -177.28 | -104.1 | 193.7 | 706.7 | 695.3 | 11.39 | 62.047 | |
| 3,400.0 | 3,356.4 | 3,308.1 | 3,298.6 | 10.8 | 7.0 | -177.11 | -109.8 | 199.6 | 732.1 | 720.3 | 11.74 | 62.372 | |
| 3,500.0 | 3,454.8 | 3,404.8 | 3,395.0 | 11.2 | 7.2 | -176.94 | -115.5 | 205.5 | 757.5 | 745.4 | 12.08 | 62.677 | |
| 3,600.0 | 3,553.2 | 3,501.5 | 3,491.3 | 11.5 | 7.5 | -176.79 | -121.2 | 211.4 | 782.9 | 770.4 | 12.43 | 62.966 | |
| 3,700.0 | 3,651.6 | 3,598.2 | 3,587.7 | 11.9 | 7.7 | -176.64 | -126.9 | 217.3 | 808.3 | 795.5 | 12.78 | 63.239 | |
| 3,800.0 | 3,750.1 | 3,694.9 | 3,684.0 | 12.2 | 7.9 | -176.51 | -132.6 | 223.2 | 833.7 | 820.6 | 13.13 | 63.497 | |
| 3,900.0 | 3,848.5 | 3,791.6 | 3,780.4 | 12.6 | 8.1 | -176.38 | -138.2 | 229.1 | 859.1 | 845.6 | 13.48 | 63.741 | |
| 4,000.0 | 3,946.9 | 3,888.3 | 3,876.7 | 13.0 | 8.3 | -176.26 | -143.9 | 235.0 | 884.5 | 870.7 | 13.83 | 63.974 | |
| 4,100.0 | 4,045.3 | 3,985.0 | 3,973.1 | 13.3 | 8.6 | -176.14 | -149.6 | 240.9 | 910.0 | 895.8 | 14.18 | 64.194 | |
| 4,200.0 | 4,143.7 | 4,081.7 | 4,069.4 | 13.7 | 8.8 | -176.04 | -155.3 | 246.8 | 935.4 | 920.9 | 14.52 | 64.404 | |
| 4,300.0 | 4,242.2 | 4,178.4 | 4,165.8 | 14.0 | 9.0 | -175.93 | -161.0 | 252.7 | 960.8 | 945.9 | 14.87 | 64.604 | |
| 4,400.0 | 4,340.6 | 4,275.1 | 4,262.1 | 14.4 | 9.2 | -175.84 | -166.7 | 258.6 | 986.3 | 971.0 | 15.22 | 64.795 | |
| 4,500.0 | 4,439.0 | 4,371.8 | 4,358.5 | 14.8 | 9.4 | -175.75 | -172.4 | 264.5 | 1,011.7 | 996.1 | 15.57 | 64.977 | |
| 4,600.0 | 4,537.4 | 4,468.5 | 4,454.8 | 15.1 | 9.7 | -175.66 | -178.0 | 270.4 | 1,037.1 | 1,021.2 | 15.92 | 65.151 | |
| 4,700.0 | 4,635.8 | 4,565.2 | 4,551.2 | 15.5 | 9.9 | -175.57 | -183.7 | 276.3 | 1,062.6 | 1,046.3 | 16.27 | 65.317 | |
| 4,800.0 | 4,734.3 | 4,661.9 | 4,647.5 | 15.8 | 10.1 | -175.50 | -189.4 | 282.2 | 1,088.0 | 1,071.4 | 16.62 | 65.476 | |
| 4,900.0 | 4,832.7 | 4,758.6 | 4,743.9 | 16.2 | 10.3 | -175.42 | -195.1 | 288.1 | 1,113.5 | 1,096.5 | 16.97 | 65.629 | |
| 5,000.0 | 4,931.1 | 4,855.3 | 4,840.2 | 16.5 | 10.6 | -175.35 | -200.8 | 294.0 | 1,138.9 | 1,121.6 | 17.32 | 65.776 | |
| 5,100.0 | 5,029.5 | 4,952.0 | 4,936.6 | 16.9 | 10.8 | -175.28 | -206.5 | 299.9 | 1,164.4 | 1,146.7 | 17.66 | 65.916 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-20D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,200.0 | 5,127.9 | 5,048.7 | 5,032.9 | 17.3 | 11.0 | -175.21 | -212.1 | 305.8 | 1,189.8 | 1,171.8 | 18.01 | 66.052 | |
| 5,300.0 | 5,226.4 | 5,193.5 | 5,177.4 | 17.6 | 11.3 | -175.16 | -218.9 | 312.8 | 1,213.8 | 1,195.4 | 18.44 | 65.819 | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-21D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.46 | 24.0 | 17.8 | 29.9 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 36.46 | 24.0 | 17.8 | 29.9 | 29.6 | 0.27 | 109.784 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 36.46 | 24.0 | 17.8 | 29.9 | 29.3 | 0.62 | 48.108 | |
| 300.0 | 300.0 | 300.7 | 300.7 | 0.5 | 0.5 | 39.05 | 22.3 | 18.1 | 28.7 | 27.7 | 0.97 | 29.474 | |
| 400.0 | 400.0 | 401.0 | 400.9 | 0.7 | 0.7 | 121.66 | 17.1 | 19.1 | 26.5 | 25.2 | 1.34 | 19.735 | |
| 432.3 | 432.3 | 433.3 | 433.0 | 0.7 | 0.8 | 128.82 | 14.7 | 19.5 | 26.2 | 24.8 | 1.47 | 17.797 | CC, ES |
| 500.0 | 499.8 | 500.5 | 499.9 | 0.9 | 0.9 | 147.32 | 8.6 | 20.7 | 27.9 | 26.2 | 1.75 | 15.961 | SF |
| 600.0 | 599.5 | 598.6 | 597.3 | 1.1 | 1.2 | 172.82 | -3.2 | 22.9 | 38.6 | 36.5 | 2.15 | 17.960 | |
| 700.0 | 698.7 | 695.9 | 693.6 | 1.3 | 1.4 | -172.70 | -16.8 | 25.4 | 58.2 | 55.7 | 2.52 | 23.069 | |
| 800.0 | 797.5 | 792.5 | 789.2 | 1.6 | 1.7 | -166.14 | -30.4 | 28.0 | 82.8 | 79.9 | 2.90 | 28.558 | |
| 900.0 | 895.9 | 888.6 | 884.3 | 2.0 | 2.0 | -162.96 | -43.9 | 30.5 | 109.9 | 106.6 | 3.30 | 33.317 | |
| 1,000.0 | 994.3 | 984.7 | 979.5 | 2.3 | 2.3 | -161.06 | -57.4 | 33.1 | 137.2 | 133.5 | 3.71 | 37.007 | |
| 1,100.0 | 1,092.7 | 1,080.9 | 1,074.6 | 2.6 | 2.6 | -159.78 | -71.0 | 35.6 | 164.6 | 160.5 | 4.12 | 39.936 | |
| 1,200.0 | 1,191.1 | 1,177.0 | 1,169.7 | 3.0 | 2.9 | -158.87 | -84.5 | 38.2 | 192.0 | 187.5 | 4.54 | 42.308 | |
| 1,300.0 | 1,289.6 | 1,273.1 | 1,264.9 | 3.3 | 3.2 | -158.19 | -98.0 | 40.7 | 219.5 | 214.5 | 4.96 | 44.263 | |
| 1,400.0 | 1,388.0 | 1,369.2 | 1,360.0 | 3.7 | 3.5 | -157.66 | -111.5 | 43.2 | 247.0 | 241.6 | 5.38 | 45.900 | |
| 1,500.0 | 1,486.4 | 1,465.4 | 1,455.2 | 4.0 | 3.7 | -157.23 | -125.0 | 45.8 | 274.5 | 268.7 | 5.80 | 47.289 | |
| 1,600.0 | 1,584.8 | 1,561.5 | 1,550.3 | 4.4 | 4.0 | -156.88 | -138.6 | 48.3 | 302.0 | 295.8 | 6.23 | 48.481 | |
| 1,700.0 | 1,683.2 | 1,657.6 | 1,645.4 | 4.8 | 4.3 | -156.59 | -152.1 | 50.9 | 329.6 | 322.9 | 6.66 | 49.516 | |
| 1,800.0 | 1,781.7 | 1,753.7 | 1,740.6 | 5.1 | 4.6 | -156.35 | -165.6 | 53.4 | 357.1 | 350.0 | 7.08 | 50.421 | |
| 1,900.0 | 1,880.1 | 1,849.8 | 1,835.7 | 5.5 | 4.9 | -156.14 | -179.1 | 55.9 | 384.6 | 377.1 | 7.51 | 51.220 | |
| 2,000.0 | 1,978.5 | 1,946.0 | 1,930.8 | 5.8 | 5.2 | -155.96 | -192.6 | 58.5 | 412.2 | 404.2 | 7.94 | 51.930 | |
| 2,100.0 | 2,076.9 | 2,042.1 | 2,026.0 | 6.2 | 5.5 | -155.80 | -206.1 | 61.0 | 439.7 | 431.4 | 8.37 | 52.564 | |
| 2,200.0 | 2,175.3 | 2,138.2 | 2,121.1 | 6.5 | 5.8 | -155.66 | -219.7 | 63.6 | 467.3 | 458.5 | 8.79 | 53.135 | |
| 2,300.0 | 2,273.8 | 2,234.3 | 2,216.2 | 6.9 | 6.1 | -155.53 | -233.2 | 66.1 | 494.8 | 485.6 | 9.22 | 53.652 | |
| 2,400.0 | 2,372.2 | 2,330.5 | 2,311.4 | 7.2 | 6.4 | -155.42 | -246.7 | 68.6 | 522.4 | 512.7 | 9.65 | 54.121 | |
| 2,500.0 | 2,470.6 | 2,426.6 | 2,406.5 | 7.6 | 6.7 | -155.32 | -260.2 | 71.2 | 550.0 | 539.9 | 10.08 | 54.549 | |
| 2,600.0 | 2,569.0 | 2,522.7 | 2,501.6 | 8.0 | 7.0 | -155.23 | -273.7 | 73.7 | 577.5 | 567.0 | 10.51 | 54.941 | |
| 2,700.0 | 2,667.4 | 2,618.8 | 2,596.8 | 8.3 | 7.2 | -155.15 | -287.2 | 76.3 | 605.1 | 594.1 | 10.94 | 55.301 | |
| 2,800.0 | 2,765.9 | 2,715.0 | 2,691.9 | 8.7 | 7.5 | -155.07 | -300.8 | 78.8 | 632.6 | 621.3 | 11.37 | 55.634 | |
| 2,900.0 | 2,864.3 | 2,811.1 | 2,787.0 | 9.0 | 7.8 | -155.00 | -314.3 | 81.4 | 660.2 | 648.4 | 11.80 | 55.941 | |
| 3,000.0 | 2,962.7 | 2,907.2 | 2,882.2 | 9.4 | 8.1 | -154.94 | -327.8 | 83.9 | 687.8 | 675.5 | 12.23 | 56.227 | |
| 3,100.0 | 3,061.1 | 3,003.3 | 2,977.3 | 9.7 | 8.4 | -154.88 | -341.3 | 86.4 | 715.3 | 702.7 | 12.66 | 56.492 | |
| 3,200.0 | 3,159.5 | 3,099.5 | 3,072.4 | 10.1 | 8.7 | -154.83 | -354.8 | 89.0 | 742.9 | 729.8 | 13.09 | 56.740 | |
| 3,300.0 | 3,258.0 | 3,195.6 | 3,167.6 | 10.5 | 9.0 | -154.78 | -368.4 | 91.5 | 770.5 | 756.9 | 13.52 | 56.972 | |
| 3,400.0 | 3,356.4 | 3,291.7 | 3,262.7 | 10.8 | 9.3 | -154.73 | -381.9 | 94.1 | 798.0 | 784.1 | 13.95 | 57.189 | |
| 3,500.0 | 3,454.8 | 3,387.8 | 3,357.8 | 11.2 | 9.6 | -154.69 | -395.4 | 96.6 | 825.6 | 811.2 | 14.39 | 57.392 | |
| 3,600.0 | 3,553.2 | 3,483.9 | 3,453.0 | 11.5 | 9.9 | -154.65 | -408.9 | 99.1 | 853.2 | 838.3 | 14.82 | 57.584 | |
| 3,700.0 | 3,651.6 | 3,580.1 | 3,548.1 | 11.9 | 10.2 | -154.61 | -422.4 | 101.7 | 880.7 | 865.5 | 15.25 | 57.765 | |
| 3,800.0 | 3,750.1 | 3,676.2 | 3,643.2 | 12.2 | 10.5 | -154.57 | -435.9 | 104.2 | 908.3 | 892.6 | 15.68 | 57.935 | |
| 3,900.0 | 3,848.5 | 3,772.3 | 3,738.4 | 12.6 | 10.8 | -154.54 | -449.5 | 106.8 | 935.9 | 919.8 | 16.11 | 58.096 | |
| 4,000.0 | 3,946.9 | 3,868.4 | 3,833.5 | 13.0 | 11.0 | -154.51 | -463.0 | 109.3 | 963.4 | 946.9 | 16.54 | 58.249 | |
| 4,100.0 | 4,045.3 | 3,964.6 | 3,928.6 | 13.3 | 11.3 | -154.48 | -476.5 | 111.8 | 991.0 | 974.0 | 16.97 | 58.394 | |
| 4,200.0 | 4,143.7 | 4,060.7 | 4,023.8 | 13.7 | 11.6 | -154.45 | -490.0 | 114.4 | 1,018.6 | 1,001.2 | 17.40 | 58.531 | |
| 4,300.0 | 4,242.2 | 4,156.8 | 4,118.9 | 14.0 | 11.9 | -154.42 | -503.5 | 116.9 | 1,046.1 | 1,028.3 | 17.83 | 58.662 | |
| 4,400.0 | 4,340.6 | 4,252.9 | 4,214.0 | 14.4 | 12.2 | -154.40 | -517.1 | 119.5 | 1,073.7 | 1,055.5 | 18.26 | 58.786 | |
| 4,500.0 | 4,439.0 | 4,349.1 | 4,309.2 | 14.8 | 12.5 | -154.37 | -530.6 | 122.0 | 1,101.3 | 1,082.6 | 18.70 | 58.905 | |
| 4,600.0 | 4,537.4 | 4,445.2 | 4,404.3 | 15.1 | 12.8 | -154.35 | -544.1 | 124.5 | 1,128.9 | 1,109.7 | 19.13 | 59.018 | |
| 4,700.0 | 4,635.8 | 4,541.3 | 4,499.4 | 15.5 | 13.1 | -154.33 | -557.6 | 127.1 | 1,156.4 | 1,136.9 | 19.56 | 59.126 | |
| 4,800.0 | 4,734.3 | 4,637.4 | 4,594.6 | 15.8 | 13.4 | -154.30 | -571.1 | 129.6 | 1,184.0 | 1,164.0 | 19.99 | 59.229 | |
| 4,900.0 | 4,832.7 | 4,733.5 | 4,689.7 | 16.2 | 13.7 | -154.28 | -584.6 | 132.2 | 1,211.6 | 1,191.1 | 20.42 | 59.328 | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-22D - DD - Plan #3

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.38 | 60.5 | 44.5 | 75.1 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 36.38 | 60.5 | 44.5 | 75.1 | 74.8 | 0.27 | 275.843 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 36.38 | 60.5 | 44.5 | 75.1 | 74.5 | 0.62 | 120.875 | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | 36.38 | 60.5 | 44.5 | 75.1 | 74.1 | 0.97 | 77.395 | CC, ES |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | 107.84 | 60.5 | 44.5 | 75.6 | 74.3 | 1.32 | 57.205 | |
| 500.0 | 499.8 | 499.8 | 499.8 | 0.9 | 0.8 | 111.50 | 60.5 | 44.5 | 77.4 | 75.7 | 1.69 | 45.923 | |
| 600.0 | 599.5 | 599.5 | 599.5 | 1.1 | 1.0 | 117.16 | 60.5 | 44.5 | 81.0 | 78.9 | 2.07 | 39.188 | |
| 700.0 | 698.7 | 698.7 | 698.7 | 1.3 | 1.2 | 124.16 | 60.5 | 44.5 | 87.3 | 84.8 | 2.46 | 35.407 | |
| 800.0 | 797.5 | 797.5 | 797.5 | 1.6 | 1.4 | 131.63 | 60.5 | 44.5 | 97.0 | 94.1 | 2.87 | 33.800 | |
| 900.0 | 895.9 | 895.9 | 895.9 | 2.0 | 1.5 | 138.49 | 60.5 | 44.5 | 109.6 | 106.3 | 3.25 | 33.708 | SF |
| 1,000.0 | 994.3 | 994.3 | 994.3 | 2.3 | 1.7 | 143.92 | 60.5 | 44.5 | 123.5 | 119.9 | 3.62 | 34.129 | |
| 1,100.0 | 1,092.7 | 1,088.4 | 1,088.4 | 2.6 | 1.9 | 148.10 | 60.6 | 45.9 | 139.7 | 135.7 | 3.97 | 35.202 | |
| 1,200.0 | 1,191.1 | 1,181.2 | 1,181.1 | 3.0 | 2.0 | 151.42 | 61.2 | 50.2 | 159.7 | 155.4 | 4.31 | 37.064 | |
| 1,300.0 | 1,289.6 | 1,272.6 | 1,272.2 | 3.3 | 2.2 | 153.96 | 62.1 | 57.4 | 183.3 | 178.7 | 4.65 | 39.460 | |
| 1,400.0 | 1,388.0 | 1,367.2 | 1,366.3 | 3.7 | 2.4 | 155.98 | 63.3 | 67.0 | 209.4 | 204.4 | 4.99 | 42.009 | |
| 1,500.0 | 1,486.4 | 1,463.5 | 1,462.1 | 4.0 | 2.6 | 157.58 | 64.5 | 76.9 | 235.9 | 230.5 | 5.33 | 44.265 | |
| 1,600.0 | 1,584.8 | 1,559.8 | 1,557.8 | 4.4 | 2.8 | 158.86 | 65.7 | 86.8 | 262.4 | 256.8 | 5.67 | 46.263 | |
| 1,700.0 | 1,683.2 | 1,656.0 | 1,653.5 | 4.8 | 3.0 | 159.90 | 67.0 | 96.7 | 289.1 | 283.1 | 6.02 | 48.042 | |
| 1,800.0 | 1,781.7 | 1,752.3 | 1,749.3 | 5.1 | 3.2 | 160.76 | 68.2 | 106.6 | 315.9 | 309.5 | 6.36 | 49.632 | |
| 1,900.0 | 1,880.1 | 1,848.5 | 1,845.0 | 5.5 | 3.5 | 161.49 | 69.4 | 116.5 | 342.7 | 336.0 | 6.71 | 51.060 | |
| 2,000.0 | 1,978.5 | 1,944.8 | 1,940.8 | 5.8 | 3.7 | 162.12 | 70.7 | 126.4 | 369.5 | 362.5 | 7.06 | 52.350 | |
| 2,100.0 | 2,076.9 | 2,041.0 | 2,036.5 | 6.2 | 3.9 | 162.66 | 71.9 | 136.3 | 396.4 | 389.0 | 7.41 | 53.518 | |
| 2,200.0 | 2,175.3 | 2,137.3 | 2,132.2 | 6.5 | 4.1 | 163.13 | 73.1 | 146.2 | 423.3 | 415.6 | 7.76 | 54.582 | |
| 2,300.0 | 2,273.8 | 2,233.5 | 2,228.0 | 6.9 | 4.4 | 163.55 | 74.4 | 156.1 | 450.3 | 442.2 | 8.11 | 55.554 | |
| 2,400.0 | 2,372.2 | 2,329.8 | 2,323.7 | 7.2 | 4.6 | 163.91 | 75.6 | 166.0 | 477.2 | 468.8 | 8.45 | 56.444 | |
| 2,500.0 | 2,470.6 | 2,426.1 | 2,419.4 | 7.6 | 4.8 | 164.24 | 76.8 | 175.9 | 504.2 | 495.4 | 8.81 | 57.264 | |
| 2,600.0 | 2,569.0 | 2,522.3 | 2,515.2 | 8.0 | 5.1 | 164.54 | 78.0 | 185.8 | 531.2 | 522.0 | 9.16 | 58.020 | |
| 2,700.0 | 2,667.4 | 2,618.6 | 2,610.9 | 8.3 | 5.3 | 164.81 | 79.3 | 195.7 | 558.2 | 548.7 | 9.51 | 58.720 | |
| 2,800.0 | 2,765.9 | 2,714.8 | 2,706.7 | 8.7 | 5.5 | 165.05 | 80.5 | 205.6 | 585.2 | 575.4 | 9.86 | 59.369 | |
| 2,900.0 | 2,864.3 | 2,811.1 | 2,802.4 | 9.0 | 5.8 | 165.27 | 81.7 | 215.4 | 612.2 | 602.0 | 10.21 | 59.973 | |
| 3,000.0 | 2,962.7 | 2,907.3 | 2,898.1 | 9.4 | 6.0 | 165.47 | 83.0 | 225.3 | 639.3 | 628.7 | 10.56 | 60.537 | |
| 3,100.0 | 3,061.1 | 3,003.6 | 2,993.9 | 9.7 | 6.2 | 165.66 | 84.2 | 235.2 | 666.3 | 655.4 | 10.91 | 61.063 | |
| 3,200.0 | 3,159.5 | 3,099.8 | 3,089.6 | 10.1 | 6.5 | 165.83 | 85.4 | 245.1 | 693.3 | 682.1 | 11.26 | 61.557 | |
| 3,300.0 | 3,258.0 | 3,206.5 | 3,195.8 | 10.5 | 6.7 | 166.01 | 86.8 | 255.8 | 720.1 | 708.5 | 11.63 | 61.909 | |
| 3,400.0 | 3,356.4 | 3,335.8 | 3,324.8 | 10.8 | 7.0 | 166.29 | 87.8 | 264.3 | 743.7 | 731.6 | 12.03 | 61.804 | |
| 3,500.0 | 3,454.8 | 3,466.0 | 3,454.9 | 11.2 | 7.2 | 166.66 | 88.2 | 267.0 | 762.9 | 750.5 | 12.43 | 61.381 | |
| 3,600.0 | 3,553.2 | 3,567.2 | 3,556.1 | 11.5 | 7.3 | 166.98 | 88.0 | 266.8 | 780.0 | 767.2 | 12.78 | 61.048 | |
| 3,700.0 | 3,651.6 | 3,666.6 | 3,655.5 | 11.9 | 7.5 | 167.29 | 87.7 | 266.3 | 796.8 | 783.7 | 13.12 | 60.732 | |
| 3,800.0 | 3,750.1 | 3,765.1 | 3,754.0 | 12.2 | 7.6 | 167.59 | 87.4 | 265.8 | 813.6 | 800.1 | 13.46 | 60.440 | |
| 3,900.0 | 3,848.5 | 3,863.6 | 3,852.5 | 12.6 | 7.8 | 167.88 | 87.1 | 265.2 | 830.4 | 816.6 | 13.80 | 60.165 | |
| 4,000.0 | 3,946.9 | 3,962.1 | 3,951.0 | 13.0 | 7.9 | 168.16 | 86.8 | 264.7 | 847.3 | 833.1 | 14.14 | 59.905 | |
| 4,100.0 | 4,045.3 | 4,060.6 | 4,049.5 | 13.3 | 8.1 | 168.43 | 86.5 | 264.2 | 864.2 | 849.7 | 14.48 | 59.660 | |
| 4,200.0 | 4,143.7 | 4,159.1 | 4,148.0 | 13.7 | 8.2 | 168.68 | 86.2 | 263.7 | 881.0 | 866.2 | 14.83 | 59.427 | |
| 4,300.0 | 4,242.2 | 4,257.6 | 4,246.5 | 14.0 | 8.3 | 168.93 | 85.9 | 263.1 | 898.0 | 882.8 | 15.17 | 59.207 | |
| 4,400.0 | 4,340.6 | 4,356.1 | 4,344.9 | 14.4 | 8.5 | 169.16 | 85.6 | 262.6 | 914.9 | 899.4 | 15.51 | 58.997 | |
| 4,500.0 | 4,439.0 | 4,454.5 | 4,443.4 | 14.8 | 8.6 | 169.39 | 85.3 | 262.1 | 931.8 | 916.0 | 15.85 | 58.798 | |
| 4,600.0 | 4,537.4 | 4,553.0 | 4,541.9 | 15.1 | 8.8 | 169.61 | 85.0 | 261.6 | 948.8 | 932.6 | 16.19 | 58.608 | |
| 4,700.0 | 4,635.8 | 4,651.5 | 4,640.4 | 15.5 | 8.9 | 169.82 | 84.7 | 261.1 | 965.7 | 949.2 | 16.53 | 58.427 | |
| 4,800.0 | 4,734.3 | 4,750.0 | 4,738.9 | 15.8 | 9.1 | 170.03 | 84.4 | 260.5 | 982.7 | 965.8 | 16.87 | 58.254 | |
| 4,900.0 | 4,832.7 | 4,848.5 | 4,837.4 | 16.2 | 9.2 | 170.23 | 84.1 | 260.0 | 999.7 | 982.5 | 17.21 | 58.088 | |
| 5,000.0 | 4,931.1 | 4,947.0 | 4,935.9 | 16.5 | 9.4 | 170.42 | 83.8 | 259.5 | 1,016.7 | 999.2 | 17.55 | 57.930 | |
| 5,100.0 | 5,029.5 | 5,045.5 | 5,034.3 | 16.9 | 9.6 | 170.60 | 83.5 | 259.0 | 1,033.7 | 1,015.8 | 17.89 | 57.778 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-22D - DD - Plan #3

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,200.0 | 5,127.9 | 5,144.0 | 5,132.8 | 17.3 | 9.7 | 170.78 | 83.2 | 258.4 | 1,050.7 | 1,032.5 | 18.23 | 57.633 | |
| 5,300.0 | 5,226.4 | 5,242.5 | 5,231.3 | 17.6 | 9.9 | 170.96 | 82.9 | 257.9 | 1,067.8 | 1,049.2 | 18.57 | 57.493 | |
| 5,400.0 | 5,324.8 | 5,340.9 | 5,329.8 | 18.0 | 10.0 | 171.13 | 82.6 | 257.4 | 1,084.8 | 1,065.9 | 18.91 | 57.359 | |
| 5,500.0 | 5,423.2 | 5,439.4 | 5,428.3 | 18.3 | 10.2 | 171.29 | 82.3 | 256.9 | 1,101.9 | 1,082.6 | 19.25 | 57.230 | |
| 5,600.0 | 5,521.6 | 5,537.9 | 5,526.8 | 18.7 | 10.3 | 171.45 | 82.0 | 256.3 | 1,118.9 | 1,099.3 | 19.59 | 57.106 | |
| 5,700.0 | 5,620.0 | 5,636.4 | 5,625.3 | 19.1 | 10.5 | 171.60 | 81.7 | 255.8 | 1,136.0 | 1,116.1 | 19.93 | 56.986 | |
| 5,800.0 | 5,718.5 | 5,734.9 | 5,723.7 | 19.4 | 10.6 | 171.75 | 81.4 | 255.3 | 1,153.1 | 1,132.8 | 20.28 | 56.871 | |
| 5,900.0 | 5,816.9 | 5,833.4 | 5,822.2 | 19.8 | 10.8 | 171.89 | 81.1 | 254.8 | 1,170.1 | 1,149.5 | 20.62 | 56.759 | |
| 6,000.0 | 5,915.3 | 5,931.9 | 5,920.7 | 20.1 | 11.0 | 172.03 | 80.8 | 254.3 | 1,187.2 | 1,166.3 | 20.96 | 56.652 | |
| 6,100.0 | 6,013.7 | 6,030.4 | 6,019.2 | 20.5 | 11.1 | 172.17 | 80.5 | 253.7 | 1,204.3 | 1,183.0 | 21.30 | 56.548 | |
| 6,200.0 | 6,112.1 | 6,128.8 | 6,117.7 | 20.8 | 11.3 | 172.30 | 80.2 | 253.2 | 1,221.4 | 1,199.8 | 21.64 | 56.447 | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-23D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.64 | 83.4 | 62.0 | 103.9 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 36.64 | 83.4 | 62.0 | 103.9 | 103.7 | 0.27 | 381.772 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 36.64 | 83.4 | 62.0 | 103.9 | 103.3 | 0.62 | 167.294 | CC, ES |
| 300.0 | 300.0 | 296.5 | 296.5 | 0.5 | 0.5 | 36.81 | 84.5 | 63.2 | 105.6 | 104.6 | 0.97 | 109.199 | |
| 400.0 | 400.0 | 392.8 | 392.6 | 0.7 | 0.7 | 108.22 | 87.8 | 66.8 | 111.1 | 109.8 | 1.31 | 84.785 | |
| 500.0 | 499.8 | 491.7 | 491.3 | 0.9 | 0.9 | 110.99 | 92.5 | 72.0 | 119.9 | 118.2 | 1.67 | 71.719 | |
| 600.0 | 599.5 | 590.8 | 590.2 | 1.1 | 1.1 | 114.73 | 97.2 | 77.3 | 130.4 | 128.4 | 2.05 | 63.514 | |
| 700.0 | 698.7 | 689.4 | 688.5 | 1.3 | 1.3 | 119.06 | 102.0 | 82.5 | 143.1 | 140.7 | 2.46 | 58.219 | |
| 800.0 | 797.5 | 787.4 | 786.2 | 1.6 | 1.5 | 123.65 | 106.7 | 87.7 | 158.5 | 155.6 | 2.89 | 54.867 | |
| 900.0 | 895.9 | 885.0 | 883.6 | 2.0 | 1.7 | 128.13 | 111.3 | 92.8 | 176.0 | 172.7 | 3.31 | 53.114 | |
| 1,000.0 | 994.3 | 982.5 | 980.9 | 2.3 | 1.9 | 131.82 | 116.0 | 98.0 | 194.4 | 190.7 | 3.73 | 52.069 | |
| 1,100.0 | 1,092.7 | 1,080.1 | 1,078.2 | 2.6 | 2.1 | 134.87 | 120.7 | 103.1 | 213.5 | 209.4 | 4.15 | 51.465 | |
| 1,200.0 | 1,191.1 | 1,177.7 | 1,175.6 | 3.0 | 2.3 | 137.41 | 125.4 | 108.3 | 233.1 | 228.5 | 4.56 | 51.136 | |
| 1,300.0 | 1,289.6 | 1,275.3 | 1,272.9 | 3.3 | 2.5 | 139.57 | 130.0 | 113.4 | 253.1 | 248.1 | 4.96 | 50.981 | |
| 1,400.0 | 1,388.0 | 1,372.9 | 1,370.2 | 3.7 | 2.7 | 141.41 | 134.7 | 118.6 | 273.3 | 267.9 | 5.37 | 50.937 | SF |
| 1,500.0 | 1,486.4 | 1,470.4 | 1,467.5 | 4.0 | 2.9 | 142.99 | 139.4 | 123.7 | 293.8 | 288.0 | 5.76 | 50.965 | |
| 1,600.0 | 1,584.8 | 1,568.0 | 1,564.9 | 4.4 | 3.2 | 144.37 | 144.1 | 128.9 | 314.5 | 308.3 | 6.16 | 51.038 | |
| 1,700.0 | 1,683.2 | 1,665.6 | 1,662.2 | 4.8 | 3.4 | 145.58 | 148.7 | 134.0 | 335.3 | 328.7 | 6.56 | 51.140 | |
| 1,800.0 | 1,781.7 | 1,763.2 | 1,759.5 | 5.1 | 3.6 | 146.65 | 153.4 | 139.2 | 356.2 | 349.3 | 6.95 | 51.259 | |
| 1,900.0 | 1,880.1 | 1,860.7 | 1,856.9 | 5.5 | 3.8 | 147.60 | 158.1 | 144.3 | 377.3 | 369.9 | 7.34 | 51.389 | |
| 2,000.0 | 1,978.5 | 1,958.3 | 1,954.2 | 5.8 | 4.0 | 148.44 | 162.8 | 149.5 | 398.4 | 390.7 | 7.73 | 51.524 | |
| 2,100.0 | 2,076.9 | 2,055.9 | 2,051.5 | 6.2 | 4.2 | 149.21 | 167.4 | 154.6 | 419.6 | 411.5 | 8.12 | 51.660 | |
| 2,200.0 | 2,175.3 | 2,153.5 | 2,148.8 | 6.5 | 4.4 | 149.90 | 172.1 | 159.8 | 440.9 | 432.4 | 8.51 | 51.795 | |
| 2,300.0 | 2,273.8 | 2,251.0 | 2,246.2 | 6.9 | 4.6 | 150.52 | 176.8 | 164.9 | 462.3 | 453.4 | 8.90 | 51.929 | |
| 2,400.0 | 2,372.2 | 2,348.6 | 2,343.5 | 7.2 | 4.8 | 151.10 | 181.5 | 170.1 | 483.7 | 474.4 | 9.29 | 52.059 | |
| 2,500.0 | 2,470.6 | 2,446.2 | 2,440.8 | 7.6 | 5.0 | 151.62 | 186.1 | 175.3 | 505.1 | 495.4 | 9.68 | 52.185 | |
| 2,600.0 | 2,569.0 | 2,543.8 | 2,538.2 | 8.0 | 5.2 | 152.10 | 190.8 | 180.4 | 526.6 | 516.5 | 10.07 | 52.308 | |
| 2,700.0 | 2,667.4 | 2,641.4 | 2,635.5 | 8.3 | 5.5 | 152.54 | 195.5 | 185.6 | 548.1 | 537.6 | 10.45 | 52.426 | |
| 2,800.0 | 2,765.9 | 2,738.9 | 2,732.8 | 8.7 | 5.7 | 152.95 | 200.2 | 190.7 | 569.6 | 558.8 | 10.84 | 52.539 | |
| 2,900.0 | 2,864.3 | 2,836.5 | 2,830.1 | 9.0 | 5.9 | 153.33 | 204.8 | 195.9 | 591.1 | 579.9 | 11.23 | 52.648 | |
| 3,000.0 | 2,962.7 | 2,934.1 | 2,927.5 | 9.4 | 6.1 | 153.68 | 209.5 | 201.0 | 612.7 | 601.1 | 11.62 | 52.753 | |
| 3,100.0 | 3,061.1 | 3,031.7 | 3,024.8 | 9.7 | 6.3 | 154.01 | 214.2 | 206.2 | 634.3 | 622.3 | 12.00 | 52.853 | |
| 3,200.0 | 3,159.5 | 3,129.2 | 3,122.1 | 10.1 | 6.5 | 154.32 | 218.9 | 211.3 | 655.9 | 643.6 | 12.39 | 52.950 | |
| 3,300.0 | 3,258.0 | 3,226.8 | 3,219.5 | 10.5 | 6.7 | 154.61 | 223.5 | 216.5 | 677.6 | 664.8 | 12.77 | 53.042 | |
| 3,400.0 | 3,356.4 | 3,324.4 | 3,316.8 | 10.8 | 6.9 | 154.88 | 228.2 | 221.6 | 699.2 | 686.1 | 13.16 | 53.131 | |
| 3,500.0 | 3,454.8 | 3,422.0 | 3,414.1 | 11.2 | 7.1 | 155.13 | 232.9 | 226.8 | 720.9 | 707.3 | 13.55 | 53.216 | |
| 3,600.0 | 3,553.2 | 3,519.5 | 3,511.4 | 11.5 | 7.3 | 155.37 | 237.6 | 231.9 | 742.6 | 728.6 | 13.93 | 53.297 | |
| 3,700.0 | 3,651.6 | 3,617.1 | 3,608.8 | 11.9 | 7.5 | 155.60 | 242.3 | 237.1 | 764.3 | 749.9 | 14.32 | 53.376 | |
| 3,800.0 | 3,750.1 | 3,714.7 | 3,706.1 | 12.2 | 7.8 | 155.81 | 246.9 | 242.2 | 786.0 | 771.2 | 14.70 | 53.451 | |
| 3,900.0 | 3,848.5 | 3,812.3 | 3,803.4 | 12.6 | 8.0 | 156.01 | 251.6 | 247.4 | 807.7 | 792.6 | 15.09 | 53.524 | |
| 4,000.0 | 3,946.9 | 3,909.9 | 3,900.8 | 13.0 | 8.2 | 156.20 | 256.3 | 252.6 | 829.4 | 813.9 | 15.48 | 53.593 | |
| 4,100.0 | 4,045.3 | 4,007.4 | 3,998.1 | 13.3 | 8.4 | 156.38 | 261.0 | 257.7 | 851.1 | 835.2 | 15.86 | 53.660 | |
| 4,200.0 | 4,143.7 | 4,105.0 | 4,095.4 | 13.7 | 8.6 | 156.56 | 265.6 | 262.9 | 872.8 | 856.6 | 16.25 | 53.724 | |
| 4,300.0 | 4,242.2 | 4,202.6 | 4,192.7 | 14.0 | 8.8 | 156.72 | 270.3 | 268.0 | 894.6 | 877.9 | 16.63 | 53.786 | |
| 4,400.0 | 4,340.6 | 4,300.2 | 4,290.1 | 14.4 | 9.0 | 156.88 | 275.0 | 273.2 | 916.3 | 899.3 | 17.02 | 53.846 | |
| 4,500.0 | 4,439.0 | 4,397.7 | 4,387.4 | 14.8 | 9.2 | 157.02 | 279.7 | 278.3 | 938.1 | 920.7 | 17.40 | 53.904 | |
| 4,600.0 | 4,537.4 | 4,495.3 | 4,484.7 | 15.1 | 9.4 | 157.17 | 284.3 | 283.5 | 959.8 | 942.0 | 17.79 | 53.959 | |
| 4,700.0 | 4,635.8 | 4,592.9 | 4,582.1 | 15.5 | 9.6 | 157.30 | 289.0 | 288.6 | 981.6 | 963.4 | 18.17 | 54.013 | |
| 4,800.0 | 4,734.3 | 4,690.5 | 4,679.4 | 15.8 | 9.8 | 157.43 | 293.7 | 293.8 | 1,003.4 | 984.8 | 18.56 | 54.064 | |
| 4,900.0 | 4,832.7 | 4,788.0 | 4,776.7 | 16.2 | 10.1 | 157.56 | 298.4 | 298.9 | 1,025.1 | 1,006.2 | 18.94 | 54.114 | |
| 5,000.0 | 4,931.1 | 4,885.6 | 4,874.0 | 16.5 | 10.3 | 157.68 | 303.0 | 304.1 | 1,046.9 | 1,027.6 | 19.33 | 54.163 | |
| 5,100.0 | 5,029.5 | 4,983.2 | 4,971.4 | 16.9 | 10.5 | 157.79 | 307.7 | 309.2 | 1,068.7 | 1,049.0 | 19.71 | 54.209 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-23D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,200.0 | 5,127.9 | 5,080.8 | 5,068.7 | 17.3 | 10.7 | 157.90 | 312.4 | 314.4 | 1,090.5 | 1,070.4 | 20.10 | 54.254 | |
| 5,300.0 | 5,226.4 | 5,178.4 | 5,166.0 | 17.6 | 10.9 | 158.01 | 317.1 | 319.5 | 1,112.3 | 1,091.8 | 20.48 | 54.298 | |
| 5,400.0 | 5,324.8 | 5,275.9 | 5,263.4 | 18.0 | 11.1 | 158.11 | 321.7 | 324.7 | 1,134.1 | 1,113.2 | 20.87 | 54.340 | |
| 5,500.0 | 5,423.2 | 5,373.5 | 5,360.7 | 18.3 | 11.3 | 158.21 | 326.4 | 329.8 | 1,155.9 | 1,134.6 | 21.26 | 54.381 | |
| 5,600.0 | 5,521.6 | 5,471.1 | 5,458.0 | 18.7 | 11.5 | 158.30 | 331.1 | 335.0 | 1,177.7 | 1,156.0 | 21.64 | 54.420 | |
| 5,700.0 | 5,620.0 | 5,568.7 | 5,555.3 | 19.1 | 11.7 | 158.39 | 335.8 | 340.2 | 1,199.5 | 1,177.5 | 22.03 | 54.459 | |
| 5,800.0 | 5,718.5 | 5,666.2 | 5,652.7 | 19.4 | 11.9 | 158.48 | 340.4 | 345.3 | 1,221.3 | 1,198.9 | 22.41 | 54.496 | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-25D - DD - DD

**Offset Site Error:** 0.0 ft

**Survey Program:** 139-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.60 | 71.4 | 53.0 | 88.9 | | | | |
| 100.0 | 100.0 | 99.1 | 99.1 | 0.1 | 0.1 | 36.57 | 71.8 | 53.3 | 89.4 | 89.1 | 0.28 | 315.868 | |
| 200.0 | 200.0 | 197.8 | 197.8 | 0.3 | 0.3 | 36.44 | 73.2 | 54.1 | 91.0 | 90.4 | 0.62 | 146.044 | |
| 300.0 | 300.0 | 296.0 | 295.9 | 0.5 | 0.5 | 35.79 | 76.5 | 55.1 | 94.4 | 93.4 | 0.98 | 95.998 | |
| 400.0 | 400.0 | 392.7 | 392.4 | 0.7 | 0.7 | 105.28 | 82.5 | 56.2 | 100.6 | 99.3 | 1.32 | 76.423 | |
| 500.0 | 499.8 | 488.8 | 488.0 | 0.9 | 0.9 | 105.48 | 92.1 | 58.0 | 111.2 | 109.5 | 1.69 | 65.917 | |
| 600.0 | 599.5 | 587.7 | 586.2 | 1.1 | 1.2 | 106.24 | 104.5 | 59.3 | 124.5 | 122.4 | 2.10 | 59.214 | |
| 700.0 | 698.7 | 686.5 | 683.9 | 1.3 | 1.5 | 107.19 | 118.2 | 58.6 | 138.7 | 136.1 | 2.57 | 53.876 | |
| 800.0 | 797.5 | 784.1 | 780.5 | 1.6 | 1.8 | 108.96 | 132.2 | 57.9 | 154.5 | 151.4 | 3.10 | 49.897 | |
| 900.0 | 895.9 | 880.0 | 875.5 | 2.0 | 2.1 | 111.70 | 145.9 | 58.9 | 172.2 | 168.6 | 3.63 | 47.506 | |
| 1,000.0 | 994.3 | 978.3 | 972.7 | 2.3 | 2.4 | 114.01 | 160.2 | 60.3 | 190.8 | 186.6 | 4.18 | 45.662 | |
| 1,100.0 | 1,092.7 | 1,073.7 | 1,067.0 | 2.6 | 2.7 | 115.86 | 174.6 | 62.1 | 210.3 | 205.5 | 4.73 | 44.495 | |
| 1,200.0 | 1,191.1 | 1,171.4 | 1,163.4 | 3.0 | 3.0 | 117.24 | 190.3 | 63.8 | 230.5 | 225.2 | 5.29 | 43.552 | |
| 1,300.0 | 1,289.6 | 1,270.0 | 1,260.8 | 3.3 | 3.3 | 118.48 | 205.8 | 65.8 | 250.8 | 244.9 | 5.85 | 42.856 | |
| 1,400.0 | 1,388.0 | 1,371.2 | 1,360.9 | 3.7 | 3.6 | 119.70 | 220.6 | 67.3 | 270.1 | 263.7 | 6.42 | 42.093 | |
| 1,500.0 | 1,486.4 | 1,468.3 | 1,457.0 | 4.0 | 3.9 | 120.82 | 234.2 | 69.0 | 289.3 | 282.3 | 6.97 | 41.526 | |
| 1,600.0 | 1,584.8 | 1,566.5 | 1,554.2 | 4.4 | 4.2 | 121.86 | 247.9 | 71.0 | 308.8 | 301.2 | 7.52 | 41.078 | |
| 1,700.0 | 1,683.2 | 1,667.0 | 1,653.8 | 4.8 | 4.5 | 122.79 | 261.6 | 72.5 | 327.8 | 319.7 | 8.07 | 40.606 | |
| 1,800.0 | 1,781.7 | 1,766.4 | 1,752.3 | 5.1 | 4.8 | 123.63 | 274.7 | 73.6 | 346.2 | 337.6 | 8.62 | 40.161 | |
| 1,900.0 | 1,880.1 | 1,864.2 | 1,849.3 | 5.5 | 5.0 | 124.44 | 287.2 | 74.9 | 364.7 | 355.6 | 9.16 | 39.820 | |
| 2,000.0 | 1,978.5 | 1,960.8 | 1,945.1 | 5.8 | 5.3 | 125.24 | 299.2 | 76.6 | 383.5 | 373.8 | 9.69 | 39.584 | |
| 2,100.0 | 2,076.9 | 2,057.0 | 2,040.5 | 6.2 | 5.6 | 126.04 | 311.0 | 79.1 | 402.8 | 392.6 | 10.21 | 39.458 | |
| 2,200.0 | 2,175.3 | 2,156.1 | 2,138.9 | 6.5 | 5.9 | 126.77 | 323.4 | 81.6 | 422.4 | 411.6 | 10.74 | 39.336 | |
| 2,300.0 | 2,273.8 | 2,256.4 | 2,238.3 | 6.9 | 6.1 | 127.45 | 335.6 | 83.7 | 441.5 | 430.2 | 11.27 | 39.179 | |
| 2,400.0 | 2,372.2 | 2,351.9 | 2,333.1 | 7.2 | 6.4 | 128.03 | 347.3 | 85.6 | 460.5 | 448.7 | 11.79 | 39.059 | |
| 2,500.0 | 2,470.6 | 2,447.2 | 2,427.6 | 7.6 | 6.7 | 128.50 | 359.8 | 88.0 | 480.4 | 468.1 | 12.32 | 38.992 | |
| 2,600.0 | 2,569.0 | 2,542.1 | 2,521.4 | 8.0 | 7.0 | 128.78 | 373.5 | 89.9 | 500.6 | 487.8 | 12.87 | 38.901 | |
| 2,700.0 | 2,667.4 | 2,638.3 | 2,616.5 | 8.3 | 7.3 | 128.93 | 388.6 | 91.9 | 521.7 | 508.2 | 13.42 | 38.858 | |
| 2,800.0 | 2,765.9 | 2,739.9 | 2,716.9 | 8.7 | 7.6 | 129.12 | 404.0 | 94.1 | 542.4 | 528.4 | 13.99 | 38.760 | |
| 2,900.0 | 2,864.3 | 2,841.0 | 2,816.8 | 9.0 | 7.9 | 129.26 | 419.4 | 95.3 | 562.3 | 547.8 | 14.57 | 38.600 | |
| 3,000.0 | 2,962.7 | 2,940.7 | 2,915.2 | 9.4 | 8.3 | 129.32 | 434.7 | 95.9 | 581.9 | 566.8 | 15.14 | 38.424 | |
| 3,100.0 | 3,061.1 | 3,045.1 | 3,018.5 | 9.7 | 8.6 | 129.42 | 450.3 | 96.2 | 600.9 | 585.2 | 15.72 | 38.220 | |
| 3,200.0 | 3,159.5 | 3,135.6 | 3,108.0 | 10.1 | 8.9 | 129.55 | 463.3 | 96.6 | 619.9 | 603.6 | 16.26 | 38.117 | |
| 3,300.0 | 3,258.0 | 3,218.6 | 3,190.1 | 10.5 | 9.1 | 129.65 | 476.0 | 98.3 | 640.6 | 623.8 | 16.78 | 38.168 | |
| 3,400.0 | 3,356.4 | 3,316.5 | 3,286.6 | 10.8 | 9.5 | 129.76 | 491.9 | 101.6 | 663.0 | 645.6 | 17.34 | 38.235 | |
| 3,500.0 | 3,454.8 | 3,430.7 | 3,399.5 | 11.2 | 9.8 | 129.93 | 509.1 | 104.3 | 683.8 | 665.9 | 17.94 | 38.124 | |
| 3,600.0 | 3,553.2 | 3,517.1 | 3,484.9 | 11.5 | 10.1 | 130.00 | 522.3 | 105.5 | 704.1 | 685.6 | 18.48 | 38.104 | |
| 3,700.0 | 3,651.6 | 3,615.8 | 3,582.2 | 11.9 | 10.4 | 130.04 | 538.2 | 107.7 | 725.4 | 706.3 | 19.04 | 38.094 | |
| 3,800.0 | 3,750.1 | 3,702.4 | 3,667.6 | 12.2 | 10.7 | 130.08 | 552.3 | 109.9 | 747.0 | 727.4 | 19.59 | 38.136 | |
| 3,900.0 | 3,848.5 | 3,784.1 | 3,747.9 | 12.6 | 11.0 | 130.02 | 567.5 | 112.7 | 770.5 | 750.4 | 20.14 | 38.262 | |
| 4,000.0 | 3,946.9 | 3,882.4 | 3,844.1 | 13.0 | 11.4 | 129.88 | 587.2 | 116.7 | 795.3 | 774.6 | 20.74 | 38.340 | |
| 4,100.0 | 4,045.3 | 3,988.1 | 3,947.6 | 13.3 | 11.8 | 129.68 | 608.5 | 119.6 | 819.1 | 797.7 | 21.39 | 38.290 | |
| 4,200.0 | 4,143.7 | 4,092.1 | 4,049.5 | 13.7 | 12.2 | 129.47 | 629.3 | 121.6 | 842.0 | 819.9 | 22.02 | 38.239 | |
| 4,300.0 | 4,242.2 | 4,192.1 | 4,147.6 | 14.0 | 12.6 | 129.32 | 648.5 | 123.3 | 864.3 | 841.7 | 22.64 | 38.172 | |
| 4,400.0 | 4,340.6 | 4,281.8 | 4,235.4 | 14.4 | 13.0 | 129.12 | 666.8 | 124.4 | 887.0 | 863.7 | 23.25 | 38.145 | |
| 4,500.0 | 4,439.0 | 4,384.6 | 4,336.0 | 14.8 | 13.4 | 128.90 | 687.9 | 125.9 | 909.8 | 886.0 | 23.88 | 38.096 | |
| 4,600.0 | 4,537.4 | 4,486.2 | 4,435.7 | 15.1 | 13.8 | 128.78 | 707.4 | 127.6 | 932.1 | 907.6 | 24.50 | 38.041 | |
| 4,700.0 | 4,635.8 | 4,589.2 | 4,536.9 | 15.5 | 14.1 | 128.70 | 726.2 | 129.1 | 953.9 | 928.8 | 25.11 | 37.985 | |
| 4,800.0 | 4,734.3 | 4,691.3 | 4,637.5 | 15.8 | 14.5 | 128.67 | 744.0 | 130.7 | 975.3 | 949.6 | 25.71 | 37.930 | |
| 4,900.0 | 4,832.7 | 4,792.3 | 4,737.1 | 16.2 | 14.8 | 128.69 | 760.7 | 132.0 | 996.0 | 969.7 | 26.30 | 37.866 | |
| 5,000.0 | 4,931.1 | 4,884.5 | 4,827.9 | 16.5 | 15.1 | 128.68 | 776.6 | 133.4 | 1,017.2 | 990.3 | 26.87 | 37.849 | |
| 5,100.0 | 5,029.5 | 4,988.9 | 4,930.8 | 16.9 | 15.5 | 128.70 | 793.8 | 135.0 | 1,038.1 | 1,010.6 | 27.47 | 37.793 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-25D - DD - DD

**Offset Site Error:** 0.0 ft

**Survey Program:** 139-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,200.0 | 5,127.9 | 5,084.2 | 5,024.9 | 17.3 | 15.8 | 128.75 | 809.1 | 136.5 | 1,058.7 | 1,030.7 | 28.04 | 37.759 | |
| 5,300.0 | 5,226.4 | 5,177.5 | 5,116.7 | 17.6 | 16.1 | 128.73 | 825.3 | 137.8 | 1,080.0 | 1,051.3 | 28.62 | 37.736 | |
| 5,400.0 | 5,324.8 | 5,280.6 | 5,218.3 | 18.0 | 16.5 | 128.71 | 842.9 | 139.2 | 1,101.1 | 1,071.9 | 29.22 | 37.688 | |
| 5,500.0 | 5,423.2 | 5,388.1 | 5,324.5 | 18.3 | 16.8 | 128.76 | 860.0 | 140.7 | 1,121.5 | 1,091.7 | 29.81 | 37.619 | |
| 5,600.0 | 5,521.6 | 5,493.7 | 5,428.8 | 18.7 | 17.2 | 128.82 | 876.1 | 141.5 | 1,141.1 | 1,110.7 | 30.41 | 37.530 | |
| 5,700.0 | 5,620.0 | 5,587.3 | 5,521.3 | 19.1 | 17.5 | 128.85 | 890.6 | 141.9 | 1,160.5 | 1,129.5 | 30.98 | 37.465 | |
| 5,800.0 | 5,718.5 | 5,669.1 | 5,601.9 | 19.4 | 17.8 | 128.85 | 904.2 | 142.4 | 1,180.8 | 1,149.3 | 31.52 | 37.464 | SF |
| 5,900.0 | 5,816.9 | 5,757.5 | 5,689.0 | 19.8 | 18.1 | 128.83 | 919.7 | 144.1 | 1,202.5 | 1,170.4 | 32.08 | 37.489 | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-32D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -143.28 | -60.1 | -44.8 | 75.0 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -143.28 | -60.1 | -44.8 | 75.0 | 74.7 | 0.27 | 275.386 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -143.28 | -60.1 | -44.8 | 75.0 | 74.4 | 0.62 | 120.675 | CC, ES |
| 300.0 | 300.0 | 297.4 | 297.4 | 0.5 | 0.5 | -143.21 | -61.4 | -45.9 | 76.7 | 75.7 | 0.97 | 79.128 | |
| 400.0 | 400.0 | 394.6 | 394.5 | 0.7 | 0.7 | -73.88 | -65.2 | -49.1 | 81.3 | 80.0 | 1.31 | 61.895 | |
| 500.0 | 499.8 | 491.4 | 490.9 | 0.9 | 0.9 | -76.53 | -71.5 | -54.3 | 88.4 | 86.7 | 1.67 | 52.804 | |
| 600.0 | 599.5 | 587.6 | 586.4 | 1.1 | 1.1 | -80.33 | -80.2 | -61.6 | 98.4 | 96.3 | 2.06 | 47.637 | |
| 700.0 | 698.7 | 683.0 | 680.7 | 1.3 | 1.4 | -84.63 | -91.3 | -70.9 | 111.6 | 109.1 | 2.51 | 44.547 | |
| 800.0 | 797.5 | 777.3 | 773.4 | 1.6 | 1.8 | -88.89 | -104.6 | -82.0 | 128.5 | 125.4 | 3.02 | 42.563 | |
| 900.0 | 895.9 | 870.5 | 864.4 | 2.0 | 2.2 | -92.67 | -120.0 | -94.9 | 149.0 | 145.4 | 3.57 | 41.771 | |
| 1,000.0 | 994.3 | 967.6 | 958.8 | 2.3 | 2.6 | -95.44 | -137.3 | -109.4 | 171.5 | 167.4 | 4.15 | 41.307 | |
| 1,100.0 | 1,092.7 | 1,064.7 | 1,053.3 | 2.6 | 3.0 | -97.57 | -154.7 | -123.9 | 194.3 | 189.6 | 4.75 | 40.873 | |
| 1,200.0 | 1,191.1 | 1,161.8 | 1,147.7 | 3.0 | 3.4 | -99.25 | -172.0 | -138.4 | 217.4 | 212.0 | 5.37 | 40.480 | |
| 1,300.0 | 1,289.6 | 1,259.0 | 1,242.2 | 3.3 | 3.8 | -100.61 | -189.4 | -152.9 | 240.5 | 234.5 | 5.99 | 40.133 | |
| 1,400.0 | 1,388.0 | 1,356.1 | 1,336.7 | 3.7 | 4.3 | -101.73 | -206.7 | -167.4 | 263.8 | 257.2 | 6.62 | 39.830 | |
| 1,500.0 | 1,486.4 | 1,453.2 | 1,431.1 | 4.0 | 4.7 | -102.67 | -224.0 | -181.9 | 287.2 | 279.9 | 7.26 | 39.565 | |
| 1,600.0 | 1,584.8 | 1,550.4 | 1,525.6 | 4.4 | 5.1 | -103.47 | -241.4 | -196.4 | 310.6 | 302.7 | 7.90 | 39.333 | |
| 1,700.0 | 1,683.2 | 1,647.5 | 1,620.1 | 4.8 | 5.5 | -104.16 | -258.7 | -210.9 | 334.1 | 325.5 | 8.54 | 39.128 | |
| 1,800.0 | 1,781.7 | 1,744.6 | 1,714.6 | 5.1 | 6.0 | -104.75 | -276.1 | -225.4 | 357.6 | 348.4 | 9.18 | 38.948 | |
| 1,900.0 | 1,880.1 | 1,841.8 | 1,809.0 | 5.5 | 6.4 | -105.28 | -293.4 | -239.9 | 381.1 | 371.3 | 9.83 | 38.788 | |
| 2,000.0 | 1,978.5 | 1,938.9 | 1,903.5 | 5.8 | 6.8 | -105.74 | -310.7 | -254.4 | 404.7 | 394.2 | 10.47 | 38.645 | |
| 2,100.0 | 2,076.9 | 2,036.1 | 1,998.0 | 6.2 | 7.3 | -106.15 | -328.1 | -268.9 | 428.3 | 417.1 | 11.12 | 38.516 | |
| 2,200.0 | 2,175.3 | 2,133.2 | 2,092.4 | 6.5 | 7.7 | -106.52 | -345.4 | -283.4 | 451.9 | 440.1 | 11.77 | 38.401 | |
| 2,300.0 | 2,273.8 | 2,230.3 | 2,186.9 | 6.9 | 8.1 | -106.85 | -362.7 | -297.9 | 475.5 | 463.1 | 12.42 | 38.296 | |
| 2,400.0 | 2,372.2 | 2,327.5 | 2,281.4 | 7.2 | 8.6 | -107.15 | -380.1 | -312.4 | 499.1 | 486.1 | 13.07 | 38.201 | |
| 2,500.0 | 2,470.6 | 2,424.6 | 2,375.8 | 7.6 | 9.0 | -107.42 | -397.4 | -326.9 | 522.8 | 509.1 | 13.72 | 38.114 | |
| 2,600.0 | 2,569.0 | 2,521.7 | 2,470.3 | 8.0 | 9.4 | -107.67 | -414.8 | -341.3 | 546.4 | 532.1 | 14.37 | 38.034 | |
| 2,700.0 | 2,667.4 | 2,618.9 | 2,564.8 | 8.3 | 9.9 | -107.90 | -432.1 | -355.8 | 570.1 | 555.1 | 15.02 | 37.961 | |
| 2,800.0 | 2,765.9 | 2,716.0 | 2,659.2 | 8.7 | 10.3 | -108.11 | -449.4 | -370.3 | 593.8 | 578.1 | 15.67 | 37.894 | |
| 2,900.0 | 2,864.3 | 2,813.1 | 2,753.7 | 9.0 | 10.7 | -108.31 | -466.8 | -384.8 | 617.4 | 601.1 | 16.32 | 37.832 | |
| 3,000.0 | 2,962.7 | 2,910.3 | 2,848.2 | 9.4 | 11.1 | -108.49 | -484.1 | -399.3 | 641.1 | 624.2 | 16.97 | 37.774 | |
| 3,100.0 | 3,061.1 | 3,007.4 | 2,942.7 | 9.7 | 11.6 | -108.65 | -501.4 | -413.8 | 664.8 | 647.2 | 17.63 | 37.720 | |
| 3,200.0 | 3,159.5 | 3,104.5 | 3,037.1 | 10.1 | 12.0 | -108.81 | -518.8 | -428.3 | 688.5 | 670.3 | 18.28 | 37.670 | |
| 3,300.0 | 3,258.0 | 3,201.7 | 3,131.6 | 10.5 | 12.4 | -108.95 | -536.1 | -442.8 | 712.2 | 693.3 | 18.93 | 37.623 | |
| 3,400.0 | 3,356.4 | 3,298.8 | 3,226.1 | 10.8 | 12.9 | -109.09 | -553.5 | -457.3 | 735.9 | 716.4 | 19.58 | 37.580 | |
| 3,500.0 | 3,454.8 | 3,395.9 | 3,320.5 | 11.2 | 13.3 | -109.22 | -570.8 | -471.8 | 759.6 | 739.4 | 20.24 | 37.539 | |
| 3,600.0 | 3,553.2 | 3,493.1 | 3,415.0 | 11.5 | 13.7 | -109.34 | -588.1 | -486.3 | 783.4 | 762.5 | 20.89 | 37.500 | |
| 3,700.0 | 3,651.6 | 3,590.2 | 3,509.5 | 11.9 | 14.2 | -109.45 | -605.5 | -500.8 | 807.1 | 785.5 | 21.54 | 37.464 | |
| 3,800.0 | 3,750.1 | 3,687.3 | 3,603.9 | 12.2 | 14.6 | -109.56 | -622.8 | -515.3 | 830.8 | 808.6 | 22.20 | 37.430 | |
| 3,900.0 | 3,848.5 | 3,784.5 | 3,698.4 | 12.6 | 15.0 | -109.66 | -640.2 | -529.8 | 854.5 | 831.7 | 22.85 | 37.397 | |
| 4,000.0 | 3,946.9 | 3,881.6 | 3,792.9 | 13.0 | 15.5 | -109.75 | -657.5 | -544.3 | 878.2 | 854.7 | 23.50 | 37.367 | |
| 4,100.0 | 4,045.3 | 3,978.8 | 3,887.4 | 13.3 | 15.9 | -109.84 | -674.8 | -558.8 | 902.0 | 877.8 | 24.16 | 37.338 | |
| 4,200.0 | 4,143.7 | 4,075.9 | 3,981.8 | 13.7 | 16.3 | -109.93 | -692.2 | -573.3 | 925.7 | 900.9 | 24.81 | 37.311 | |
| 4,300.0 | 4,242.2 | 4,173.0 | 4,076.3 | 14.0 | 16.8 | -110.01 | -709.5 | -587.8 | 949.4 | 924.0 | 25.46 | 37.284 | |
| 4,400.0 | 4,340.6 | 4,270.2 | 4,170.8 | 14.4 | 17.2 | -110.09 | -726.8 | -602.3 | 973.2 | 947.0 | 26.12 | 37.260 | |
| 4,500.0 | 4,439.0 | 4,367.3 | 4,265.2 | 14.8 | 17.6 | -110.16 | -744.2 | -616.8 | 996.9 | 970.1 | 26.77 | 37.236 | |
| 4,600.0 | 4,537.4 | 4,464.4 | 4,359.7 | 15.1 | 18.1 | -110.23 | -761.5 | -631.3 | 1,020.6 | 993.2 | 27.43 | 37.213 | |
| 4,700.0 | 4,635.8 | 4,561.6 | 4,454.2 | 15.5 | 18.5 | -110.30 | -778.9 | -645.8 | 1,044.4 | 1,016.3 | 28.08 | 37.192 | |
| 4,800.0 | 4,734.3 | 4,658.7 | 4,548.6 | 15.8 | 18.9 | -110.36 | -796.2 | -660.3 | 1,068.1 | 1,039.4 | 28.73 | 37.171 | |
| 4,900.0 | 4,832.7 | 4,755.8 | 4,643.1 | 16.2 | 19.4 | -110.42 | -813.5 | -674.7 | 1,091.8 | 1,062.5 | 29.39 | 37.152 | |
| 5,000.0 | 4,931.1 | 4,853.0 | 4,737.6 | 16.5 | 19.8 | -110.48 | -830.9 | -689.2 | 1,115.6 | 1,085.5 | 30.04 | 37.133 | |
| 5,100.0 | 5,029.5 | 4,950.1 | 4,832.0 | 16.9 | 20.2 | -110.54 | -848.2 | -703.7 | 1,139.3 | 1,108.6 | 30.70 | 37.115 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-32D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,200.0 | 5,127.9 | 5,047.2 | 4,926.5 | 17.3 | 20.7 | -110.59 | -865.5 | -718.2 | 1,163.1 | 1,131.7 | 31.35 | 37.098 | |
| 5,300.0 | 5,226.4 | 5,144.4 | 5,021.0 | 17.6 | 21.1 | -110.64 | -882.9 | -732.7 | 1,186.8 | 1,154.8 | 32.01 | 37.081 | |
| 5,400.0 | 5,324.8 | 5,241.5 | 5,115.5 | 18.0 | 21.5 | -110.69 | -900.2 | -747.2 | 1,210.6 | 1,177.9 | 32.66 | 37.065 SF | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-33D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -143.11 | -48.1 | -36.1 | 60.1 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -143.11 | -48.1 | -36.1 | 60.1 | 59.8 | 0.27 | 220.805 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -143.11 | -48.1 | -36.1 | 60.1 | 59.5 | 0.62 | 96.757 | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -143.11 | -48.1 | -36.1 | 60.1 | 59.1 | 0.97 | 61.952 | CC, ES |
| 400.0 | 400.0 | 398.0 | 397.9 | 0.7 | 0.7 | -74.05 | -49.2 | -37.4 | 61.3 | 60.0 | 1.32 | 46.474 | |
| 500.0 | 499.8 | 495.8 | 495.6 | 0.9 | 0.8 | -77.24 | -52.4 | -41.2 | 64.9 | 63.2 | 1.68 | 38.601 | |
| 600.0 | 599.5 | 593.2 | 592.7 | 1.1 | 1.1 | -81.77 | -57.7 | -47.6 | 71.4 | 69.3 | 2.08 | 34.349 | |
| 700.0 | 698.7 | 690.2 | 689.0 | 1.3 | 1.3 | -86.82 | -65.1 | -56.4 | 81.0 | 78.5 | 2.53 | 32.052 | |
| 800.0 | 797.5 | 786.5 | 784.1 | 1.6 | 1.6 | -91.67 | -74.6 | -67.7 | 94.2 | 91.1 | 3.06 | 30.820 | |
| 900.0 | 895.9 | 882.1 | 878.1 | 2.0 | 1.9 | -95.54 | -86.0 | -81.3 | 110.7 | 107.1 | 3.62 | 30.565 | |
| 1,000.0 | 994.3 | 980.3 | 974.3 | 2.3 | 2.3 | -98.07 | -98.6 | -96.4 | 128.8 | 124.6 | 4.22 | 30.516 | |
| 1,100.0 | 1,092.7 | 1,078.5 | 1,070.5 | 2.6 | 2.6 | -99.97 | -111.3 | -111.5 | 147.1 | 142.3 | 4.84 | 30.418 | |
| 1,200.0 | 1,191.1 | 1,176.7 | 1,166.8 | 3.0 | 3.0 | -101.45 | -123.9 | -126.6 | 165.6 | 160.1 | 5.46 | 30.302 | |
| 1,300.0 | 1,289.6 | 1,275.0 | 1,263.0 | 3.3 | 3.4 | -102.64 | -136.6 | -141.7 | 184.1 | 178.0 | 6.10 | 30.186 | |
| 1,400.0 | 1,388.0 | 1,373.2 | 1,359.2 | 3.7 | 3.8 | -103.61 | -149.3 | -156.8 | 202.7 | 195.9 | 6.74 | 30.076 | |
| 1,500.0 | 1,486.4 | 1,471.4 | 1,455.4 | 4.0 | 4.2 | -104.41 | -161.9 | -171.9 | 221.3 | 213.9 | 7.38 | 29.975 | |
| 1,600.0 | 1,584.8 | 1,569.6 | 1,551.6 | 4.4 | 4.5 | -105.10 | -174.6 | -187.0 | 240.0 | 231.9 | 8.03 | 29.883 | |
| 1,700.0 | 1,683.2 | 1,667.8 | 1,647.8 | 4.8 | 4.9 | -105.68 | -187.3 | -202.1 | 258.7 | 250.0 | 8.68 | 29.800 | |
| 1,800.0 | 1,781.7 | 1,766.0 | 1,744.0 | 5.1 | 5.3 | -106.18 | -199.9 | -217.2 | 277.4 | 268.0 | 9.33 | 29.725 | |
| 1,900.0 | 1,880.1 | 1,864.2 | 1,840.2 | 5.5 | 5.7 | -106.62 | -212.6 | -232.3 | 296.1 | 286.1 | 9.98 | 29.657 | |
| 2,000.0 | 1,978.5 | 1,962.4 | 1,936.4 | 5.8 | 6.1 | -107.01 | -225.3 | -247.4 | 314.8 | 304.2 | 10.64 | 29.596 | |
| 2,100.0 | 2,076.9 | 2,060.6 | 2,032.6 | 6.2 | 6.5 | -107.35 | -237.9 | -262.5 | 333.6 | 322.3 | 11.29 | 29.540 | |
| 2,200.0 | 2,175.3 | 2,158.8 | 2,128.8 | 6.5 | 6.8 | -107.66 | -250.6 | -277.6 | 352.4 | 340.4 | 11.95 | 29.489 | |
| 2,300.0 | 2,273.8 | 2,257.0 | 2,225.0 | 6.9 | 7.2 | -107.94 | -263.3 | -292.7 | 371.2 | 358.5 | 12.61 | 29.443 | |
| 2,400.0 | 2,372.2 | 2,355.2 | 2,321.2 | 7.2 | 7.6 | -108.19 | -275.9 | -307.8 | 389.9 | 376.7 | 13.26 | 29.400 | |
| 2,500.0 | 2,470.6 | 2,453.4 | 2,417.5 | 7.6 | 8.0 | -108.42 | -288.6 | -322.9 | 408.7 | 394.8 | 13.92 | 29.361 | |
| 2,600.0 | 2,569.0 | 2,551.6 | 2,513.7 | 8.0 | 8.4 | -108.62 | -301.2 | -338.0 | 427.5 | 413.0 | 14.58 | 29.325 | |
| 2,700.0 | 2,667.4 | 2,649.8 | 2,609.9 | 8.3 | 8.8 | -108.81 | -313.9 | -353.1 | 446.3 | 431.1 | 15.24 | 29.292 | |
| 2,800.0 | 2,765.9 | 2,748.0 | 2,706.1 | 8.7 | 9.2 | -108.99 | -326.6 | -368.2 | 465.1 | 449.2 | 15.90 | 29.261 | |
| 2,900.0 | 2,864.3 | 2,846.3 | 2,802.3 | 9.0 | 9.5 | -109.15 | -339.2 | -383.3 | 484.0 | 467.4 | 16.56 | 29.233 | |
| 3,000.0 | 2,962.7 | 2,944.5 | 2,898.5 | 9.4 | 9.9 | -109.30 | -351.9 | -398.4 | 502.8 | 485.6 | 17.21 | 29.206 | |
| 3,100.0 | 3,061.1 | 3,042.7 | 2,994.7 | 9.7 | 10.3 | -109.43 | -364.6 | -413.5 | 521.6 | 503.7 | 17.87 | 29.181 | |
| 3,200.0 | 3,159.5 | 3,140.9 | 3,090.9 | 10.1 | 10.7 | -109.56 | -377.2 | -428.6 | 540.4 | 521.9 | 18.53 | 29.158 | |
| 3,300.0 | 3,258.0 | 3,239.1 | 3,187.1 | 10.5 | 11.1 | -109.68 | -389.9 | -443.7 | 559.2 | 540.0 | 19.19 | 29.136 | |
| 3,400.0 | 3,356.4 | 3,337.3 | 3,283.3 | 10.8 | 11.5 | -109.79 | -402.6 | -458.8 | 578.0 | 558.2 | 19.85 | 29.116 | |
| 3,500.0 | 3,454.8 | 3,435.5 | 3,379.5 | 11.2 | 11.9 | -109.90 | -415.2 | -473.9 | 596.9 | 576.4 | 20.51 | 29.097 | |
| 3,600.0 | 3,553.2 | 3,533.7 | 3,475.7 | 11.5 | 12.2 | -110.00 | -427.9 | -489.1 | 615.7 | 594.5 | 21.17 | 29.079 | |
| 3,700.0 | 3,651.6 | 3,631.9 | 3,571.9 | 11.9 | 12.6 | -110.09 | -440.6 | -504.2 | 634.5 | 612.7 | 21.83 | 29.062 | |
| 3,800.0 | 3,750.1 | 3,730.1 | 3,668.2 | 12.2 | 13.0 | -110.18 | -453.2 | -519.3 | 653.4 | 630.9 | 22.49 | 29.045 | |
| 3,900.0 | 3,848.5 | 3,828.3 | 3,764.4 | 12.6 | 13.4 | -110.26 | -465.9 | -534.4 | 672.2 | 649.0 | 23.16 | 29.030 | |
| 4,000.0 | 3,946.9 | 3,926.5 | 3,860.6 | 13.0 | 13.8 | -110.34 | -478.5 | -549.5 | 691.0 | 667.2 | 23.82 | 29.016 | |
| 4,100.0 | 4,045.3 | 4,024.7 | 3,956.8 | 13.3 | 14.2 | -110.41 | -491.2 | -564.6 | 709.9 | 685.4 | 24.48 | 29.002 | |
| 4,200.0 | 4,143.7 | 4,122.9 | 4,053.0 | 13.7 | 14.6 | -110.48 | -503.9 | -579.7 | 728.7 | 703.6 | 25.14 | 28.989 | |
| 4,300.0 | 4,242.2 | 4,221.1 | 4,149.2 | 14.0 | 15.0 | -110.55 | -516.5 | -594.8 | 747.5 | 721.7 | 25.80 | 28.977 | |
| 4,400.0 | 4,340.6 | 4,319.3 | 4,245.4 | 14.4 | 15.3 | -110.61 | -529.2 | -609.9 | 766.4 | 739.9 | 26.46 | 28.965 | |
| 4,500.0 | 4,439.0 | 4,417.5 | 4,341.6 | 14.8 | 15.7 | -110.67 | -541.9 | -625.0 | 785.2 | 758.1 | 27.12 | 28.953 | |
| 4,600.0 | 4,537.4 | 4,515.8 | 4,437.8 | 15.1 | 16.1 | -110.73 | -554.5 | -640.1 | 804.1 | 776.3 | 27.78 | 28.943 | |
| 4,700.0 | 4,635.8 | 4,614.0 | 4,534.0 | 15.5 | 16.5 | -110.78 | -567.2 | -655.2 | 822.9 | 794.5 | 28.44 | 28.932 | |
| 4,800.0 | 4,734.3 | 4,712.2 | 4,630.2 | 15.8 | 16.9 | -110.84 | -579.9 | -670.3 | 841.7 | 812.6 | 29.10 | 28.923 | |
| 4,900.0 | 4,832.7 | 4,810.4 | 4,726.4 | 16.2 | 17.3 | -110.89 | -592.5 | -685.4 | 860.6 | 830.8 | 29.76 | 28.913 | |
| 5,000.0 | 4,931.1 | 4,908.6 | 4,822.7 | 16.5 | 17.7 | -110.93 | -605.2 | -700.5 | 879.4 | 849.0 | 30.43 | 28.904 | |
| 5,100.0 | 5,029.5 | 5,006.8 | 4,918.9 | 16.9 | 18.1 | -110.98 | -617.9 | -715.6 | 898.3 | 867.2 | 31.09 | 28.895 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-33D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,200.0 | 5,127.9 | 5,105.0 | 5,015.1 | 17.3 | 18.4 | -111.02 | -630.5 | -730.7 | 917.1 | 885.4 | 31.75 | 28.887 | |
| 5,300.0 | 5,226.4 | 5,203.2 | 5,111.3 | 17.6 | 18.8 | -111.06 | -643.2 | -745.8 | 936.0 | 903.5 | 32.41 | 28.879 | |
| 5,400.0 | 5,324.8 | 5,301.4 | 5,207.5 | 18.0 | 19.2 | -111.11 | -655.8 | -760.9 | 954.8 | 921.7 | 33.07 | 28.871 | |
| 5,500.0 | 5,423.2 | 5,399.6 | 5,303.7 | 18.3 | 19.6 | -111.14 | -668.5 | -776.0 | 973.6 | 939.9 | 33.73 | 28.864 | |
| 5,600.0 | 5,521.6 | 5,497.8 | 5,399.9 | 18.7 | 20.0 | -111.18 | -681.2 | -791.1 | 992.5 | 958.1 | 34.39 | 28.857 | |
| 5,700.0 | 5,620.0 | 5,596.0 | 5,496.1 | 19.1 | 20.4 | -111.22 | -693.8 | -806.2 | 1,011.3 | 976.3 | 35.06 | 28.850 | |
| 5,800.0 | 5,718.5 | 5,694.2 | 5,592.3 | 19.4 | 20.8 | -111.25 | -706.5 | -821.3 | 1,030.2 | 994.5 | 35.72 | 28.843 | |
| 5,900.0 | 5,816.9 | 5,792.4 | 5,688.5 | 19.8 | 21.2 | -111.29 | -719.2 | -836.4 | 1,049.0 | 1,012.7 | 36.38 | 28.837 | |
| 6,000.0 | 5,915.3 | 5,890.6 | 5,784.7 | 20.1 | 21.5 | -111.32 | -731.8 | -851.5 | 1,067.9 | 1,030.8 | 37.04 | 28.831 | |
| 6,100.0 | 6,013.7 | 5,988.8 | 5,880.9 | 20.5 | 21.9 | -111.35 | -744.5 | -866.6 | 1,086.7 | 1,049.0 | 37.70 | 28.825 | |
| 6,200.0 | 6,112.1 | 6,087.1 | 5,977.1 | 20.8 | 22.3 | -111.38 | -757.2 | -881.7 | 1,105.6 | 1,067.2 | 38.36 | 28.819 | |
| 6,300.0 | 6,210.6 | 6,185.3 | 6,073.4 | 21.2 | 22.7 | -111.41 | -769.8 | -896.9 | 1,124.4 | 1,085.4 | 39.02 | 28.814 | |
| 6,400.0 | 6,309.0 | 6,283.5 | 6,169.6 | 21.6 | 23.1 | -111.44 | -782.5 | -912.0 | 1,143.3 | 1,103.6 | 39.69 | 28.808 | |
| 6,500.0 | 6,407.4 | 6,381.7 | 6,265.8 | 21.9 | 23.5 | -111.46 | -795.2 | -927.1 | 1,162.1 | 1,121.8 | 40.35 | 28.803 | |
| 6,600.0 | 6,505.8 | 6,479.9 | 6,362.0 | 22.3 | 23.9 | -111.49 | -807.8 | -942.2 | 1,181.0 | 1,140.0 | 41.01 | 28.798 | |
| 6,700.0 | 6,604.2 | 6,578.1 | 6,458.2 | 22.6 | 24.3 | -111.52 | -820.5 | -957.3 | 1,199.8 | 1,158.1 | 41.67 | 28.793 | |
| 6,800.0 | 6,702.7 | 6,676.3 | 6,554.4 | 23.0 | 24.6 | -111.54 | -833.1 | -972.4 | 1,218.7 | 1,176.3 | 42.33 | 28.788 | SF |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-34D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -143.11 | -36.1 | -27.1 | 45.1 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -143.11 | -36.1 | -27.1 | 45.1 | 44.8 | 0.27 | 165.604 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -143.11 | -36.1 | -27.1 | 45.1 | 44.5 | 0.62 | 72.568 | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -143.11 | -36.1 | -27.1 | 45.1 | 44.1 | 0.97 | 46.464 | |
| 400.0 | 400.0 | 400.0 | 400.0 | 0.7 | 0.7 | -75.06 | -36.1 | -27.1 | 44.6 | 43.3 | 1.32 | 33.742 | |
| 500.0 | 499.8 | 499.8 | 499.8 | 0.9 | 0.8 | -81.73 | -36.1 | -27.1 | 43.6 | 41.9 | 1.69 | 25.806 | |
| 528.3 | 528.1 | 527.7 | 527.7 | 0.9 | 0.9 | -84.36 | -36.1 | -27.2 | 43.4 | 41.6 | 1.80 | 24.137 | CC, ES |
| 600.0 | 599.5 | 598.4 | 598.3 | 1.1 | 1.0 | -91.54 | -36.9 | -28.6 | 44.4 | 42.3 | 2.08 | 21.342 | |
| 700.0 | 698.7 | 696.8 | 696.7 | 1.3 | 1.2 | -101.44 | -39.3 | -33.0 | 49.2 | 46.7 | 2.51 | 19.597 | |
| 800.0 | 797.5 | 795.2 | 794.7 | 1.6 | 1.4 | -109.57 | -43.3 | -40.4 | 58.1 | 55.1 | 3.00 | 19.391 | |
| 900.0 | 895.9 | 893.4 | 892.1 | 2.0 | 1.6 | -114.54 | -48.9 | -50.8 | 70.1 | 66.6 | 3.51 | 19.952 | |
| 1,000.0 | 994.3 | 991.4 | 989.0 | 2.3 | 1.9 | -115.88 | -56.1 | -64.0 | 83.6 | 79.5 | 4.08 | 20.493 | |
| 1,100.0 | 1,092.7 | 1,089.7 | 1,085.6 | 2.6 | 2.2 | -115.16 | -64.7 | -80.0 | 98.3 | 93.6 | 4.69 | 20.949 | |
| 1,200.0 | 1,191.1 | 1,188.5 | 1,182.6 | 3.0 | 2.6 | -114.34 | -73.7 | -96.6 | 113.3 | 108.0 | 5.33 | 21.258 | |
| 1,300.0 | 1,289.6 | 1,287.4 | 1,279.7 | 3.3 | 2.9 | -113.71 | -82.7 | -113.1 | 128.3 | 122.3 | 5.97 | 21.467 | |
| 1,400.0 | 1,388.0 | 1,386.3 | 1,376.7 | 3.7 | 3.3 | -113.21 | -91.7 | -129.7 | 143.3 | 136.6 | 6.63 | 21.613 | |
| 1,500.0 | 1,486.4 | 1,485.1 | 1,473.8 | 4.0 | 3.6 | -112.81 | -100.6 | -146.3 | 158.3 | 151.0 | 7.29 | 21.718 | |
| 1,600.0 | 1,584.8 | 1,584.0 | 1,570.8 | 4.4 | 4.0 | -112.47 | -109.6 | -162.9 | 173.3 | 165.3 | 7.95 | 21.796 | |
| 1,700.0 | 1,683.2 | 1,682.9 | 1,667.9 | 4.8 | 4.3 | -112.19 | -118.6 | -179.4 | 188.3 | 179.7 | 8.61 | 21.854 | |
| 1,800.0 | 1,781.7 | 1,781.7 | 1,764.9 | 5.1 | 4.7 | -111.95 | -127.6 | -196.0 | 203.3 | 194.0 | 9.28 | 21.900 | |
| 1,900.0 | 1,880.1 | 1,880.6 | 1,862.0 | 5.5 | 5.1 | -111.75 | -136.5 | -212.6 | 218.3 | 208.3 | 9.95 | 21.935 | |
| 2,000.0 | 1,978.5 | 1,979.4 | 1,959.0 | 5.8 | 5.4 | -111.57 | -145.5 | -229.1 | 233.3 | 222.7 | 10.62 | 21.964 | |
| 2,100.0 | 2,076.9 | 2,078.3 | 2,056.1 | 6.2 | 5.8 | -111.41 | -154.5 | -245.7 | 248.3 | 237.0 | 11.29 | 21.986 | |
| 2,200.0 | 2,175.3 | 2,177.2 | 2,153.1 | 6.5 | 6.2 | -111.27 | -163.5 | -262.3 | 263.4 | 251.4 | 11.97 | 22.005 | |
| 2,300.0 | 2,273.8 | 2,276.0 | 2,250.2 | 6.9 | 6.5 | -111.15 | -172.4 | -278.9 | 278.4 | 265.7 | 12.64 | 22.020 | |
| 2,400.0 | 2,372.2 | 2,374.9 | 2,347.2 | 7.2 | 6.9 | -111.04 | -181.4 | -295.4 | 293.4 | 280.1 | 13.32 | 22.033 | |
| 2,500.0 | 2,470.6 | 2,473.8 | 2,444.3 | 7.6 | 7.3 | -110.93 | -190.4 | -312.0 | 308.4 | 294.4 | 13.99 | 22.044 | |
| 2,600.0 | 2,569.0 | 2,572.6 | 2,541.3 | 8.0 | 7.6 | -110.84 | -199.4 | -328.6 | 323.5 | 308.8 | 14.67 | 22.052 | |
| 2,700.0 | 2,667.4 | 2,671.5 | 2,638.4 | 8.3 | 8.0 | -110.76 | -208.3 | -345.1 | 338.5 | 323.1 | 15.34 | 22.060 | |
| 2,800.0 | 2,765.9 | 2,770.4 | 2,735.4 | 8.7 | 8.4 | -110.68 | -217.3 | -361.7 | 353.5 | 337.5 | 16.02 | 22.067 | |
| 2,900.0 | 2,864.3 | 2,869.2 | 2,832.5 | 9.0 | 8.8 | -110.61 | -226.3 | -378.3 | 368.5 | 351.8 | 16.70 | 22.072 | |
| 3,000.0 | 2,962.7 | 2,968.1 | 2,929.5 | 9.4 | 9.1 | -110.55 | -235.3 | -394.9 | 383.6 | 366.2 | 17.37 | 22.077 | |
| 3,100.0 | 3,061.1 | 3,066.9 | 3,026.6 | 9.7 | 9.5 | -110.49 | -244.2 | -411.4 | 398.6 | 380.5 | 18.05 | 22.081 | |
| 3,200.0 | 3,159.5 | 3,165.8 | 3,123.6 | 10.1 | 9.9 | -110.43 | -253.2 | -428.0 | 413.6 | 394.9 | 18.73 | 22.085 | |
| 3,300.0 | 3,258.0 | 3,264.7 | 3,220.7 | 10.5 | 10.3 | -110.38 | -262.2 | -444.6 | 428.7 | 409.3 | 19.41 | 22.088 | |
| 3,400.0 | 3,356.4 | 3,363.5 | 3,317.7 | 10.8 | 10.6 | -110.33 | -271.2 | -461.1 | 443.7 | 423.6 | 20.09 | 22.090 | |
| 3,500.0 | 3,454.8 | 3,462.4 | 3,414.8 | 11.2 | 11.0 | -110.29 | -280.1 | -477.7 | 458.7 | 438.0 | 20.76 | 22.093 | |
| 3,600.0 | 3,553.2 | 3,561.3 | 3,511.8 | 11.5 | 11.4 | -110.25 | -289.1 | -494.3 | 473.7 | 452.3 | 21.44 | 22.095 | |
| 3,700.0 | 3,651.6 | 3,660.1 | 3,608.9 | 11.9 | 11.8 | -110.21 | -298.1 | -510.9 | 488.8 | 466.7 | 22.12 | 22.097 | |
| 3,800.0 | 3,750.1 | 3,759.0 | 3,705.9 | 12.2 | 12.1 | -110.17 | -307.1 | -527.4 | 503.8 | 481.0 | 22.80 | 22.098 | |
| 3,900.0 | 3,848.5 | 3,857.9 | 3,803.0 | 12.6 | 12.5 | -110.13 | -316.0 | -544.0 | 518.8 | 495.4 | 23.48 | 22.100 | |
| 4,000.0 | 3,946.9 | 3,956.7 | 3,900.0 | 13.0 | 12.9 | -110.10 | -325.0 | -560.6 | 533.9 | 509.7 | 24.16 | 22.101 | |
| 4,100.0 | 4,045.3 | 4,055.6 | 3,997.1 | 13.3 | 13.2 | -110.07 | -334.0 | -577.1 | 548.9 | 524.1 | 24.84 | 22.102 | |
| 4,200.0 | 4,143.7 | 4,154.4 | 4,094.1 | 13.7 | 13.6 | -110.04 | -343.0 | -593.7 | 563.9 | 538.4 | 25.51 | 22.103 | |
| 4,300.0 | 4,242.2 | 4,253.3 | 4,191.2 | 14.0 | 14.0 | -110.01 | -351.9 | -610.3 | 579.0 | 552.8 | 26.19 | 22.104 | |
| 4,400.0 | 4,340.6 | 4,352.2 | 4,288.2 | 14.4 | 14.4 | -109.99 | -360.9 | -626.9 | 594.0 | 567.1 | 26.87 | 22.105 | |
| 4,500.0 | 4,439.0 | 4,451.0 | 4,385.3 | 14.8 | 14.7 | -109.96 | -369.9 | -643.4 | 609.0 | 581.5 | 27.55 | 22.105 | |
| 4,600.0 | 4,537.4 | 4,549.9 | 4,482.3 | 15.1 | 15.1 | -109.94 | -378.9 | -660.0 | 624.1 | 595.8 | 28.23 | 22.106 | |
| 4,700.0 | 4,635.8 | 4,648.8 | 4,579.4 | 15.5 | 15.5 | -109.91 | -387.8 | -676.6 | 639.1 | 610.2 | 28.91 | 22.107 | |
| 4,800.0 | 4,734.3 | 4,747.6 | 4,676.4 | 15.8 | 15.9 | -109.89 | -396.8 | -693.1 | 654.1 | 624.5 | 29.59 | 22.107 | |
| 4,900.0 | 4,832.7 | 4,846.5 | 4,773.5 | 16.2 | 16.2 | -109.87 | -405.8 | -709.7 | 669.2 | 638.9 | 30.27 | 22.108 | |
| 5,000.0 | 4,931.1 | 4,945.3 | 4,870.5 | 16.5 | 16.6 | -109.85 | -414.8 | -726.3 | 684.2 | 653.3 | 30.95 | 22.108 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-34D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,100.0 | 5,029.5 | 5,044.2 | 4,967.6 | 16.9 | 17.0 | -109.83 | -423.7 | -742.8 | 699.2 | 667.6 | 31.63 | 22.108 | |
| 5,200.0 | 5,127.9 | 5,143.1 | 5,064.6 | 17.3 | 17.4 | -109.81 | -432.7 | -759.4 | 714.3 | 682.0 | 32.31 | 22.109 | |
| 5,300.0 | 5,226.4 | 5,241.9 | 5,161.7 | 17.6 | 17.7 | -109.80 | -441.7 | -776.0 | 729.3 | 696.3 | 32.99 | 22.109 | |
| 5,400.0 | 5,324.8 | 5,340.8 | 5,258.7 | 18.0 | 18.1 | -109.78 | -450.7 | -792.6 | 744.3 | 710.7 | 33.67 | 22.109 | |
| 5,500.0 | 5,423.2 | 5,439.7 | 5,355.8 | 18.3 | 18.5 | -109.76 | -459.6 | -809.1 | 759.4 | 725.0 | 34.35 | 22.109 | |
| 5,600.0 | 5,521.6 | 5,538.5 | 5,452.9 | 18.7 | 18.9 | -109.75 | -468.6 | -825.7 | 774.4 | 739.4 | 35.03 | 22.109 | |
| 5,700.0 | 5,620.0 | 5,637.4 | 5,549.9 | 19.1 | 19.2 | -109.73 | -477.6 | -842.3 | 789.4 | 753.7 | 35.71 | 22.110 | |
| 5,800.0 | 5,718.5 | 5,736.3 | 5,647.0 | 19.4 | 19.6 | -109.72 | -486.6 | -858.8 | 804.5 | 768.1 | 36.39 | 22.110 | |
| 5,900.0 | 5,816.9 | 5,835.1 | 5,744.0 | 19.8 | 20.0 | -109.71 | -495.5 | -875.4 | 819.5 | 782.4 | 37.07 | 22.110 | |
| 6,000.0 | 5,915.3 | 5,934.0 | 5,841.1 | 20.1 | 20.4 | -109.69 | -504.5 | -892.0 | 834.5 | 796.8 | 37.74 | 22.110 | |
| 6,100.0 | 6,013.7 | 6,032.8 | 5,938.1 | 20.5 | 20.7 | -109.68 | -513.5 | -908.6 | 849.6 | 811.1 | 38.42 | 22.110 | |
| 6,200.0 | 6,112.1 | 6,131.7 | 6,035.2 | 20.8 | 21.1 | -109.67 | -522.5 | -925.1 | 864.6 | 825.5 | 39.10 | 22.110 | |
| 6,300.0 | 6,210.6 | 6,230.6 | 6,132.2 | 21.2 | 21.5 | -109.65 | -531.4 | -941.7 | 879.6 | 839.9 | 39.78 | 22.110 | |
| 6,400.0 | 6,309.0 | 6,329.4 | 6,229.3 | 21.6 | 21.9 | -109.64 | -540.4 | -958.3 | 894.7 | 854.2 | 40.46 | 22.110 | |
| 6,500.0 | 6,407.4 | 6,428.3 | 6,326.3 | 21.9 | 22.2 | -109.63 | -549.4 | -974.8 | 909.7 | 868.6 | 41.14 | 22.110 | |
| 6,600.0 | 6,505.8 | 6,527.2 | 6,423.4 | 22.3 | 22.6 | -109.62 | -558.4 | -991.4 | 924.7 | 882.9 | 41.82 | 22.110 | |
| 6,700.0 | 6,604.2 | 6,626.0 | 6,520.4 | 22.6 | 23.0 | -109.61 | -567.3 | -1,008.0 | 939.8 | 897.3 | 42.50 | 22.110 | |
| 6,800.0 | 6,702.7 | 6,724.9 | 6,617.5 | 23.0 | 23.4 | -109.60 | -576.3 | -1,024.6 | 954.8 | 911.6 | 43.18 | 22.110 | |
| 6,900.0 | 6,801.1 | 6,831.7 | 6,722.4 | 23.4 | 23.8 | -109.65 | -585.8 | -1,042.1 | 969.7 | 925.8 | 43.88 | 22.098 | |
| 7,000.0 | 6,899.9 | 6,949.7 | 6,839.0 | 23.7 | 24.1 | -109.96 | -594.4 | -1,058.0 | 982.2 | 937.6 | 44.53 | 22.058 | |
| 7,100.0 | 6,999.1 | 7,068.3 | 6,956.9 | 23.9 | 24.4 | -110.23 | -600.7 | -1,069.7 | 991.6 | 946.5 | 45.06 | 22.008 | |
| 7,200.0 | 7,098.8 | 7,187.4 | 7,075.6 | 24.1 | 24.6 | -110.47 | -604.7 | -1,077.1 | 997.9 | 952.4 | 45.47 | 21.946 | |
| 7,300.0 | 7,198.6 | 7,306.6 | 7,194.7 | 24.2 | 24.7 | -110.68 | -606.4 | -1,080.1 | 1,001.0 | 955.2 | 45.77 | 21.872 | |
| 7,400.0 | 7,298.6 | 7,408.8 | 7,297.0 | 24.3 | 24.8 | -61.73 | -606.5 | -1,080.3 | 1,001.7 | 955.7 | 45.97 | 21.788 | |
| 7,500.0 | 7,398.6 | 7,506.7 | 7,394.9 | 24.4 | 24.9 | -61.71 | -606.8 | -1,080.8 | 1,001.8 | 955.6 | 46.18 | 21.692 | |
| 7,600.0 | 7,498.6 | 7,604.6 | 7,492.8 | 24.5 | 25.0 | -61.70 | -607.3 | -1,081.6 | 1,002.0 | 955.6 | 46.40 | 21.592 | |
| 7,700.0 | 7,598.6 | 7,702.9 | 7,591.0 | 24.6 | 25.1 | -61.68 | -608.0 | -1,082.8 | 1,002.1 | 955.5 | 46.64 | 21.488 | |
| 7,800.0 | 7,698.6 | 7,802.9 | 7,691.0 | 24.7 | 25.2 | -61.68 | -608.7 | -1,084.2 | 1,002.2 | 955.3 | 46.88 | 21.379 | |
| 7,900.0 | 7,798.6 | 7,902.9 | 7,791.0 | 24.8 | 25.4 | -61.68 | -609.5 | -1,085.5 | 1,002.2 | 955.1 | 47.12 | 21.270 | |
| 8,000.0 | 7,898.6 | 8,002.9 | 7,891.0 | 25.0 | 25.5 | -61.68 | -610.3 | -1,086.9 | 1,002.2 | 954.9 | 47.36 | 21.162 | |
| 8,100.0 | 7,998.6 | 8,102.9 | 7,991.0 | 25.1 | 25.6 | -61.68 | -611.1 | -1,088.2 | 1,002.3 | 954.7 | 47.61 | 21.054 | |
| 8,200.0 | 8,098.6 | 8,202.9 | 8,091.0 | 25.2 | 25.7 | -61.68 | -611.9 | -1,089.6 | 1,002.3 | 954.4 | 47.85 | 20.946 | |
| 8,300.0 | 8,198.5 | 8,302.9 | 8,191.0 | 25.3 | 25.8 | -61.68 | -612.6 | -1,090.9 | 1,002.3 | 954.2 | 48.10 | 20.839 | |
| 8,400.0 | 8,298.5 | 8,402.9 | 8,291.0 | 25.4 | 26.0 | -61.68 | -613.4 | -1,092.3 | 1,002.3 | 954.0 | 48.35 | 20.733 | |
| 8,500.0 | 8,398.5 | 8,502.9 | 8,390.9 | 25.5 | 26.1 | -61.68 | -614.2 | -1,093.6 | 1,002.3 | 953.8 | 48.59 | 20.627 | |
| 8,600.0 | 8,498.5 | 8,602.9 | 8,490.9 | 25.6 | 26.2 | -61.68 | -615.0 | -1,095.0 | 1,002.4 | 953.5 | 48.84 | 20.522 | |
| 8,700.0 | 8,598.5 | 8,702.9 | 8,590.9 | 25.8 | 26.3 | -61.68 | -615.7 | -1,096.3 | 1,002.4 | 953.3 | 49.10 | 20.417 | |
| 8,800.0 | 8,698.5 | 8,802.9 | 8,690.9 | 25.9 | 26.4 | -61.68 | -616.5 | -1,097.7 | 1,002.4 | 953.1 | 49.35 | 20.313 | |
| 8,900.0 | 8,798.5 | 8,902.9 | 8,790.9 | 26.0 | 26.6 | -61.68 | -617.3 | -1,099.0 | 1,002.4 | 952.8 | 49.60 | 20.209 | |
| 9,000.0 | 8,898.5 | 9,002.9 | 8,890.9 | 26.1 | 26.7 | -61.68 | -618.1 | -1,100.4 | 1,002.5 | 952.6 | 49.86 | 20.106 | |
| 9,100.0 | 8,998.5 | 9,102.9 | 8,990.9 | 26.2 | 26.8 | -61.68 | -618.9 | -1,101.7 | 1,002.5 | 952.4 | 50.12 | 20.003 | |
| 9,200.0 | 9,098.4 | 9,202.9 | 9,090.9 | 26.4 | 26.9 | -61.68 | -619.6 | -1,103.0 | 1,002.5 | 952.1 | 50.37 | 19.901 | |
| 9,300.0 | 9,198.4 | 9,302.9 | 9,190.8 | 26.5 | 27.1 | -61.68 | -620.4 | -1,104.4 | 1,002.5 | 951.9 | 50.63 | 19.800 | |
| 9,400.0 | 9,298.4 | 9,402.9 | 9,290.8 | 26.6 | 27.2 | -61.68 | -621.2 | -1,105.7 | 1,002.6 | 951.7 | 50.89 | 19.699 | |
| 9,500.0 | 9,398.4 | 9,502.9 | 9,390.8 | 26.7 | 27.3 | -61.68 | -622.0 | -1,107.1 | 1,002.6 | 951.4 | 51.15 | 19.599 | |
| 9,600.0 | 9,498.4 | 9,602.9 | 9,490.8 | 26.8 | 27.4 | -61.68 | -622.8 | -1,108.4 | 1,002.6 | 951.2 | 51.42 | 19.500 | |
| 9,700.0 | 9,598.4 | 9,702.9 | 9,590.8 | 27.0 | 27.6 | -61.68 | -623.5 | -1,109.8 | 1,002.6 | 950.9 | 51.68 | 19.401 | |
| 9,800.0 | 9,698.4 | 9,802.9 | 9,690.8 | 27.1 | 27.7 | -61.68 | -624.3 | -1,111.1 | 1,002.7 | 950.7 | 51.94 | 19.303 | |
| 9,900.0 | 9,798.4 | 9,902.9 | 9,790.8 | 27.2 | 27.8 | -61.68 | -625.1 | -1,112.5 | 1,002.7 | 950.5 | 52.21 | 19.205 | |
| 10,000.0 | 9,898.3 | 10,002.9 | 9,890.8 | 27.3 | 28.0 | -61.68 | -625.9 | -1,113.8 | 1,002.7 | 950.2 | 52.48 | 19.108 | |
| 10,051.0 | 9,949.4 | 10,053.9 | 9,941.8 | 27.4 | 28.0 | -61.68 | -626.3 | -1,114.5 | 1,002.7 | 950.1 | 52.61 | 19.059 | |
| 10,100.0 | 9,998.3 | 10,081.1 | 9,969.0 | 27.5 | 28.1 | -61.68 | -626.5 | -1,114.9 | 1,003.0 | 950.2 | 52.71 | 19.027 | SF |

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

# Cathedral Energy Services

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-34D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10,145.7 | 10,044.0 | 10,081.1 | 9,969.0 | 27.5 | 28.1 | -61.68 | -626.5 | -1,114.9 | 1,005.0 | 952.2 | 52.77 | 19.043 | |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-35D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -143.11 | -24.0 | -18.0 | 30.1 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -143.11 | -24.0 | -18.0 | 30.1 | 29.8 | 0.27 | 110.402 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -143.11 | -24.0 | -18.0 | 30.1 | 29.4 | 0.62 | 48.379 | |
| 300.0 | 300.0 | 300.0 | 300.0 | 0.5 | 0.5 | -143.11 | -24.0 | -18.0 | 30.1 | 29.1 | 0.97 | 30.976 | CC, ES |
| 400.0 | 400.0 | 399.2 | 399.2 | 0.7 | 0.7 | -73.83 | -24.4 | -19.7 | 30.8 | 29.5 | 1.32 | 23.328 | |
| 500.0 | 499.8 | 498.4 | 498.2 | 0.9 | 0.9 | -76.34 | -25.4 | -24.8 | 33.2 | 31.5 | 1.69 | 19.605 | |
| 600.0 | 599.5 | 597.5 | 596.9 | 1.1 | 1.1 | -79.79 | -27.0 | -33.2 | 37.3 | 35.2 | 2.11 | 17.663 | |
| 700.0 | 698.7 | 696.4 | 695.1 | 1.3 | 1.3 | -83.48 | -29.3 | -44.9 | 43.2 | 40.6 | 2.60 | 16.608 | |
| 800.0 | 797.5 | 795.2 | 792.7 | 1.6 | 1.6 | -86.95 | -32.3 | -59.9 | 50.9 | 47.8 | 3.18 | 16.007 | |
| 900.0 | 895.9 | 894.8 | 890.9 | 2.0 | 1.9 | -90.48 | -35.5 | -76.4 | 59.5 | 55.7 | 3.81 | 15.643 | |
| 1,000.0 | 994.3 | 994.3 | 989.0 | 2.3 | 2.3 | -93.13 | -38.8 | -92.8 | 68.3 | 63.9 | 4.45 | 15.348 | |
| 1,100.0 | 1,092.7 | 1,093.9 | 1,087.2 | 2.6 | 2.6 | -95.18 | -42.0 | -109.3 | 77.2 | 72.1 | 5.11 | 15.114 | |
| 1,200.0 | 1,191.1 | 1,193.5 | 1,185.3 | 3.0 | 2.9 | -96.81 | -45.3 | -125.7 | 86.1 | 80.4 | 5.77 | 14.928 | |
| 1,300.0 | 1,289.6 | 1,293.0 | 1,283.5 | 3.3 | 3.3 | -98.13 | -48.5 | -142.2 | 95.2 | 88.7 | 6.44 | 14.779 | |
| 1,400.0 | 1,388.0 | 1,392.6 | 1,381.6 | 3.7 | 3.6 | -99.22 | -51.8 | -158.6 | 104.2 | 97.1 | 7.11 | 14.657 | |
| 1,500.0 | 1,486.4 | 1,492.2 | 1,479.8 | 4.0 | 3.9 | -100.13 | -55.0 | -175.1 | 113.3 | 105.5 | 7.78 | 14.556 | |
| 1,600.0 | 1,584.8 | 1,591.8 | 1,577.9 | 4.4 | 4.3 | -100.91 | -58.3 | -191.5 | 122.4 | 113.9 | 8.46 | 14.472 | |
| 1,700.0 | 1,683.2 | 1,691.3 | 1,676.1 | 4.8 | 4.6 | -101.58 | -61.5 | -208.0 | 131.5 | 122.4 | 9.13 | 14.401 | |
| 1,800.0 | 1,781.7 | 1,790.9 | 1,774.2 | 5.1 | 4.9 | -102.17 | -64.8 | -224.4 | 140.7 | 130.9 | 9.81 | 14.339 | |
| 1,900.0 | 1,880.1 | 1,890.5 | 1,872.4 | 5.5 | 5.3 | -102.68 | -68.0 | -240.9 | 149.8 | 139.3 | 10.49 | 14.286 | |
| 2,000.0 | 1,978.5 | 1,990.0 | 1,970.5 | 5.8 | 5.6 | -103.13 | -71.2 | -257.3 | 159.0 | 147.8 | 11.17 | 14.240 | |
| 2,100.0 | 2,076.9 | 2,089.6 | 2,068.7 | 6.2 | 6.0 | -103.54 | -74.5 | -273.8 | 168.2 | 156.3 | 11.84 | 14.200 | |
| 2,200.0 | 2,175.3 | 2,189.2 | 2,166.8 | 6.5 | 6.3 | -103.90 | -77.7 | -290.2 | 177.4 | 164.8 | 12.52 | 14.164 | |
| 2,300.0 | 2,273.8 | 2,288.8 | 2,265.0 | 6.9 | 6.6 | -104.23 | -81.0 | -306.7 | 186.6 | 173.4 | 13.20 | 14.132 | |
| 2,400.0 | 2,372.2 | 2,388.3 | 2,363.1 | 7.2 | 7.0 | -104.52 | -84.2 | -323.1 | 195.8 | 181.9 | 13.88 | 14.103 | |
| 2,500.0 | 2,470.6 | 2,487.9 | 2,461.3 | 7.6 | 7.3 | -104.79 | -87.5 | -339.6 | 205.0 | 190.4 | 14.56 | 14.077 | |
| 2,600.0 | 2,569.0 | 2,587.5 | 2,559.4 | 8.0 | 7.7 | -105.04 | -90.7 | -356.0 | 214.2 | 198.9 | 15.24 | 14.054 | |
| 2,700.0 | 2,667.4 | 2,687.0 | 2,657.6 | 8.3 | 8.0 | -105.26 | -94.0 | -372.5 | 223.4 | 207.5 | 15.92 | 14.033 | |
| 2,800.0 | 2,765.9 | 2,786.6 | 2,755.7 | 8.7 | 8.4 | -105.47 | -97.2 | -388.9 | 232.6 | 216.0 | 16.60 | 14.013 | |
| 2,900.0 | 2,864.3 | 2,886.2 | 2,853.9 | 9.0 | 8.7 | -105.66 | -100.5 | -405.4 | 241.8 | 224.5 | 17.28 | 13.996 | |
| 3,000.0 | 2,962.7 | 2,985.8 | 2,952.0 | 9.4 | 9.0 | -105.84 | -103.7 | -421.8 | 251.0 | 233.1 | 17.96 | 13.979 | |
| 3,100.0 | 3,061.1 | 3,085.3 | 3,050.2 | 9.7 | 9.4 | -106.01 | -107.0 | -438.3 | 260.2 | 241.6 | 18.64 | 13.964 | |
| 3,200.0 | 3,159.5 | 3,184.9 | 3,148.3 | 10.1 | 9.7 | -106.16 | -110.2 | -454.7 | 269.5 | 250.1 | 19.32 | 13.950 | |
| 3,300.0 | 3,258.0 | 3,284.5 | 3,246.5 | 10.5 | 10.1 | -106.31 | -113.4 | -471.2 | 278.7 | 258.7 | 20.00 | 13.937 | |
| 3,400.0 | 3,356.4 | 3,384.0 | 3,344.6 | 10.8 | 10.4 | -106.44 | -116.7 | -487.7 | 287.9 | 267.2 | 20.67 | 13.925 | |
| 3,500.0 | 3,454.8 | 3,483.6 | 3,442.8 | 11.2 | 10.8 | -106.57 | -119.9 | -504.1 | 297.1 | 275.8 | 21.35 | 13.914 | |
| 3,600.0 | 3,553.2 | 3,583.2 | 3,540.9 | 11.5 | 11.1 | -106.69 | -123.2 | -520.6 | 306.4 | 284.3 | 22.03 | 13.904 | |
| 3,700.0 | 3,651.6 | 3,682.8 | 3,639.1 | 11.9 | 11.4 | -106.80 | -126.4 | -537.0 | 315.6 | 292.9 | 22.71 | 13.894 | |
| 3,800.0 | 3,750.1 | 3,782.3 | 3,737.2 | 12.2 | 11.8 | -106.90 | -129.7 | -553.5 | 324.8 | 301.4 | 23.39 | 13.885 | |
| 3,900.0 | 3,848.5 | 3,881.9 | 3,835.4 | 12.6 | 12.1 | -107.00 | -132.9 | -569.9 | 334.0 | 310.0 | 24.07 | 13.876 | |
| 4,000.0 | 3,946.9 | 3,981.5 | 3,933.5 | 13.0 | 12.5 | -107.10 | -136.2 | -586.4 | 343.3 | 318.5 | 24.75 | 13.868 | |
| 4,100.0 | 4,045.3 | 4,081.0 | 4,031.7 | 13.3 | 12.8 | -107.19 | -139.4 | -602.8 | 352.5 | 327.1 | 25.43 | 13.860 | |
| 4,200.0 | 4,143.7 | 4,180.6 | 4,129.8 | 13.7 | 13.2 | -107.27 | -142.7 | -619.3 | 361.7 | 335.6 | 26.11 | 13.853 | |
| 4,300.0 | 4,242.2 | 4,280.2 | 4,228.0 | 14.0 | 13.5 | -107.35 | -145.9 | -635.7 | 371.0 | 344.2 | 26.79 | 13.846 | |
| 4,400.0 | 4,340.6 | 4,379.8 | 4,326.1 | 14.4 | 13.8 | -107.43 | -149.1 | -652.2 | 380.2 | 352.7 | 27.47 | 13.839 | |
| 4,500.0 | 4,439.0 | 4,479.3 | 4,424.3 | 14.8 | 14.2 | -107.50 | -152.4 | -668.6 | 389.5 | 361.3 | 28.15 | 13.833 | |
| 4,600.0 | 4,537.4 | 4,578.9 | 4,522.4 | 15.1 | 14.5 | -107.57 | -155.6 | -685.1 | 398.7 | 369.9 | 28.83 | 13.827 | |
| 4,700.0 | 4,635.8 | 4,678.5 | 4,620.6 | 15.5 | 14.9 | -107.64 | -158.9 | -701.5 | 407.9 | 378.4 | 29.51 | 13.822 | |
| 4,800.0 | 4,734.3 | 4,778.0 | 4,718.7 | 15.8 | 15.2 | -107.70 | -162.1 | -718.0 | 417.2 | 387.0 | 30.19 | 13.817 | |
| 4,900.0 | 4,832.7 | 4,877.6 | 4,816.9 | 16.2 | 15.6 | -107.76 | -165.4 | -734.4 | 426.4 | 395.5 | 30.87 | 13.811 | |
| 5,000.0 | 4,931.1 | 4,977.2 | 4,915.0 | 16.5 | 15.9 | -107.82 | -168.6 | -750.9 | 435.6 | 404.1 | 31.55 | 13.807 | |
| 5,100.0 | 5,029.5 | 5,076.8 | 5,013.1 | 16.9 | 16.3 | -107.88 | -171.9 | -767.3 | 444.9 | 412.6 | 32.23 | 13.802 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-35D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,200.0 | 5,127.9 | 5,176.3 | 5,111.3 | 17.3 | 16.6 | -107.93 | -175.1 | -783.8 | 454.1 | 421.2 | 32.91 | 13.798 | |
| 5,300.0 | 5,226.4 | 5,275.9 | 5,209.4 | 17.6 | 16.9 | -107.98 | -178.4 | -800.2 | 463.4 | 429.8 | 33.59 | 13.793 | |
| 5,400.0 | 5,324.8 | 5,375.5 | 5,307.6 | 18.0 | 17.3 | -108.03 | -181.6 | -816.7 | 472.6 | 438.3 | 34.27 | 13.789 | |
| 5,500.0 | 5,423.2 | 5,475.0 | 5,405.7 | 18.3 | 17.6 | -108.08 | -184.9 | -833.1 | 481.8 | 446.9 | 34.95 | 13.785 | |
| 5,600.0 | 5,521.6 | 5,574.6 | 5,503.9 | 18.7 | 18.0 | -108.12 | -188.1 | -849.6 | 491.1 | 455.4 | 35.63 | 13.782 | |
| 5,700.0 | 5,620.0 | 5,674.2 | 5,602.0 | 19.1 | 18.3 | -108.17 | -191.3 | -866.0 | 500.3 | 464.0 | 36.31 | 13.778 | |
| 5,800.0 | 5,718.5 | 5,773.8 | 5,700.2 | 19.4 | 18.7 | -108.21 | -194.6 | -882.5 | 509.6 | 472.6 | 36.99 | 13.775 | |
| 5,900.0 | 5,816.9 | 5,873.3 | 5,798.3 | 19.8 | 19.0 | -108.25 | -197.8 | -898.9 | 518.8 | 481.1 | 37.67 | 13.771 | |
| 6,000.0 | 5,915.3 | 5,972.9 | 5,896.5 | 20.1 | 19.3 | -108.29 | -201.1 | -915.4 | 528.0 | 489.7 | 38.35 | 13.768 | |
| 6,100.0 | 6,013.7 | 6,072.5 | 5,994.6 | 20.5 | 19.7 | -108.33 | -204.3 | -931.8 | 537.3 | 498.3 | 39.03 | 13.765 | |
| 6,200.0 | 6,112.1 | 6,172.0 | 6,092.8 | 20.8 | 20.0 | -108.37 | -207.6 | -948.3 | 546.5 | 506.8 | 39.71 | 13.762 | |
| 6,300.0 | 6,210.6 | 6,271.6 | 6,190.9 | 21.2 | 20.4 | -108.40 | -210.8 | -964.7 | 555.8 | 515.4 | 40.39 | 13.759 | |
| 6,400.0 | 6,309.0 | 6,371.2 | 6,289.1 | 21.6 | 20.7 | -108.44 | -214.1 | -981.2 | 565.0 | 523.9 | 41.07 | 13.756 | |
| 6,500.0 | 6,407.4 | 6,470.8 | 6,387.2 | 21.9 | 21.1 | -108.47 | -217.3 | -997.6 | 574.3 | 532.5 | 41.75 | 13.754 | |
| 6,600.0 | 6,505.8 | 6,570.3 | 6,485.4 | 22.3 | 21.4 | -108.50 | -220.6 | -1,014.1 | 583.5 | 541.1 | 42.43 | 13.751 | |
| 6,700.0 | 6,604.2 | 6,669.9 | 6,583.5 | 22.6 | 21.7 | -108.53 | -223.8 | -1,030.6 | 592.7 | 549.6 | 43.11 | 13.749 | |
| 6,800.0 | 6,702.7 | 6,769.5 | 6,681.7 | 23.0 | 22.1 | -108.56 | -227.0 | -1,047.0 | 602.0 | 558.2 | 43.79 | 13.746 | |
| 6,900.0 | 6,801.1 | 6,870.1 | 6,780.9 | 23.4 | 22.4 | -108.62 | -230.3 | -1,063.5 | 611.2 | 566.7 | 44.47 | 13.744 | |
| 7,000.0 | 6,899.9 | 6,974.4 | 6,884.2 | 23.7 | 22.7 | -108.85 | -233.2 | -1,078.1 | 619.2 | 574.1 | 45.05 | 13.743 | |
| 7,100.0 | 6,999.1 | 7,078.9 | 6,988.0 | 23.9 | 23.0 | -109.07 | -235.3 | -1,088.9 | 625.3 | 579.8 | 45.53 | 13.734 | |
| 7,200.0 | 7,098.8 | 7,183.4 | 7,092.3 | 24.1 | 23.1 | -109.27 | -236.7 | -1,096.0 | 629.5 | 583.6 | 45.90 | 13.716 | |
| 7,300.0 | 7,198.6 | 7,288.0 | 7,196.8 | 24.2 | 23.3 | -109.46 | -237.4 | -1,099.4 | 631.9 | 585.7 | 46.16 | 13.689 | |
| 7,400.0 | 7,298.6 | 7,389.0 | 7,297.8 | 24.3 | 23.4 | -60.54 | -237.5 | -1,099.8 | 632.5 | 586.1 | 46.35 | 13.645 | |
| 7,500.0 | 7,398.6 | 7,487.6 | 7,396.4 | 24.4 | 23.5 | -60.52 | -237.7 | -1,100.2 | 632.6 | 586.0 | 46.56 | 13.587 | |
| 7,600.0 | 7,498.6 | 7,586.2 | 7,495.1 | 24.5 | 23.6 | -60.50 | -238.2 | -1,100.9 | 632.7 | 585.9 | 46.78 | 13.526 | |
| 7,700.0 | 7,598.6 | 7,684.9 | 7,593.7 | 24.6 | 23.7 | -60.48 | -238.8 | -1,102.1 | 632.9 | 585.8 | 47.01 | 13.462 | |
| 7,800.0 | 7,698.6 | 7,784.8 | 7,693.6 | 24.7 | 23.8 | -60.48 | -239.6 | -1,103.4 | 632.9 | 585.7 | 47.25 | 13.395 | |
| 7,900.0 | 7,798.6 | 7,884.8 | 7,793.6 | 24.8 | 23.9 | -60.48 | -240.4 | -1,104.8 | 632.9 | 585.4 | 47.49 | 13.328 | |
| 8,000.0 | 7,898.6 | 7,984.8 | 7,893.6 | 25.0 | 24.1 | -60.48 | -241.2 | -1,106.1 | 633.0 | 585.2 | 47.73 | 13.262 | |
| 8,100.0 | 7,998.6 | 8,084.8 | 7,993.6 | 25.1 | 24.2 | -60.48 | -241.9 | -1,107.5 | 633.0 | 585.0 | 47.97 | 13.195 | |
| 8,200.0 | 8,098.6 | 8,184.8 | 8,093.6 | 25.2 | 24.3 | -60.48 | -242.7 | -1,108.8 | 633.0 | 584.8 | 48.21 | 13.129 | |
| 8,300.0 | 8,198.5 | 8,284.8 | 8,193.6 | 25.3 | 24.4 | -60.48 | -243.5 | -1,110.1 | 633.0 | 584.6 | 48.46 | 13.063 | |
| 8,400.0 | 8,298.5 | 8,384.8 | 8,293.6 | 25.4 | 24.5 | -60.48 | -244.3 | -1,111.5 | 633.1 | 584.3 | 48.70 | 12.998 | |
| 8,500.0 | 8,398.5 | 8,484.8 | 8,393.5 | 25.5 | 24.7 | -60.48 | -245.1 | -1,112.8 | 633.1 | 584.1 | 48.95 | 12.933 | |
| 8,600.0 | 8,498.5 | 8,584.8 | 8,493.5 | 25.6 | 24.8 | -60.48 | -245.8 | -1,114.2 | 633.1 | 583.9 | 49.20 | 12.868 | |
| 8,700.0 | 8,598.5 | 8,684.8 | 8,593.5 | 25.8 | 24.9 | -60.48 | -246.6 | -1,115.5 | 633.1 | 583.7 | 49.45 | 12.804 | |
| 8,800.0 | 8,698.5 | 8,784.8 | 8,693.5 | 25.9 | 25.0 | -60.48 | -247.4 | -1,116.9 | 633.1 | 583.4 | 49.70 | 12.739 | |
| 8,900.0 | 8,798.5 | 8,884.8 | 8,793.5 | 26.0 | 25.2 | -60.48 | -248.2 | -1,118.2 | 633.2 | 583.2 | 49.95 | 12.676 | |
| 9,000.0 | 8,898.5 | 8,984.8 | 8,893.5 | 26.1 | 25.3 | -60.48 | -248.9 | -1,119.6 | 633.2 | 583.0 | 50.21 | 12.612 | |
| 9,100.0 | 8,998.5 | 9,084.8 | 8,993.5 | 26.2 | 25.4 | -60.48 | -249.7 | -1,120.9 | 633.2 | 582.8 | 50.46 | 12.549 | |
| 9,200.0 | 9,098.4 | 9,184.8 | 9,093.5 | 26.4 | 25.6 | -60.48 | -250.5 | -1,122.3 | 633.2 | 582.5 | 50.72 | 12.486 | |
| 9,300.0 | 9,198.4 | 9,284.8 | 9,193.5 | 26.5 | 25.7 | -60.48 | -251.3 | -1,123.6 | 633.3 | 582.3 | 50.97 | 12.424 | |
| 9,400.0 | 9,298.4 | 9,384.8 | 9,293.4 | 26.6 | 25.8 | -60.48 | -252.1 | -1,125.0 | 633.3 | 582.1 | 51.23 | 12.362 | |
| 9,500.0 | 9,398.4 | 9,484.8 | 9,393.4 | 26.7 | 25.9 | -60.48 | -252.8 | -1,126.3 | 633.3 | 581.8 | 51.49 | 12.300 | |
| 9,600.0 | 9,498.4 | 9,584.8 | 9,493.4 | 26.8 | 26.1 | -60.48 | -253.6 | -1,127.7 | 633.3 | 581.6 | 51.75 | 12.238 | |
| 9,700.0 | 9,598.4 | 9,684.8 | 9,593.4 | 27.0 | 26.2 | -60.48 | -254.4 | -1,129.0 | 633.4 | 581.4 | 52.01 | 12.177 | |
| 9,800.0 | 9,698.4 | 9,784.8 | 9,693.4 | 27.1 | 26.3 | -60.48 | -255.2 | -1,130.3 | 633.4 | 581.1 | 52.27 | 12.117 | |
| 9,900.0 | 9,798.4 | 9,884.8 | 9,793.4 | 27.2 | 26.5 | -60.48 | -256.0 | -1,131.7 | 633.4 | 580.9 | 52.54 | 12.056 | |
| 10,000.0 | 9,898.3 | 9,984.8 | 9,893.4 | 27.3 | 26.6 | -60.48 | -256.7 | -1,133.0 | 633.4 | 580.6 | 52.80 | 11.997 | |
| 10,057.6 | 9,956.0 | 10,042.5 | 9,951.0 | 27.4 | 26.7 | -60.48 | -257.2 | -1,133.8 | 633.5 | 580.5 | 52.96 | 11.962 | |
| 10,100.0 | 9,998.3 | 10,080.5 | 9,989.0 | 27.5 | 26.7 | -60.48 | -257.5 | -1,134.3 | 633.5 | 580.4 | 53.06 | 11.939 SF | |
| 10,145.7 | 10,044.0 | 10,080.5 | 9,989.0 | 27.5 | 26.7 | -60.48 | -257.5 | -1,134.3 | 635.5 | 582.3 | 53.12 | 11.962 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-36D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -143.11 | -12.0 | -9.0 | 15.0 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | -143.11 | -12.0 | -9.0 | 15.0 | 14.8 | 0.27 | 55.201 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | -143.11 | -12.0 | -9.0 | 15.0 | 14.4 | 0.62 | 24.189 | CC, ES |
| 300.0 | 300.0 | 299.7 | 299.7 | 0.5 | 0.5 | -137.87 | -11.9 | -10.8 | 16.0 | 15.1 | 0.97 | 16.525 | |
| 400.0 | 400.0 | 399.2 | 399.1 | 0.7 | 0.7 | -59.96 | -11.5 | -15.9 | 18.7 | 17.4 | 1.33 | 14.060 | |
| 500.0 | 499.8 | 498.6 | 498.1 | 0.9 | 0.9 | -55.92 | -10.8 | -24.5 | 22.4 | 20.6 | 1.71 | 13.058 | |
| 600.0 | 599.5 | 597.9 | 596.6 | 1.1 | 1.2 | -54.42 | -9.9 | -36.5 | 26.7 | 24.6 | 2.13 | 12.566 | |
| 700.0 | 698.7 | 697.3 | 694.8 | 1.3 | 1.5 | -54.81 | -8.8 | -51.7 | 31.6 | 29.0 | 2.59 | 12.185 | |
| 800.0 | 797.5 | 797.2 | 793.4 | 1.6 | 1.8 | -59.10 | -7.6 | -67.6 | 35.0 | 31.8 | 3.15 | 11.116 | |
| 900.0 | 895.9 | 897.1 | 892.0 | 2.0 | 2.1 | -65.44 | -6.3 | -83.5 | 37.7 | 33.9 | 3.79 | 9.941 | |
| 1,000.0 | 994.3 | 996.9 | 990.6 | 2.3 | 2.4 | -70.91 | -5.1 | -99.4 | 40.8 | 36.3 | 4.47 | 9.117 | |
| 1,100.0 | 1,092.7 | 1,096.8 | 1,089.2 | 2.6 | 2.8 | -75.57 | -3.9 | -115.3 | 44.2 | 39.0 | 5.17 | 8.541 | |
| 1,200.0 | 1,191.1 | 1,196.7 | 1,187.8 | 3.0 | 3.1 | -79.55 | -2.7 | -131.2 | 47.8 | 41.9 | 5.88 | 8.134 | |
| 1,300.0 | 1,289.6 | 1,296.6 | 1,286.4 | 3.3 | 3.4 | -82.95 | -1.5 | -147.1 | 51.7 | 45.1 | 6.59 | 7.843 | |
| 1,400.0 | 1,388.0 | 1,396.5 | 1,385.0 | 3.7 | 3.7 | -85.86 | -0.3 | -163.0 | 55.7 | 48.4 | 7.29 | 7.632 | |
| 1,500.0 | 1,486.4 | 1,496.4 | 1,483.6 | 4.0 | 4.1 | -88.39 | 0.9 | -178.9 | 59.8 | 51.8 | 8.00 | 7.477 | |
| 1,600.0 | 1,584.8 | 1,596.2 | 1,582.2 | 4.4 | 4.4 | -90.58 | 2.1 | -194.8 | 64.0 | 55.3 | 8.70 | 7.363 | |
| 1,700.0 | 1,683.2 | 1,696.1 | 1,680.8 | 4.8 | 4.7 | -92.50 | 3.3 | -210.7 | 68.4 | 59.0 | 9.39 | 7.277 | |
| 1,800.0 | 1,781.7 | 1,796.0 | 1,779.4 | 5.1 | 5.0 | -94.18 | 4.6 | -226.6 | 72.7 | 62.6 | 10.08 | 7.213 | |
| 1,900.0 | 1,880.1 | 1,895.9 | 1,878.1 | 5.5 | 5.4 | -95.68 | 5.8 | -242.5 | 77.2 | 66.4 | 10.77 | 7.165 | |
| 2,000.0 | 1,978.5 | 1,995.8 | 1,976.7 | 5.8 | 5.7 | -97.01 | 7.0 | -258.4 | 81.7 | 70.2 | 11.45 | 7.129 | |
| 2,100.0 | 2,076.9 | 2,095.6 | 2,075.3 | 6.2 | 6.0 | -98.21 | 8.2 | -274.3 | 86.2 | 74.0 | 12.13 | 7.102 | |
| 2,200.0 | 2,175.3 | 2,195.5 | 2,173.9 | 6.5 | 6.4 | -99.28 | 9.4 | -290.2 | 90.7 | 77.9 | 12.81 | 7.082 | |
| 2,300.0 | 2,273.8 | 2,295.4 | 2,272.5 | 6.9 | 6.7 | -100.25 | 10.6 | -306.1 | 95.3 | 81.8 | 13.49 | 7.067 | |
| 2,400.0 | 2,372.2 | 2,395.3 | 2,371.1 | 7.2 | 7.0 | -101.13 | 11.8 | -322.0 | 99.9 | 85.8 | 14.16 | 7.057 | |
| 2,500.0 | 2,470.6 | 2,495.2 | 2,469.7 | 7.6 | 7.4 | -101.94 | 13.0 | -338.0 | 104.6 | 89.7 | 14.83 | 7.050 | |
| 2,600.0 | 2,569.0 | 2,595.1 | 2,568.3 | 8.0 | 7.7 | -102.67 | 14.3 | -353.9 | 109.2 | 93.7 | 15.50 | 7.045 | |
| 2,700.0 | 2,667.4 | 2,694.9 | 2,666.9 | 8.3 | 8.0 | -103.35 | 15.5 | -369.8 | 113.9 | 97.7 | 16.17 | 7.043 | |
| 2,800.0 | 2,765.9 | 2,794.8 | 2,765.5 | 8.7 | 8.3 | -103.97 | 16.7 | -385.7 | 118.6 | 101.7 | 16.84 | 7.042 | |
| 2,900.0 | 2,864.3 | 2,894.7 | 2,864.1 | 9.0 | 8.7 | -104.54 | 17.9 | -401.6 | 123.3 | 105.8 | 17.50 | 7.043 | |
| 3,000.0 | 2,962.7 | 2,994.6 | 2,962.7 | 9.4 | 9.0 | -105.07 | 19.1 | -417.5 | 128.0 | 109.8 | 18.17 | 7.044 | |
| 3,100.0 | 3,061.1 | 3,094.5 | 3,061.3 | 9.7 | 9.3 | -105.57 | 20.3 | -433.4 | 132.7 | 113.8 | 18.83 | 7.046 | |
| 3,200.0 | 3,159.5 | 3,194.4 | 3,159.9 | 10.1 | 9.7 | -106.03 | 21.5 | -449.3 | 137.4 | 117.9 | 19.49 | 7.049 | |
| 3,300.0 | 3,258.0 | 3,294.2 | 3,258.5 | 10.5 | 10.0 | -106.46 | 22.7 | -465.2 | 142.1 | 122.0 | 20.15 | 7.053 | |
| 3,400.0 | 3,356.4 | 3,394.1 | 3,357.1 | 10.8 | 10.3 | -106.86 | 23.9 | -481.1 | 146.9 | 126.1 | 20.81 | 7.057 | |
| 3,500.0 | 3,454.8 | 3,494.0 | 3,455.7 | 11.2 | 10.7 | -107.24 | 25.2 | -497.0 | 151.6 | 130.2 | 21.47 | 7.061 | |
| 3,600.0 | 3,553.2 | 3,593.9 | 3,554.3 | 11.5 | 11.0 | -107.59 | 26.4 | -512.9 | 156.4 | 134.2 | 22.13 | 7.065 | |
| 3,700.0 | 3,651.6 | 3,693.8 | 3,652.9 | 11.9 | 11.3 | -107.93 | 27.6 | -528.8 | 161.1 | 138.3 | 22.79 | 7.070 | |
| 3,800.0 | 3,750.1 | 3,793.6 | 3,751.5 | 12.2 | 11.7 | -108.24 | 28.8 | -544.7 | 165.9 | 142.5 | 23.45 | 7.074 | |
| 3,900.0 | 3,848.5 | 3,893.5 | 3,850.1 | 12.6 | 12.0 | -108.54 | 30.0 | -560.6 | 170.7 | 146.6 | 24.11 | 7.079 | |
| 4,000.0 | 3,946.9 | 3,993.4 | 3,948.7 | 13.0 | 12.3 | -108.82 | 31.2 | -576.5 | 175.4 | 150.7 | 24.77 | 7.084 | |
| 4,100.0 | 4,045.3 | 4,093.3 | 4,047.3 | 13.3 | 12.7 | -109.08 | 32.4 | -592.4 | 180.2 | 154.8 | 25.42 | 7.089 | |
| 4,200.0 | 4,143.7 | 4,193.2 | 4,145.9 | 13.7 | 13.0 | -109.34 | 33.6 | -608.3 | 185.0 | 158.9 | 26.08 | 7.094 | |
| 4,300.0 | 4,242.2 | 4,293.1 | 4,244.5 | 14.0 | 13.3 | -109.57 | 34.8 | -624.2 | 189.8 | 163.1 | 26.74 | 7.098 | |
| 4,400.0 | 4,340.6 | 4,392.9 | 4,343.1 | 14.4 | 13.6 | -109.80 | 36.1 | -640.1 | 194.6 | 167.2 | 27.39 | 7.103 | |
| 4,500.0 | 4,439.0 | 4,492.8 | 4,441.7 | 14.8 | 14.0 | -110.02 | 37.3 | -656.0 | 199.4 | 171.3 | 28.05 | 7.108 | |
| 4,600.0 | 4,537.4 | 4,592.7 | 4,540.3 | 15.1 | 14.3 | -110.22 | 38.5 | -671.9 | 204.2 | 175.5 | 28.70 | 7.113 | |
| 4,700.0 | 4,635.8 | 4,692.6 | 4,638.9 | 15.5 | 14.6 | -110.42 | 39.7 | -687.8 | 209.0 | 179.6 | 29.36 | 7.117 | |
| 4,800.0 | 4,734.3 | 4,792.5 | 4,737.5 | 15.8 | 15.0 | -110.61 | 40.9 | -703.7 | 213.8 | 183.7 | 30.02 | 7.122 | |
| 4,900.0 | 4,832.7 | 4,892.4 | 4,836.1 | 16.2 | 15.3 | -110.79 | 42.1 | -719.6 | 218.6 | 187.9 | 30.67 | 7.126 | |
| 5,000.0 | 4,931.1 | 4,992.2 | 4,934.7 | 16.5 | 15.6 | -110.96 | 43.3 | -735.5 | 223.4 | 192.0 | 31.32 | 7.131 | |
| 5,100.0 | 5,029.5 | 5,092.1 | 5,033.3 | 16.9 | 16.0 | -111.13 | 44.5 | -751.4 | 228.2 | 196.2 | 31.98 | 7.135 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-36D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,200.0 | 5,127.9 | 5,192.0 | 5,131.9 | 17.3 | 16.3 | -111.28 | 45.7 | -767.3 | 233.0 | 200.3 | 32.63 | 7.139 | |
| 5,300.0 | 5,226.4 | 5,291.9 | 5,230.5 | 17.6 | 16.6 | -111.44 | 47.0 | -783.2 | 237.8 | 204.5 | 33.29 | 7.143 | |
| 5,400.0 | 5,324.8 | 5,391.8 | 5,329.1 | 18.0 | 17.0 | -111.58 | 48.2 | -799.1 | 242.6 | 208.7 | 33.94 | 7.147 | |
| 5,500.0 | 5,423.2 | 5,491.6 | 5,427.7 | 18.3 | 17.3 | -111.72 | 49.4 | -815.0 | 247.4 | 212.8 | 34.60 | 7.151 | |
| 5,600.0 | 5,521.6 | 5,591.5 | 5,526.3 | 18.7 | 17.6 | -111.86 | 50.6 | -830.9 | 252.2 | 217.0 | 35.25 | 7.155 | |
| 5,700.0 | 5,620.0 | 5,691.4 | 5,624.9 | 19.1 | 18.0 | -111.98 | 51.8 | -846.8 | 257.0 | 221.1 | 35.90 | 7.159 | |
| 5,800.0 | 5,718.5 | 5,791.3 | 5,723.5 | 19.4 | 18.3 | -112.11 | 53.0 | -862.7 | 261.8 | 225.3 | 36.56 | 7.163 | |
| 5,900.0 | 5,816.9 | 5,891.2 | 5,822.1 | 19.8 | 18.6 | -112.23 | 54.2 | -878.6 | 266.7 | 229.5 | 37.21 | 7.167 | |
| 6,000.0 | 5,915.3 | 5,991.1 | 5,920.7 | 20.1 | 18.9 | -112.35 | 55.4 | -894.5 | 271.5 | 233.6 | 37.86 | 7.170 | |
| 6,100.0 | 6,013.7 | 6,090.9 | 6,019.3 | 20.5 | 19.3 | -112.46 | 56.7 | -910.4 | 276.3 | 237.8 | 38.52 | 7.174 | |
| 6,200.0 | 6,112.1 | 6,190.8 | 6,117.9 | 20.8 | 19.6 | -112.57 | 57.9 | -926.3 | 281.1 | 242.0 | 39.17 | 7.177 | |
| 6,300.0 | 6,210.6 | 6,290.7 | 6,216.5 | 21.2 | 19.9 | -112.67 | 59.1 | -942.2 | 285.9 | 246.1 | 39.82 | 7.181 | |
| 6,400.0 | 6,309.0 | 6,390.6 | 6,315.1 | 21.6 | 20.3 | -112.77 | 60.3 | -958.2 | 290.8 | 250.3 | 40.47 | 7.184 | |
| 6,500.0 | 6,407.4 | 6,490.5 | 6,413.7 | 21.9 | 20.6 | -112.87 | 61.5 | -974.1 | 295.6 | 254.5 | 41.13 | 7.187 | |
| 6,600.0 | 6,505.8 | 6,590.4 | 6,512.3 | 22.3 | 20.9 | -112.96 | 62.7 | -990.0 | 300.4 | 258.6 | 41.78 | 7.190 | |
| 6,700.0 | 6,604.2 | 6,690.2 | 6,610.9 | 22.6 | 21.3 | -113.06 | 63.9 | -1,005.9 | 305.2 | 262.8 | 42.43 | 7.194 | |
| 6,800.0 | 6,702.7 | 6,790.1 | 6,709.5 | 23.0 | 21.6 | -113.14 | 65.1 | -1,021.8 | 310.1 | 267.0 | 43.08 | 7.197 | |
| 6,900.0 | 6,801.1 | 6,890.0 | 6,808.1 | 23.4 | 21.9 | -113.24 | 66.3 | -1,037.7 | 314.9 | 271.1 | 43.74 | 7.199 | |
| 7,000.0 | 6,899.9 | 6,988.5 | 6,905.5 | 23.7 | 22.2 | -113.31 | 67.4 | -1,051.8 | 319.0 | 274.7 | 44.29 | 7.203 | |
| 7,100.0 | 6,999.1 | 7,086.9 | 7,003.3 | 23.9 | 22.4 | -113.40 | 68.2 | -1,062.6 | 322.3 | 277.5 | 44.75 | 7.202 | |
| 7,200.0 | 7,098.8 | 7,185.3 | 7,101.5 | 24.1 | 22.6 | -113.50 | 68.8 | -1,070.0 | 324.6 | 279.5 | 45.10 | 7.199 | |
| 7,300.0 | 7,198.6 | 7,283.7 | 7,199.8 | 24.2 | 22.7 | -113.63 | 69.1 | -1,074.0 | 326.1 | 280.7 | 45.35 | 7.191 | |
| 7,400.0 | 7,298.6 | 7,382.4 | 7,298.4 | 24.3 | 22.8 | -64.70 | 69.2 | -1,074.9 | 326.6 | 281.1 | 45.53 | 7.174 | |
| 7,500.0 | 7,398.6 | 7,481.7 | 7,397.8 | 24.4 | 22.9 | -64.68 | 69.0 | -1,075.2 | 326.7 | 280.9 | 45.74 | 7.142 | |
| 7,600.0 | 7,498.6 | 7,581.1 | 7,497.2 | 24.5 | 23.1 | -64.66 | 68.6 | -1,075.9 | 326.7 | 280.7 | 45.96 | 7.108 | |
| 7,700.0 | 7,598.6 | 7,680.5 | 7,596.6 | 24.6 | 23.2 | -64.65 | 68.0 | -1,076.9 | 326.8 | 280.6 | 46.20 | 7.073 | |
| 7,800.0 | 7,698.6 | 7,780.3 | 7,696.4 | 24.7 | 23.3 | -64.64 | 67.2 | -1,078.2 | 326.8 | 280.4 | 46.44 | 7.037 | |
| 7,900.0 | 7,798.6 | 7,880.3 | 7,796.4 | 24.8 | 23.4 | -64.64 | 66.5 | -1,079.6 | 326.8 | 280.1 | 46.69 | 7.000 | |
| 8,000.0 | 7,898.6 | 7,980.3 | 7,896.3 | 25.0 | 23.5 | -64.64 | 65.7 | -1,080.9 | 326.8 | 279.9 | 46.93 | 6.964 | |
| 8,100.0 | 7,998.6 | 8,080.3 | 7,996.3 | 25.1 | 23.7 | -64.64 | 64.9 | -1,082.3 | 326.9 | 279.7 | 47.18 | 6.928 | |
| 8,200.0 | 8,098.6 | 8,180.3 | 8,096.3 | 25.2 | 23.8 | -64.64 | 64.1 | -1,083.6 | 326.9 | 279.5 | 47.43 | 6.893 | |
| 8,300.0 | 8,198.5 | 8,280.3 | 8,196.3 | 25.3 | 23.9 | -64.64 | 63.4 | -1,085.0 | 326.9 | 279.2 | 47.67 | 6.857 | |
| 8,400.0 | 8,298.5 | 8,380.3 | 8,296.3 | 25.4 | 24.0 | -64.64 | 62.6 | -1,086.3 | 326.9 | 279.0 | 47.92 | 6.822 | |
| 8,500.0 | 8,398.5 | 8,480.3 | 8,396.3 | 25.5 | 24.1 | -64.64 | 61.8 | -1,087.7 | 327.0 | 278.8 | 48.18 | 6.787 | |
| 8,600.0 | 8,498.5 | 8,580.3 | 8,496.3 | 25.6 | 24.3 | -64.64 | 61.0 | -1,089.0 | 327.0 | 278.5 | 48.43 | 6.752 | |
| 8,700.0 | 8,598.5 | 8,680.3 | 8,596.3 | 25.8 | 24.4 | -64.64 | 60.3 | -1,090.3 | 327.0 | 278.3 | 48.68 | 6.717 | |
| 8,800.0 | 8,698.5 | 8,780.3 | 8,696.3 | 25.9 | 24.5 | -64.64 | 59.5 | -1,091.7 | 327.0 | 278.1 | 48.94 | 6.682 | |
| 8,900.0 | 8,798.5 | 8,880.3 | 8,796.2 | 26.0 | 24.6 | -64.65 | 58.7 | -1,093.0 | 327.0 | 277.8 | 49.20 | 6.648 | |
| 9,000.0 | 8,898.5 | 8,980.3 | 8,896.2 | 26.1 | 24.8 | -64.65 | 57.9 | -1,094.4 | 327.1 | 277.6 | 49.45 | 6.614 | |
| 9,100.0 | 8,998.5 | 9,080.3 | 8,996.2 | 26.2 | 24.9 | -64.65 | 57.1 | -1,095.7 | 327.1 | 277.4 | 49.71 | 6.580 | |
| 9,200.0 | 9,098.4 | 9,180.3 | 9,096.2 | 26.4 | 25.0 | -64.65 | 56.4 | -1,097.1 | 327.1 | 277.1 | 49.97 | 6.546 | |
| 9,300.0 | 9,198.4 | 9,280.3 | 9,196.2 | 26.5 | 25.2 | -64.65 | 55.6 | -1,098.4 | 327.1 | 276.9 | 50.23 | 6.512 | |
| 9,400.0 | 9,298.4 | 9,380.3 | 9,296.2 | 26.6 | 25.3 | -64.65 | 54.8 | -1,099.8 | 327.1 | 276.7 | 50.50 | 6.479 | |
| 9,500.0 | 9,398.4 | 9,480.3 | 9,396.2 | 26.7 | 25.4 | -64.65 | 54.0 | -1,101.1 | 327.2 | 276.4 | 50.76 | 6.446 | |
| 9,600.0 | 9,498.4 | 9,580.3 | 9,496.2 | 26.8 | 25.5 | -64.65 | 53.3 | -1,102.5 | 327.2 | 276.2 | 51.02 | 6.413 | |
| 9,700.0 | 9,598.4 | 9,680.3 | 9,596.1 | 27.0 | 25.7 | -64.65 | 52.5 | -1,103.8 | 327.2 | 275.9 | 51.29 | 6.380 | |
| 9,800.0 | 9,698.4 | 9,780.3 | 9,696.1 | 27.1 | 25.8 | -64.65 | 51.7 | -1,105.2 | 327.2 | 275.7 | 51.56 | 6.347 | |
| 9,900.0 | 9,798.4 | 9,880.3 | 9,796.1 | 27.2 | 25.9 | -64.65 | 50.9 | -1,106.5 | 327.3 | 275.4 | 51.82 | 6.315 | |
| 10,000.0 | 9,898.3 | 9,980.3 | 9,896.1 | 27.3 | 26.1 | -64.65 | 50.2 | -1,107.8 | 327.3 | 275.2 | 52.09 | 6.283 | |
| 10,100.0 | 9,998.3 | 10,080.3 | 9,996.1 | 27.5 | 26.2 | -64.65 | 49.4 | -1,109.2 | 327.3 | 274.9 | 52.36 | 6.251 | |
| 10,109.5 | 10,007.8 | 10,089.8 | 10,005.6 | 27.5 | 26.2 | -64.65 | 49.3 | -1,109.3 | 327.3 | 274.9 | 52.39 | 6.248 | SF |
| 10,145.7 | 10,044.0 | 10,103.2 | 10,019.0 | 27.5 | 26.2 | -64.65 | 49.2 | -1,109.5 | 328.1 | 275.6 | 52.45 | 6.255 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-38D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 36.02 | 12.0 | 8.7 | 14.9 | | | | |
| 100.0 | 100.0 | 100.0 | 100.0 | 0.1 | 0.1 | 36.02 | 12.0 | 8.7 | 14.9 | 14.6 | 0.27 | 54.586 | |
| 200.0 | 200.0 | 200.0 | 200.0 | 0.3 | 0.3 | 36.02 | 12.0 | 8.7 | 14.9 | 14.2 | 0.62 | 23.920 | |
| 233.3 | 233.3 | 233.3 | 233.3 | 0.4 | 0.4 | 35.28 | 12.1 | 8.6 | 14.9 | 14.1 | 0.74 | 20.142 | CC |
| 300.0 | 300.0 | 300.0 | 299.9 | 0.5 | 0.5 | 29.32 | 13.0 | 7.3 | 14.9 | 14.0 | 0.97 | 15.392 | ES |
| 400.0 | 400.0 | 399.8 | 399.6 | 0.7 | 0.7 | 87.10 | 16.1 | 3.1 | 16.2 | 14.8 | 1.34 | 12.031 | |
| 500.0 | 499.8 | 499.5 | 498.9 | 0.9 | 0.9 | 77.85 | 21.1 | -4.0 | 18.9 | 17.2 | 1.75 | 10.833 | |
| 600.0 | 599.5 | 599.0 | 597.7 | 1.1 | 1.2 | 72.14 | 28.1 | -13.9 | 22.9 | 20.7 | 2.19 | 10.425 | |
| 700.0 | 698.7 | 698.4 | 695.8 | 1.3 | 1.5 | 69.10 | 37.1 | -26.5 | 27.8 | 25.1 | 2.70 | 10.287 | |
| 800.0 | 797.5 | 798.0 | 793.9 | 1.6 | 1.8 | 68.99 | 47.6 | -41.2 | 33.1 | 29.8 | 3.29 | 10.056 | |
| 900.0 | 895.9 | 897.9 | 892.1 | 2.0 | 2.2 | 71.75 | 58.2 | -56.1 | 37.7 | 33.8 | 3.93 | 9.584 | |
| 1,000.0 | 994.3 | 997.8 | 990.3 | 2.3 | 2.5 | 73.92 | 68.8 | -71.0 | 42.4 | 37.8 | 4.60 | 9.212 | |
| 1,100.0 | 1,092.7 | 1,097.7 | 1,088.5 | 2.6 | 2.9 | 75.66 | 79.4 | -85.9 | 47.1 | 41.9 | 5.28 | 8.921 | |
| 1,200.0 | 1,191.1 | 1,197.6 | 1,186.6 | 3.0 | 3.3 | 77.08 | 90.0 | -100.8 | 51.9 | 45.9 | 5.98 | 8.689 | |
| 1,300.0 | 1,289.6 | 1,297.4 | 1,284.8 | 3.3 | 3.6 | 78.26 | 100.6 | -115.7 | 56.7 | 50.1 | 6.67 | 8.502 | |
| 1,400.0 | 1,388.0 | 1,397.3 | 1,383.0 | 3.7 | 4.0 | 79.26 | 111.2 | -130.6 | 61.6 | 54.2 | 7.37 | 8.348 | |
| 1,500.0 | 1,486.4 | 1,497.2 | 1,481.2 | 4.0 | 4.3 | 80.11 | 121.8 | -145.4 | 66.4 | 58.3 | 8.08 | 8.220 | |
| 1,600.0 | 1,584.8 | 1,597.1 | 1,579.4 | 4.4 | 4.7 | 80.84 | 132.4 | -160.3 | 71.3 | 62.5 | 8.79 | 8.112 | |
| 1,700.0 | 1,683.2 | 1,696.9 | 1,677.6 | 4.8 | 5.1 | 81.48 | 143.0 | -175.2 | 76.1 | 66.6 | 9.49 | 8.019 | |
| 1,800.0 | 1,781.7 | 1,796.8 | 1,775.8 | 5.1 | 5.4 | 82.04 | 153.6 | -190.1 | 81.0 | 70.8 | 10.20 | 7.940 | |
| 1,900.0 | 1,880.1 | 1,896.7 | 1,874.0 | 5.5 | 5.8 | 82.54 | 164.2 | -205.0 | 85.9 | 75.0 | 10.91 | 7.870 | |
| 2,000.0 | 1,978.5 | 1,996.6 | 1,972.2 | 5.8 | 6.2 | 82.99 | 174.8 | -219.9 | 90.8 | 79.2 | 11.63 | 7.809 | |
| 2,100.0 | 2,076.9 | 2,096.5 | 2,070.4 | 6.2 | 6.5 | 83.39 | 185.4 | -234.8 | 95.7 | 83.3 | 12.34 | 7.755 | |
| 2,200.0 | 2,175.3 | 2,196.3 | 2,168.6 | 6.5 | 6.9 | 83.75 | 196.0 | -249.7 | 100.6 | 87.5 | 13.05 | 7.707 | |
| 2,300.0 | 2,273.8 | 2,296.2 | 2,266.8 | 6.9 | 7.3 | 84.08 | 206.6 | -264.5 | 105.5 | 91.7 | 13.76 | 7.664 | |
| 2,400.0 | 2,372.2 | 2,396.1 | 2,364.9 | 7.2 | 7.6 | 84.38 | 217.2 | -279.4 | 110.4 | 95.9 | 14.48 | 7.626 | |
| 2,500.0 | 2,470.6 | 2,496.0 | 2,463.1 | 7.6 | 8.0 | 84.65 | 227.8 | -294.3 | 115.3 | 100.1 | 15.19 | 7.590 | |
| 2,600.0 | 2,569.0 | 2,595.8 | 2,561.3 | 8.0 | 8.3 | 84.90 | 238.4 | -309.2 | 120.2 | 104.3 | 15.90 | 7.559 | |
| 2,700.0 | 2,667.4 | 2,695.7 | 2,659.5 | 8.3 | 8.7 | 85.13 | 249.0 | -324.1 | 125.1 | 108.5 | 16.62 | 7.529 | |
| 2,800.0 | 2,765.9 | 2,795.6 | 2,757.7 | 8.7 | 9.1 | 85.35 | 259.6 | -339.0 | 130.0 | 112.7 | 17.33 | 7.503 | |
| 2,900.0 | 2,864.3 | 2,895.5 | 2,855.9 | 9.0 | 9.4 | 85.54 | 270.2 | -353.9 | 135.0 | 116.9 | 18.05 | 7.478 | |
| 3,000.0 | 2,962.7 | 2,995.4 | 2,954.1 | 9.4 | 9.8 | 85.73 | 280.8 | -368.8 | 139.9 | 121.1 | 18.76 | 7.456 | |
| 3,100.0 | 3,061.1 | 3,095.2 | 3,052.3 | 9.7 | 10.2 | 85.90 | 291.4 | -383.6 | 144.8 | 125.3 | 19.48 | 7.435 | |
| 3,200.0 | 3,159.5 | 3,195.1 | 3,150.5 | 10.1 | 10.5 | 86.06 | 302.0 | -398.5 | 149.7 | 129.5 | 20.19 | 7.415 | |
| 3,300.0 | 3,258.0 | 3,295.0 | 3,248.7 | 10.5 | 10.9 | 86.21 | 312.6 | -413.4 | 154.6 | 133.7 | 20.91 | 7.397 | |
| 3,400.0 | 3,356.4 | 3,394.9 | 3,346.9 | 10.8 | 11.3 | 86.35 | 323.2 | -428.3 | 159.6 | 137.9 | 21.62 | 7.380 | |
| 3,500.0 | 3,454.8 | 3,494.7 | 3,445.0 | 11.2 | 11.6 | 86.48 | 333.8 | -443.2 | 164.5 | 142.2 | 22.34 | 7.365 | |
| 3,600.0 | 3,553.2 | 3,594.6 | 3,543.2 | 11.5 | 12.0 | 86.61 | 344.4 | -458.1 | 169.4 | 146.4 | 23.05 | 7.350 | |
| 3,700.0 | 3,651.6 | 3,694.5 | 3,641.4 | 11.9 | 12.4 | 86.72 | 355.0 | -473.0 | 174.3 | 150.6 | 23.77 | 7.336 | |
| 3,800.0 | 3,750.1 | 3,794.4 | 3,739.6 | 12.2 | 12.7 | 86.84 | 365.6 | -487.9 | 179.3 | 154.8 | 24.48 | 7.323 | |
| 3,900.0 | 3,848.5 | 3,894.3 | 3,837.8 | 12.6 | 13.1 | 86.94 | 376.2 | -502.7 | 184.2 | 159.0 | 25.20 | 7.311 | |
| 4,000.0 | 3,946.9 | 3,994.1 | 3,936.0 | 13.0 | 13.5 | 87.04 | 386.8 | -517.6 | 189.1 | 163.2 | 25.91 | 7.299 | |
| 4,100.0 | 4,045.3 | 4,094.0 | 4,034.2 | 13.3 | 13.8 | 87.14 | 397.4 | -532.5 | 194.1 | 167.4 | 26.63 | 7.288 | |
| 4,200.0 | 4,143.7 | 4,193.9 | 4,132.4 | 13.7 | 14.2 | 87.23 | 408.0 | -547.4 | 199.0 | 171.6 | 27.34 | 7.278 | |
| 4,300.0 | 4,242.2 | 4,293.8 | 4,230.6 | 14.0 | 14.6 | 87.31 | 418.6 | -562.3 | 203.9 | 175.9 | 28.06 | 7.268 | |
| 4,400.0 | 4,340.6 | 4,393.7 | 4,328.8 | 14.4 | 14.9 | 87.39 | 429.2 | -577.2 | 208.8 | 180.1 | 28.77 | 7.258 | |
| 4,500.0 | 4,439.0 | 4,493.5 | 4,427.0 | 14.8 | 15.3 | 87.47 | 439.8 | -592.1 | 213.8 | 184.3 | 29.49 | 7.250 | |
| 4,600.0 | 4,537.4 | 4,593.4 | 4,525.2 | 15.1 | 15.7 | 87.55 | 450.4 | -607.0 | 218.7 | 188.5 | 30.20 | 7.241 | |
| 4,700.0 | 4,635.8 | 4,693.3 | 4,623.3 | 15.5 | 16.0 | 87.62 | 461.0 | -621.9 | 223.6 | 192.7 | 30.92 | 7.233 | |
| 4,800.0 | 4,734.3 | 4,793.2 | 4,721.5 | 15.8 | 16.4 | 87.68 | 471.6 | -636.7 | 228.6 | 196.9 | 31.63 | 7.225 | |
| 4,900.0 | 4,832.7 | 4,893.0 | 4,819.7 | 16.2 | 16.8 | 87.75 | 482.2 | -651.6 | 233.5 | 201.1 | 32.35 | 7.218 | |
| 5,000.0 | 4,931.1 | 4,992.9 | 4,917.9 | 16.5 | 17.1 | 87.81 | 492.8 | -666.5 | 238.4 | 205.4 | 33.06 | 7.211 | |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

**Offset Design** Sec 6 T6S R96W (F06 696) - Chevron 6-38D - DD - Plan #2

**Offset Site Error:** 0.0 ft

**Survey Program:** 0-MWD

**Offset Well Error:** 0.0 ft

| Reference Measured Depth (ft) | Reference Vertical Depth (ft) | Offset Measured Depth (ft) | Offset Vertical Depth (ft) | Semi Major Axis Reference (ft) | Semi Major Axis Offset (ft) | Highside Toolface (°) | Offset Wellbore Centre +N/-S (ft) | Offset Wellbore Centre +E/-W (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Total Uncertainty Axis | Separation Factor | Warning |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5,100.0 | 5,029.5 | 5,092.8 | 5,016.1 | 16.9 | 17.5 | 87.87 | 503.4 | -681.4 | 243.4 | 209.6 | 33.78 | 7.204 | |
| 5,200.0 | 5,127.9 | 5,192.7 | 5,114.3 | 17.3 | 17.9 | 87.93 | 514.0 | -696.3 | 248.3 | 213.8 | 34.50 | 7.198 | |
| 5,300.0 | 5,226.4 | 5,292.6 | 5,212.5 | 17.6 | 18.2 | 87.98 | 524.6 | -711.2 | 253.2 | 218.0 | 35.21 | 7.192 | |
| 5,400.0 | 5,324.8 | 5,392.4 | 5,310.7 | 18.0 | 18.6 | 88.04 | 535.2 | -726.1 | 258.2 | 222.2 | 35.93 | 7.186 | |
| 5,500.0 | 5,423.2 | 5,492.3 | 5,408.9 | 18.3 | 19.0 | 88.09 | 545.8 | -741.0 | 263.1 | 226.4 | 36.64 | 7.180 | |
| 5,600.0 | 5,521.6 | 5,592.2 | 5,507.1 | 18.7 | 19.3 | 88.14 | 556.4 | -755.8 | 268.0 | 230.7 | 37.36 | 7.175 | |
| 5,700.0 | 5,620.0 | 5,692.1 | 5,605.3 | 19.1 | 19.7 | 88.19 | 567.0 | -770.7 | 273.0 | 234.9 | 38.07 | 7.169 | |
| 5,800.0 | 5,718.5 | 5,791.9 | 5,703.5 | 19.4 | 20.1 | 88.23 | 577.6 | -785.6 | 277.9 | 239.1 | 38.79 | 7.164 | |
| 5,900.0 | 5,816.9 | 5,891.8 | 5,801.6 | 19.8 | 20.4 | 88.28 | 588.2 | -800.5 | 282.8 | 243.3 | 39.50 | 7.159 | |
| 6,000.0 | 5,915.3 | 5,991.7 | 5,899.8 | 20.1 | 20.8 | 88.32 | 598.8 | -815.4 | 287.8 | 247.5 | 40.22 | 7.155 | |
| 6,100.0 | 6,013.7 | 6,091.6 | 5,998.0 | 20.5 | 21.2 | 88.36 | 609.4 | -830.3 | 292.7 | 251.8 | 40.93 | 7.150 | |
| 6,200.0 | 6,112.1 | 6,191.5 | 6,096.2 | 20.8 | 21.5 | 88.40 | 620.0 | -845.2 | 297.6 | 256.0 | 41.65 | 7.146 | |
| 6,300.0 | 6,210.6 | 6,291.3 | 6,194.4 | 21.2 | 21.9 | 88.44 | 630.6 | -860.1 | 302.6 | 260.2 | 42.37 | 7.142 | |
| 6,400.0 | 6,309.0 | 6,391.2 | 6,292.6 | 21.6 | 22.3 | 88.48 | 641.2 | -874.9 | 307.5 | 264.4 | 43.08 | 7.138 | |
| 6,500.0 | 6,407.4 | 6,491.1 | 6,390.8 | 21.9 | 22.6 | 88.51 | 651.8 | -889.8 | 312.4 | 268.6 | 43.80 | 7.134 | |
| 6,600.0 | 6,505.8 | 6,591.0 | 6,489.0 | 22.3 | 23.0 | 88.55 | 662.4 | -904.7 | 317.4 | 272.8 | 44.51 | 7.130 | |
| 6,700.0 | 6,604.2 | 6,690.8 | 6,587.2 | 22.6 | 23.4 | 88.58 | 673.0 | -919.6 | 322.3 | 277.1 | 45.23 | 7.126 | |
| 6,800.0 | 6,702.7 | 6,790.7 | 6,685.4 | 23.0 | 23.7 | 88.61 | 683.6 | -934.5 | 327.2 | 281.3 | 45.94 | 7.122 | |
| 6,900.0 | 6,801.1 | 6,890.7 | 6,783.7 | 23.4 | 24.1 | 88.65 | 694.3 | -949.4 | 332.2 | 285.5 | 46.66 | 7.119 | |
| 7,000.0 | 6,899.9 | 6,994.1 | 6,885.7 | 23.7 | 24.4 | 88.71 | 704.1 | -963.2 | 336.6 | 289.3 | 47.27 | 7.120 | |
| 7,100.0 | 6,999.1 | 7,097.6 | 6,988.3 | 23.9 | 24.7 | 88.73 | 711.8 | -974.0 | 340.1 | 292.3 | 47.78 | 7.118 | |
| 7,200.0 | 7,098.8 | 7,201.1 | 7,091.4 | 24.1 | 24.9 | 88.73 | 717.3 | -981.8 | 342.6 | 294.4 | 48.17 | 7.111 | |
| 7,300.0 | 7,198.6 | 7,304.7 | 7,194.8 | 24.2 | 25.0 | 88.71 | 720.7 | -986.5 | 344.1 | 295.6 | 48.46 | 7.100 | |
| 7,400.0 | 7,298.6 | 7,408.4 | 7,298.4 | 24.3 | 25.1 | 137.71 | 721.9 | -988.2 | 344.6 | 296.0 | 48.65 | 7.084 | |
| 7,500.0 | 7,398.6 | 7,509.6 | 7,399.7 | 24.4 | 25.2 | 137.71 | 721.8 | -988.4 | 344.7 | 295.8 | 48.84 | 7.056 | |
| 7,600.0 | 7,498.6 | 7,610.8 | 7,500.8 | 24.5 | 25.3 | 137.72 | 721.5 | -988.9 | 344.7 | 295.6 | 49.05 | 7.027 | |
| 7,700.0 | 7,598.6 | 7,711.9 | 7,602.0 | 24.6 | 25.4 | 137.72 | 720.9 | -989.9 | 344.7 | 295.4 | 49.26 | 6.997 | |
| 7,800.0 | 7,698.6 | 7,812.6 | 7,702.6 | 24.7 | 25.5 | 137.73 | 720.2 | -991.2 | 344.7 | 295.2 | 49.48 | 6.966 | |
| 7,900.0 | 7,798.6 | 7,912.6 | 7,802.6 | 24.8 | 25.6 | 137.73 | 719.4 | -992.5 | 344.7 | 295.0 | 49.71 | 6.934 | |
| 8,000.0 | 7,898.6 | 8,012.6 | 7,902.6 | 25.0 | 25.7 | 137.73 | 718.6 | -993.9 | 344.6 | 294.7 | 49.93 | 6.903 | |
| 8,100.0 | 7,998.6 | 8,112.6 | 8,002.6 | 25.1 | 25.8 | 137.73 | 717.9 | -995.2 | 344.6 | 294.5 | 50.16 | 6.871 | |
| 8,200.0 | 8,098.6 | 8,212.6 | 8,102.6 | 25.2 | 26.0 | 137.73 | 717.1 | -996.6 | 344.6 | 294.2 | 50.38 | 6.840 | |
| 8,300.0 | 8,198.5 | 8,312.6 | 8,202.6 | 25.3 | 26.1 | 137.73 | 716.3 | -997.9 | 344.6 | 294.0 | 50.61 | 6.809 | |
| 8,400.0 | 8,298.5 | 8,412.6 | 8,302.5 | 25.4 | 26.2 | 137.73 | 715.5 | -999.3 | 344.6 | 293.7 | 50.84 | 6.777 | |
| 8,500.0 | 8,398.5 | 8,512.6 | 8,402.5 | 25.5 | 26.3 | 137.73 | 714.7 | -1,000.6 | 344.5 | 293.5 | 51.07 | 6.746 | |
| 8,600.0 | 8,498.5 | 8,612.6 | 8,502.5 | 25.6 | 26.4 | 137.73 | 714.0 | -1,002.0 | 344.5 | 293.2 | 51.30 | 6.715 | |
| 8,700.0 | 8,598.5 | 8,712.6 | 8,602.5 | 25.8 | 26.5 | 137.74 | 713.2 | -1,003.3 | 344.5 | 293.0 | 51.54 | 6.685 | |
| 8,800.0 | 8,698.5 | 8,812.6 | 8,702.5 | 25.9 | 26.6 | 137.74 | 712.4 | -1,004.7 | 344.5 | 292.7 | 51.77 | 6.654 | |
| 8,900.0 | 8,798.5 | 8,912.6 | 8,802.5 | 26.0 | 26.7 | 137.74 | 711.6 | -1,006.0 | 344.5 | 292.5 | 52.01 | 6.623 | |
| 9,000.0 | 8,898.5 | 9,012.6 | 8,902.5 | 26.1 | 26.8 | 137.74 | 710.9 | -1,007.4 | 344.4 | 292.2 | 52.25 | 6.593 | |
| 9,100.0 | 8,998.5 | 9,112.6 | 9,002.5 | 26.2 | 26.9 | 137.74 | 710.1 | -1,008.7 | 344.4 | 291.9 | 52.49 | 6.562 | |
| 9,200.0 | 9,098.4 | 9,212.6 | 9,102.4 | 26.4 | 27.0 | 137.74 | 709.3 | -1,010.1 | 344.4 | 291.7 | 52.73 | 6.532 | |
| 9,300.0 | 9,198.4 | 9,312.6 | 9,202.4 | 26.5 | 27.2 | 137.74 | 708.5 | -1,011.4 | 344.4 | 291.4 | 52.97 | 6.502 | |
| 9,400.0 | 9,298.4 | 9,412.6 | 9,302.4 | 26.6 | 27.3 | 137.74 | 707.8 | -1,012.8 | 344.4 | 291.2 | 53.21 | 6.472 | |
| 9,500.0 | 9,398.4 | 9,512.6 | 9,402.4 | 26.7 | 27.4 | 137.74 | 707.0 | -1,014.1 | 344.3 | 290.9 | 53.45 | 6.442 | |
| 9,600.0 | 9,498.4 | 9,612.6 | 9,502.4 | 26.8 | 27.5 | 137.74 | 706.2 | -1,015.5 | 344.3 | 290.6 | 53.70 | 6.412 | |
| 9,700.0 | 9,598.4 | 9,712.6 | 9,602.4 | 27.0 | 27.6 | 137.75 | 705.4 | -1,016.8 | 344.3 | 290.4 | 53.94 | 6.383 | |
| 9,800.0 | 9,698.4 | 9,812.6 | 9,702.4 | 27.1 | 27.7 | 137.75 | 704.7 | -1,018.2 | 344.3 | 290.1 | 54.19 | 6.353 | |
| 9,900.0 | 9,798.4 | 9,912.6 | 9,802.4 | 27.2 | 27.9 | 137.75 | 703.9 | -1,019.5 | 344.3 | 289.8 | 54.44 | 6.324 | |
| 10,000.0 | 9,898.3 | 10,012.6 | 9,902.4 | 27.3 | 28.0 | 137.75 | 703.1 | -1,020.9 | 344.2 | 289.6 | 54.69 | 6.294 | |
| 10,100.0 | 9,998.3 | 10,112.6 | 10,002.3 | 27.5 | 28.1 | 137.75 | 702.3 | -1,022.2 | 344.2 | 289.3 | 54.94 | 6.265 | |
| 10,145.7 | 10,044.0 | 10,158.3 | 10,048.0 | 27.5 | 28.1 | 137.75 | 702.0 | -1,022.8 | 344.2 | 289.2 | 55.06 | 6.252 | SF |

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

| | | | |
|---|---|---|---|
| **Company:** | Berry Petroleum Company (NAD 83) | **Local Co-ordinate Reference:** | Well Chevron 6-37D |
| **Project:** | Garfield County | **TVD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Reference Site:** | Sec 6 T6S R96W (F06 696) | **MD Reference:** | KBE @ 8244.0ft (Original Well Elev) |
| **Site Error:** | 0.0ft | **North Reference:** | True |
| **Reference Well:** | Chevron 6-37D | **Survey Calculation Method:** | Minimum Curvature |
| **Well Error:** | 0.0ft | **Output errors are at** | 2.00 sigma |
| **Reference Wellbore** | DD | **Database:** | EDM 5000.1 US Multi Users DB |
| **Reference Design:** | Plan #2 | **Offset TVD Reference:** | Offset Datum |

Reference Depths are relative to KBE @ 8244.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: Chevron 6-37D
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.67°